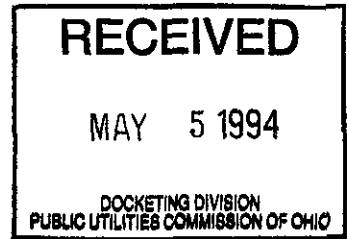


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Before
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
The Ohio Bell Telephone Company for)
approval of an alternative form of)
regulation)

Case No. 93-487-TP-ALT

SUPPLEMENTAL TESTIMONY OF DR. ROBERT G. HARRIS
AMERITECH OHIO EXHIBIT 15S.0
SUBJECT: ECONOMIC RATIONALE, PUBLIC POLICY GOALS AND THE
ADVANTAGE OHIO PLAN

Introduction

1. Q: Would you please state your name, address and nature of employment.

A: My name is Robert G. Harris. I am a professor at the University of California, Berkeley and a principal in the Law & Economics Consulting Group, Inc. My business address is 2000 Powell Street, Suite 600, Emeryville, California, 94608.

2. Q: Have you previously filed testimony in this Case?

A: Yes, I have.

3. Q: Does that testimony include your educational background and professional qualifications to testify in this proceeding?

A: Yes, it does.

4. Q: Dr. Harris, would you please briefly summarize the initial testimony that you filed in this Case?

A: In my initial testimony, I described the dramatic changes in the telecommunications environment due to technological, market and competitive forces. In light of these changed industry conditions and current public policy objectives, I showed that traditional regulation is neither well suited to the current highly dynamic industry conditions nor likely to achieve emerging public policy objectives, which should take greater account of telecommunications infrastructure investment and innovation and their contributions to economic growth and development.

On the basis of an explicit set of evaluative criteria and the public policy goals articulated in Ohio Revised Code, Chapter 4927, "Telecommunications – Alternative Regulation," I concluded that the plan proposed by Ameritech Ohio meets the criteria for an appropriate alternative regulation plan and would achieve the public policy objectives of the state.

5. Q: For what purpose are you submitting additional testimony?

A: I will respond to a number of recommendations and arguments made in the Staff Report of Investigation and by their consultant, the National Regulatory Research Institute, in this proceeding. I will challenge the position that Ohio should continue rate of return regulation -- an undesirable consequence of adopting a regulatory plan that incorporates earnings sharing, earnings reporting and regulation of depreciation rates. I show why it is in the state's best interest to make a clean break from rate of return regulation by adopting a price regulation plan with no earnings reporting, earnings sharing, or depreciation prescription provisions.

6. Q: Will this supplemental testimony address every contention and issue pertaining to your direct testimony that were raised by the Staff and their consultant?

A: No. The fact that my supplemental testimony does not address a contention raised by the Staff or their consultant should not be construed as a concession or admission by me or Ameritech Ohio that the record has any merit.

General Responses to the Staff Report

7. Q: How would you explain the difference between your views on regulatory reform and those of the Staff?

A: The Staff and their consultants generally fail to recognize the enormous increase in risk and uncertainty facing Ameritech Ohio and other telecommunications providers. This uncertainty is generated by several forces, working separately and collectively: rapid technological change and early obsolescence; dramatic changes in market conditions, with new entrants and potentially large shifts in demand making market forecasts highly problematic; a proliferation of new technologies and new services, with heightened uncertainty about which products will succeed in the marketplace; and fundamental shifts in regulatory policies (and/or judicial decisions related thereto) which significantly impact competition and pricing in local exchange services. Just in the time since I filed my direct testimony, MCI has announced plans for entering the local access market and acquired a substantial ownership share of a newly developing national wireless carrier, Nextel. Hardly a week goes by without a significant announcement of a merger, acquisition, strategic alliance, new entrant or market expansion by an existing carrier.

These developments individually and collectively increase the risk of doing business in a highly dynamic environment. While Ameritech Ohio's plan would not help **control** the uncertainties it faces, it would -- far better than rate of return regulation -- enable Ameritech Ohio to **adapt** more quickly to these changes and developments; give it the opportunity to **compete** in the marketplace with these new technologies and competitors; and

provide substantial incentives for it to **respond** effectively to changing customer demands. It would also insulate Ameritech Ohio's customers from increasing risk and uncertainty.

Monitoring and Control

8. Q: The Staff report calls for increased monitoring requirements and the development of new "Staff capabilities consistent with oversight of price cap regulation." (p. 32) Do you agree?

A: I agree that the Commission should monitor performance under the plan, but with three caveats. First, there is a compliance cost of collecting, reporting and monitoring information which should not be ignored. Second, the Commission should also be cognizant that, in competitive markets, information has critical strategic value to competitors, who can gain considerable advantage from information about the reporting carrier's costs, pricing, investment plans, etc. To reduce the costs of reporting and to protect against the strategic use of the regulatory reporting process, the Commission should limit reporting requirements to what is essential to administer the regulatory plan, and should treat LEC reports as highly confidential. Finally, monitoring of performance should not include monitoring of earnings levels with all the accompanying oversight of rate base, rates of return and depreciation rates since this is precisely what a price cap plan is moving away from.

In their report, the Staff endorsed several recommendations made by their consultant on continuing all current reporting requirements on financial and cost data, and introduced new ones on exogenous changes, tax and

rule changes, usage measures and other factors: "The Staff endorses... N-ST Recommendations 2.5, 5.2, 5.9, 5.10, 5.11 and 6.2 concerning continuing regulatory oversight responsibilities in a price cap environment." (p. 32) The Staff is recommending to significantly increase the reporting requirements that Ameritech Ohio must satisfy and is proposing to replace a set of regulations with a whole range of restrictions, reports and regulations. This is exactly the opposite of what a new regulatory plan ought to do as competition emerges. The Commission should seize this opportunity to reduce and rationalize reporting requirements that may be redundant in the new regulatory regime.

Pricing Concerns

9. Q: The Staff is concerned that the "inclusion within the same baskets of monopoly and competitive services" is one of "the most controversial elements of [Ameritech Ohio's] proposal." (p. 34) What do you think?
- A: I agree that including competitive and less competitive services in the same market basket may allow Ameritech Ohio to raise prices for some services facing little competition and lower it for other services that may face emerging or potential competition. However, this concern is misplaced and overstated for two reasons. The first is that pricing flexibility is limited by rules proposed in the plan. The second reason, that many local services may be below cost, is acknowledged by the Staff report:

"On the other hand... to the extent that there may be historical contribution flows to Cell 1 monopoly services from other cells, [inclusion within the same basket] would enable the elimination of existing cross-subsidies and thereby facilitate transitioning to a broader competitive market."
(p. 34-35)

As long as local services are priced below their cost, encouraging competitive entry into those market segments will not be possible. Allowing convergence of prices to their true economic costs will go a long way towards shortening the transition to a "broader competitive market."

10. Q: The Staff asserts that "it would be inappropriate ... to Ramsey-price any Cell 1 monopoly service above cost, so as to provide contribution to competitive services." (p. 35) Is this correct?

A: No. It is ironic that the Staff accepts the concern of its consultant on Ramsey pricing while at the same time, the NRRI stated that "regulation of utilities is intended to provide a set of incentives such that prices and services mimic those of an unregulated market." (NRRI Report, p. 11). Yet, when they propose pricing rules for Ameritech Ohio, they usually depart from pricing methods common in competitive markets.

To emulate market pricing, the Commission should employ long-run service incremental cost as a price floor for each service, but allow prices above LRSIC to maximize contributions to common costs, except for services where there are social policy objectives. Regulations that require

each service to be priced at its full distributed cost do not emulate competitive markets.

My position on pricing is fully supported by the leading business and marketing literature on the use of incremental cost as a price floor, with markups determined by demand and competitive factors. For example, a leading price theorist in marketing admonishes:

“One frequently offered reason for a full-cost pricing approach is that each product or activity should carry its ‘fair share of the burden.’ That is, the objective is to recover the costs incurred while performing the activities of the organization.... The determination of the contribution each product or service should make to the recovery of indirect period costs and common costs is a managerial decision and should not be determined by an inflexible and arbitrary allocation rule... The determination of these desired contributions must consider external factors such as competition, stage of the product’s life cycle, demand and general economic conditions.” (Monroe, Kent B. Pricing: Making Profitable Decisions. 2nd ed. New York: McGraw-Hill Publishing Company, 1990; pages 150-151.)

Common business practice also supports my position on the use of incremental cost as a price floor, with markups determined by demand and competitive factors. If a firm is earning a normal profit, but charging very different mark-ups then it must be logically the case that some

products are priced above fully distributed costs while others are priced below. Consider the following examples of cases where some products of a multiple product firm do not cover their full distributed costs:

- automobile and durable goods prices: the markups are much higher on luxury models than on economy models, reflecting higher price sensitivity among buyers of economy models;
- grocery prices: "cents off" coupons offer lower prices to the most price-sensitive buyers (the ones willing to take the time to clip, collect and use coupons), while charging higher prices to less price sensitive buyers;
- MCI's "Friends and Families" calling plan: offers lower prices to more informed, more price sensitive customers, while maintaining higher, non-discounted rates to other customers.

In each of these and countless other cases, firms are charging some customers prices less than "FDC," because, by so doing, they maximize the contribution of those customers to common costs. In each case, there is little or no difference in the cost of serving customers, yet the prices charged are quite different. These firms, like most firms, are using some form of "quasi-Ramsey pricing." Price regulation should allow firms to follow the same practice, except in cases where the resulting prices would conflict with social policy objectives.

Pricing Rules

11. Q: Should the Commission limit the maximum increase in the Price Cap Index to seven percent, as suggested by the Staff?

A: In their report, the Staff suggested an upper limit on the annual increase in the price cap index:

“The Staff agrees [that] the Gross Domestic Product Price Index [is] an appropriate measure of inflation in the price cap plan. The Staff also recommends that the GDP-PI adjustment in any one year be limited to a maximum of seven percent.” (p. 37)

It is very unlikely that inflation will increase to levels where the price cap may rise by seven percent or more in one year. However, it is a mistake to only consider nominal increases in prices of telecommunications services. The price cap formula already has built in real reductions in price levels (through the productivity adjustment factor). Limiting price increases to some arbitrary maximum amount may hurt Ameritech Ohio precisely at a time when economic conditions may necessitate price rises.

The price cap formula does ensure real reductions without jeopardizing the financial viability of the Company by setting maximum increases in the price cap. The Commission should consider the underlying economic principles behind the formula and reject an arbitrary maximum.

Expected Productivity Increases

12. Q: The Staff has suggested that Ameritech Ohio will very likely exceed their historical rate of productivity increase. Do you agree?

A: No. The Staff stated that it "suspects... that [Ameritech Ohio's] productivity in excess of the general economy as a whole will on an ongoing basis exceed the proposed 1.9%." (p. 37) It based its position on various statements by the NRRI consultant.

The Staff is simply choosing to focus on possible sources of more rapid productivity growth. This is a risky strategy. Just as there are factors that may accelerate productivity growth, there are compelling reasons to "suspect" that Ameritech Ohio will be unable to perform at historic levels in the years that lie ahead. The Staff acknowledges that "previous interstate productivity gains may be slightly higher than its intrastate productivity gains" (p. 37). Therefore, the offset for the price cap index (which applies to intrastate services) will be overstating historical productivity increases for those services.

Furthermore, with increasing competition, the Company will continue to lose customers, especially in the most profitable services, because new entrants will target those customers and services. If the Company loses customers rapidly enough, its output will grow more slowly (or even actually decline) than in the past, even if the total market continues to grow. Dr. Christensen's study showed that a major source of productivity growth is output growth. Sales growth justifies (and makes possible) the sorts of investments in new capacity and technology that is the source of

large productivity gains. As the Company's growth diverges from the market's growth, the Company may have trouble "keeping up" the sorts of investments necessary for productivity increases. In addition to losing traffic, Ameritech Ohio will also have to lower the prices of its competitive services, in order to avoid losing even more customers to competitors.

All these future developments will act to lower Ameritech's productivity gains relative to historical trends. While, price caps do provide incentives to increase productivity and the flexibility to respond to competitive challenges, there are many other factors determining productivity growth. We can not predict what the net impact of all those changes will be. To engage in the process of attempting to discover sources of future productivity growth is extremely risky. Any conclusion will be biased either in favor or against the company and does not provide a rational basis for determining the productivity offset for Advantage Ohio.

13. Q: The Staff argued that, in the future, "intrastate productivity should align more closely with... interstate productivity as it deploys more advanced and efficient technologies satisfying its 'commitment' obligations under the Plan." (p. 38) Is this likely?

A: As I stated before, it is impossible to accurately predict future productivity changes. It is very risky to assume that for one reason or the other, productivity will increase more or less rapidly than in the past. The Staff and their consultant have done just that. If the Company is able to increase productivity more rapidly than in the past, then its profits should rise. If it is not able to increase its productivity as rapidly, then its profits

should decline. The Staff is willing to assume that certain factors will accelerate productivity growth but not consider any factors that may lower productivity growth. Not only is there no economic basis for such a proposition, it represents nothing more than bias against Ameritech Ohio. In constructing a price cap mechanism, the Commission should make its best effort not to err - in one direction or the other. If the formula strives for a balance of interests, then both consumers and shareholders benefit.

Productivity Offset

14. Q: The Staff suggested that productivity may rise more rapidly due to the "increased efficiencies and productivity inherent to price cap regulation that are not inherent to traditional rate of return regulation." (p. 38)
- Should this be included in the offset?

A: The most important disagreement is that I believe the price regulating formula should not incorporate the additional efficiencies engendered by presence of incentive regulation. The productivity adjustment should reflect only normal expected productivity growth. To estimate the potential increased efficiencies from incentive regulation, then create an index incorporating that estimate, constitutes circular reasoning and a denial of the incentive benefits to the firm and its shareholders. I also see no economic rationale for incorporating a "stretch" factor in the price cap mechanism: the price cap plan ensures that consumers continue to benefit from normal productivity gains (with shareholders receiving the benefits of above average performance). In competitive (unregulated)

industries, firms get to keep the benefits of above average performance at least in the short run.

15. Q: The Staff has cited Ameritech's alleged excess profits over its authorized rate of return under the FCC's price cap plan as a justification for a higher productivity offset. Is this correct?

A: No. The Staff stated their belief that the offset should be much higher and their calculations show that the offset could be as high as 7.325%:

"In support of its belief, the Staff points to the FCC's price cap plan, which mandates that Ameritech adopt a 3.3% productivity offset. Under the FCC's price cap plan for interstate access services, Ameritech has realized rates of return of 12.94% and 12.79% for years 1991 and 1992, respectively. These returns are in excess of the FCC's authorized rates of return of 11.25%." (p. 37)

"Combining [our estimated] productivity offset [of 4.025%, based on Ameritech excess return on investment over its FCC allowed return,] with the FCC's currently-imposed 3.3% offset, results in a 7.325% average productivity offset for Ameritech for 1991 and 1992." (p. 39)

I disagree with these claims, and the implications drawn from them by the Staff. The regulated rate of return reported by Ameritech Ohio in the past is not an economic measure of profit. So long as depreciation rates are

below economic levels, then the reported rate of return is an upward-biased measure of the real rate of return.

All one need do is keep depreciation rates low and the firm *appears* to be earning reasonable profits. Then, at some point the reality of business or technological obsolescence sets in and the same advocates of depreciation regulation argue that the firm's shareholders should incur the losses through a write-down of assets. The only way to get out of that trap is by allowing Ameritech Ohio to make its own business judgments about investments and their amortization, then live with the consequences. If they manage those risks well, their shareholders would be rewarded; if they do not, their shareholders should pay the price. That is exactly what the Ameritech Ohio Plan would do.

Further, as I stated earlier in this testimony, attempts to build into the price cap formula additional productivity increases derived from price caps have no basis in fact, engage in circular reasoning and simply represent bias against the company. The Commission should reject attempts at controlling Ameritech Ohio's future rate of return through the productivity offset. If the productivity offset was set too high, it could significantly reduce incentives for Ameritech Ohio to invest in Ohio's telecommunications network.

16. Q: The Staff has suggested that "in the event that the Commission adopts a relatively low productivity offset and does not require profit sharing," (p. 39) then the use of a consumer dividend "safeguard would be warranted." Do you agree?

A: Any calculation of a consumer dividend merely chooses an arbitrary number. There is no economic rationale for a stretch factor or consumer dividend. If a price cap plan ensures that consumers continue to benefit, at minimum, from historical productivity gains (with shareholders receiving the benefits of above average performance), that is a consumer dividend. In competitive industries, firms get to keep the benefits of above average performance at least in the short run.

Sharing Increased Earnings

17. Q: The Staff has argued that a higher productivity offset is necessary or else “[Ameritech Ohio’s] customers would not share sufficiently in the benefits of price cap regulation through price decreases resulting from Ameritech Ohio’s productivity gains.” (p. 37)

A: The Staff has expressed the belief that one should expect Ohio Bell’s profits to rise in the coming years, due to a number of factors working in their favor. The Staff leaves us with the impression that because there is no review of earnings during the plan, Ameritech Ohio would be able to keep excess profits and not benefit customers. These characterizations are directly at odds with the actual experience under price regulation in other states. As predictions, they amount to little more than scare tactics, with little or no basis in fact.

Moreover, it should be noted that many factors other than productivity improvements affect the earnings of firms in competitive markets, e.g., superior marketing, new products, better customer service. Any one of these performance variables can raise a firm’s profitability above industry

norms, which is why one observes large differences in profit margins among firms in competitive industries, with many firms earning above 20% return on equity. As shown in Table 1, it is wrong to argue that firms in competitive industries only earn their cost of capital: some firms earn much more, others much less. Hence, given the dynamic environment of the telecommunications industry, it would be a gross mistake to believe that by regulating profits, one can promote efficiency, innovation and infrastructure investment. Compare the earnings of Wal-Mart with those of Sears, for example. Would anyone argue that Wal-Mart's prices are too high because it is earning high rates of profit? Of course not, because Wal-Mart has been a very powerful pro-competitive, pro-consumer force in retailing.

Instead, a good regulatory plan should limit the prices of less competitive services directly. Having done that, it makes no sense to deny Ameritech Ohio the opportunity to earn higher rates of return through superior performance, nor should it be assumed that if Ameritech Ohio succeeds in doing so, it must be because of a flaw in the plan. Just as profits range widely in other competitive industries, so too should they be allowed to vary in telecommunications.

**Table 1: Examples of Industry, Firm ROE's
(from 1993 issue of "The Business Week 100")**

Industry	Composite ROE	Examples of Low, High ROE Firms in Industry	Company ROE's
Consumer Products - Apparel	21.3%	Reebok International Warnaco Group	13.7% 34.1%
Consumer Products - Beverages	23.5%	Adolph Coors Coca-Cola	3.2% 41.0%
Discount & Fashion Retailing	9.0%	Sear, Roebuck Wal-Mart Stores	-19.9% 24.8%
Food Retailing	24.8%	A & P Safeway	-3.9% 37.9%
Manufacturing - Special Machinery	4.3%	Caterpillar FMC	-13.8% 40.2%
Computer Software & Services	20.9%	Comdisco Cisco Systems	3.0% 42.4%
General Manufacturing	16.0%	Illinois Tool Works International Game Tech	14.3% 33.5%

Earnings Sharing

18. Q: The Staff seemed to allow the possibility of including an earnings sharing provision in the alternative regulation plan for Ameritech Ohio in the "event that the Commission adopts a low productivity offset." (p. 39) Why do you oppose earnings sharing?

A: The Commission should adopt the current productivity offset, based on long-term historical experience. In my view, the time for earnings sharing has come and gone. During the mid- to late 1980's, as regulatory commissions were making modest, incremental reforms of rate of return regulation, sharing was considered a logical first-step. The conditions in

the industry were changing, but there was plenty of time for a gradual transition to a fundamental change in the form of regulation. It is now 1994, and anyone who has been observing the telecommunications industry over the past few years must be struck by just how incredibly fast changes are occurring in the industry.

The Staff and their consultant have focused on the risk of customers not being able to "share" in alleged higher profits that Ameritech Ohio will earn in the future. They have ignored the possibility that earnings could decline, as technological progress accelerates and competition intensifies in various telecommunications segments. While earnings sharing provides the illusion that as profits rise customers would "share" in those profits it also saddles less competitive services with the risk that at some point, if profits were to be below a threshold, the Company could be allowed to file for rate increases. In fact, customers of less competitive services would be at the highest risk from earnings sharing as competition emerges since other customers would have competitive alternatives.

The fundamental problem with earnings sharing is that it is rate of return regulation and therefore requires all of the baggage and administrative costs of rate of return regulation and more: prescription of depreciation rates; extensive reporting and monitoring of investments, rate base and profitability; prudence reviews; and, no doubt, continuing debates over how much profits Ameritech Ohio is earning and how much they should be allowed to "keep." It is no better idea to keep Ameritech Ohio under rate of return regulation than it would be to put MCI or Teleport under rate of return regulation.

19. Q: The Staff have suggested that profit sharing could “mitigate the impact” of “cross-subsidization of monopoly and competitive services.” (p. 39) Is this correct?

A: The Staff discussed the use of a profit sharing plan as a safeguard against cross subsidization of competitive services by monopoly services:

“The staff believes that, as proposed, the Applicant’s price cap plan could result in predatory pricing and cross-subsidization of monopoly and competitive services.

Although profit sharing could mitigate the impact of the latter to some extent, the Staff believes that the addition of a profit sharing mechanism in and of itself would not satisfactorily address the problematic aspects of the proposed price cap framework.” (p. 39)

Earnings sharing would overlay an additional layer of regulations on Ameritech Ohio and by retaining all the perverse features of rate base, rate-of-return regulation it would increase, not reduce, the incentives to cross-subsidize. The Staff seems to think that what is needed is more rules and regulations. I do not. I advocate less, but inherently better regulation. Better regulation can be achieved by reducing regulatory control over services that do not require regulatory protection, by targeting rate protection to where it is most needed, and by establishing an incentive framework that eliminates any economic reason for Ameritech Ohio to compete unfairly or cross-subsidize competitive services. This is unquestionably true under the Plan given that Ameritech Ohio requires

that prices be at or above long-run incremental costs. It is not possible for Ameritech Ohio to cross-subsidize, so there is absolutely no need for additional regulatory protections.

20. Q: The Staff and their consultant seem to view profit sharing as a costless mechanism to ensure that customers share in the potential productivity gains from price caps and to lower the risk to customers that the price cap may have been set incorrectly (NRRI, p. 130 and Staff, p.39). Do you agree?

A: No. Profit sharing may require the regulated company to share its profits thus creating the illusion that this is a better arrangement for customers. But this distorts the incentives that the company faces and hence introduces significant costs over the long run to both customers and Ameritech Ohio.

The Staff's consultant argued that "as long as the profit sharing threshold is greater than under rate of return regulation, Ameritech Ohio is still better off." (NRRI, p. 136) It is true that allowing some profit sharing to traditional rate of return regulation can increase incentives, but that is the wrong comparison. By adding profit sharing to a price regulation plan, one is actually decreasing incentives.

The Staff has recognized the role that price cap regulation has in providing the right set of incentives.

"Staff supports price caps as a foundation of an alternative regulation plan, because, among other reasons identified by the NRRI Study Team, a properly designed price cap

framework mitigates customer risk related to infrastructure investment.” (p. 105)

Yet, despite this recognition, by leaving open the possibility of introducing earnings sharing provisions, the Staff allowed the risk that, at some point in the future, Cell 1 service rates may have to go up because increasing competition in other services forces more of the total costs of investments onto them. At the same time, incentives to invest are reduced.

Shareholders do not have less risk under earnings sharing because there is no assurance that the regulator will be able to keep its part of the contract, i.e., allowing the Company a fair chance of earning its cost of capital over the life of its investments. Investments made by Ameritech Ohio during the next few years will have economic lives of ten, fifteen or more years. There is no doubt in my mind that, within that timeframe, all markets for communications services, including Cell 1 services, will have become highly competitive.

21. Q: The Staff’s consultant quoted your direct testimony as a justification for the appropriateness of profit sharing. Is that correct?

A: Absolutely not. The consultant referred to:

“The usefulness of profit sharing can be seen in Ameritech Ohio Telephone witness Harris’ statement that ‘passing through a share of productivity gains to basic ratepayers, for example, regulators can ensure that both efficiency and

equity are enhanced.' [Harris, Ameritech Ohio Exhibit 15 at 44]" (p. 137)

The consultant misinterpreted my testimony. I would never support profit sharing as a mechanism to ensure equity and distribution of profits between the Company and the ratepayers. My statement was in reference to the productivity offset and it is absolutely inappropriate to use it as a justification for profit sharing. Profit sharing promotes neither equity nor efficiency and would increase risks for "basic ratepayers" the most.

Protecting Customers of Less Competitive Services

22. Q: The Staff seems to be concerned on the effect of the price cap plan on less competitive services (p. 34). Is this warranted?

A: Frankly, I am bewildered by the Staff's position on this point. Both the Staff and their consultant, although they support the concept of price regulation, oppose the price regulation plan as proposed by Ameritech Ohio. First, introduction of a sharing component with all the accompanying rate of return baggage (prescription of depreciation rates, incentives to cross-subsidize, its cost-plus features), would in fact do the opposite: it would tend to hurt customers of less competitive services the most. Second, the Ameritech Ohio plan would freeze prices during the first year of the plan and would not increase prices for residential and business exchange access and local usage for three years, thus protecting the bulk of less competitive services of Ameritech Ohio. Furthermore, the Staff and their consultant are ignoring the almost certain effect of rate of return regulation with escalating competition for other than

Cell 1 services: as the contribution of those increasingly competitive services declines, the Commission would have to authorize rate increases on various Cell 1 services to allow Ameritech Ohio to meet its revenue requirement. Such a result is directly at odds with legislative and regulatory policy objectives and the public interest of Ohio.

Profit-sharing does not provide a safety net, for either consumers or shareholders. It is premised on the myth that, over a very long period of time -- the length of the economic lives of investments made under a rate of return constraint -- the regulator can assure the opportunity for adequate returns to shareholders and protect consumers from rate increases. Given the rates at which technology is changing and competition increasing, the Commission can offer no such assurances.

Mischaracterization of Regulatory Plans

23. Q: The Staff's consultant claims that "although many states have adopted alternative regulation to some degree, relatively few have departed from traditional regulation to the extent of approving a price cap plan such as that being proposed by Ameritech Ohio." (NRRI, p. 9) Is this true?

A: No. Nothing could be further from the truth. Beginning in the late '1980's, several states adopted regulation plans without earnings sharing provisions. Six states -- Kansas, Michigan, Nebraska, North Dakota, Vermont and West Virginia -- adopted regulatory plans with no rate of return or earnings sharing provisions. As detailed below, the experience in those states was quite favorable:

Kansas: first-year of plan: revenues up by 20% despite stable basic telephone rates; 60 of 131 C.O.'s planned to be converted to digital in 1991-92; "dozens new products" introduced. An article in the *Wichita Business Journal* illustrated the results achieved by the plan:

"As Southwestern Bell Telephone Co. enters its second year under a plan that has closed the door on traditional rate-of-return regulation...the company is reaping the rewards with increased sales and rural customers are profiting with a more modernized telephone network...The company was able to attain a 20 percent sales increase in Kansas in the fiscal year ending Dec. 31st." [Lee Ann Groene "Southwestern Bell Sales Increase as TeleKansas Finishes First Year" in *Wichita Business Journal*, 2/1/91]

Michigan: Two-year freeze of basic service rates; 25 new services introduced in first year of legislation (immediately before legislation, 82 services were offered by Michigan Bell); 8.1% decrease in Michigan Bell's intraLATA toll rates between 1992 and 1993. In a review of the plan, the Michigan Public Service Commission concluded that the Deregulation Act provided an appropriate alternative regulation framework and recommended its continuation:

"The Commission believes Act 179 presents a workable regulatory framework that permits the forces in competitive markets to replace regulation. The law also provides protection for captive customers of monopolistic basic services. The Commission recommends deletion of the January 1, 1996 sunset." [*Public Service Commission 1994 Report to the Legislature and Governor* p. 70.]

Nebraska: Local service rates deregulated; enhanced service quality monitoring; US West did not change basic rates between 1986 and 1991; rise in new service introduction; rise in capital investment; US West's profitability not above normal. A study of the deregulation experience in Nebraska found positive effects:

"As noted before, Nebraska received new and experimental services more rapidly and more frequently than other US West states, despite its small market size. Rate deregulation at the state level appears to have provided a moderate stimulus to investment and service innovation by removing regulatory constraints on capital recovery...US West's positive results in Nebraska represented a genuine response to opportunities created by detariffing. The differential between Nebraska and other states appears to be increasing rather than decreasing as time passes." [Mueller, Milton L. *Telephone Companies in Paradise: A Case Study in Telecommunications Regulation*, New Brunswick, NJ: Transaction Publishers, 1993]

North Dakota: Essential and non-essential services separated; limited increases in telephone rates; some telecommunications services industries relocated part of their operations to North Dakota; broad public support for second bill expanding the number of non-essential services, and setting the price cap into law (the North Dakota Legislature passed SB 2440 with 46 votes in favor and one against (2 absent) in the Senate and with 98 votes in favor and zero against in the House). Some comments of the local press reported favorably on the new regime:

"There are examples of telecommunications service industries locating a portion of their operations in North Dakota... There is a substantial increase in the number of long-distance educational consortiums organized by the schools." [David Crothers "How Deregulation Has Affected North Dakota Telecommunications - A Look at the Past Two Years" in *Rural Telecommunications* 11(1) Jan./Feb., 1992, p.43-45]

Vermont: Stable telephone rates; proliferation of new services; fourth highest telephone penetration in the country; 80% conversion to digital switching; accelerated capital investment; more new services than in any other New England Telephone state; NET rates of return lower than under

Rate of Return regulation. A local article illustrates the effect of this plan on Vermont telecommunications:

"In 1987, the Vermont Public Service Board signed a landmark agreement with New England Telephone that radically altered the way the company was regulated. The result has been dramatic: Stable telephone rates; a proliferation of new services; and the most sophisticated telecommunications network in the country. More than 80 percent of the state is served by digital switching and fiber optic trunk lines, and the figure is rising." [Richard Andrews in "Telecommunications Agreement Scrutinized" in *Vermont Business Magazine* 3/1/91]

West Virginia: 100 percent penetration of digital switches (one year ahead of plan); debt rating upgrade of telephone company; enhanced ability to attract companies using telecommunications; revenue growth from new services. In a credit rating report, Duff & Phelps found the effect of the regulatory environment on C&P Telephone Co. very positive:

"CP-WV's improved financial performance can be traced to stronger economic activity in its service territory, improved regulation, revenue growth from new services, and the company's commitment to expense control... CP WV's expense control has been driven by its modern network. At the end of 1993, the company expects to have 100 percent penetration of digital switches [one year ahead of schedule], signaling system seven capabilities, and Custom Local Area Signaling Services (CLASS) capabilities." ["Duff & Phelps Credit Rating Co. Upgrades the Chesapeake and Potomac Telephone Company of West Virginia" in *PR NewsWire*, 9/30/93]

The accumulated experience in these states provides solid support for price regulation: it works. The Staff's notion that it is too radical, too untested, or too risky, is simply not true. Quite the contrary, as other states adopt progressive, flexible, adaptive regulatory plans, it will be even

more important that Ohio do so too to remain an attractive location for business and to attract additional investment.

24. Q: The Staff's consultant (NRRI, p. 132) appears to imply that most states that have adopted price caps have also adopted earnings sharing. Do you agree?

A: No. The NRRI consultant stated that "profit sharing occurs in three of the four fourth generation price cap states." (p. 132) The NRRI, by arbitrarily identifying a group of states as satisfying its definition of "fourth generation" price cap plans, was able to arrive at that result. As I stated before, several states have adopted price cap or social contract plans with no earnings sharing. The fact is that price regulation with no earnings sharing provisions have been employed successfully in the US for years.

Symmetric Treatment of Service Quality

25. Q: The Staff seems to think that service quality should be both regulated and prescribed (p. 39-40). Do you agree?

A: No I strongly disagree. The Staff proposed first that only negative adjustment factors be incorporated into the price cap plan and second, that new service quality needs of the "information age economy" be incorporated into the service quality parameters:

"The Staff accepts [N-ST recommendations 4.1 to integrate quality of service into the price cap framework and 4.8 that modifies the adjustment factor to deal only with an unacceptable (or negative) quality-of-service levels] and

proposes the following modifications to render the quality of service adjustment factor acceptable within the price cap framework proposed by OBT.” (p. 39-40)

“The Staff agrees that the thirteen minimum service standards proposed by the Applicant be elements of the quality-of-service component of the price cap. These thirteen standards would remain the benchmark until the Commission would adopt new MTSS, pursuant to N-ST Recommendation 4.6 [that the Commission should order an investigation into the quality of service needs of the information economy], and incorporate them into a modified Plan.” (p. 40)

I disagree for two fundamental reasons. First, any plan that intended to “mimic an unregulated market” must offer a symmetric risk-reward function. Second, the Commission should not be the main agent establishing the relevant quality measures of the information age economy. The market ought to be the driver of enhanced service quality. This is a fundamental regulatory principle: do not overregulate. The most powerful incentive for delivering enhanced and expanded service quality is competition in meeting consumer demand. While the Commission has a role to play in the review of quality measures, it should be careful to determine the appropriateness of its role in establishing new MTSS in the emerging competitive environment.

Exogenous Impact Adjustments

26. Q: The Staff appeared to be proposing that only “the Commission should have sole discretion to initiate and implement any exogenous impact adjustments within the price cap framework.” (p. 42) Is this appropriate?

A: No. I assume that the Staff meant that both parties could bring exogenous adjustment requests and I would agree with that. The exogenous impact adjustment ought to be symmetrical. That is, both parties ought to have the ability to be able to request adjustments to the price cap formula. If one side holds sole discretion over whether an adjustment is due, then only those adjustments that are favorable to that party will be proposed.

The Commission should note that prices DO increase in competitive markets, when costs increase. One should distinguish real increases in prices from nominal increases. If prices rise only 2% while general inflation rises 4%, that amounts to a 2% price decrease in real terms. Moreover, in a regulated environment, price changes can reflect the fact that prices were not, or are not yet, aligned with economic costs. In that case, price increases may indicate a movement toward economic costs, which is consistent with competition.

Restrictions on Pricing Flexibility

27. Q: The Staff has proposed various options to tighten the limits on pricing flexibility of Cell 1 services. What do you think?

A: The Staff has expressed various concern on the pricing flexibility of Cell 1 services:

“The Staff is concerned that the inclusion of monopoly and competitive services within the residence and non-residence service groups may result in the cross-subsidization of such services, whereby monopoly rents are extracted from Cell 1 services priced above their respective costs, and used to offset decreases in rates for competitive services.” (p. 43)

“The potential for the abuse of Ramsey pricing is a fundamental weakness of the Applicant’s proposed price cap framework.” (p. 43)

“A more fundamental redesign of the baskets to which a price cap would apply e.g. establishment of a basket or baskets for Cell 1 services, could conceivably address this issue and is not precluded by the Staff.” (p. 43)

“The Staff... agrees with the NRRI Study Team that Cell 1 price decreases should be limited to prevent pricing practices intended to insulate Cell 1 services from potential competition.” (p. 45)

It is important to note that the Ameritech Ohio plan has upward pricing limits that were endorsed by the Staff (p.45). This is an appropriate protection for less competitive service customers from experiencing rate increases after the first year’s proposed limit on price increases. Further,

basic access and usage will not experience any price increases for the next three years as part of Ameritech Ohio's proposed price freeze. The Staff has expressed concerns about price decreases as preventing competitive entry (p. 45). However, as long as those prices are above LRSIC, then there is no reason to prevent Ameritech Ohio from lowering the price whether in response to potential or actual competitive entry or as part of its efforts to increase penetration or usage.

As for the Staff's suggested "fundamental redesign" of the baskets on which a price cap would apply, I fundamentally disagree with this proposal. As the number of baskets is multiplied, Ameritech Ohio's pricing flexibility would be seriously limited. The Commission must be extremely careful not to overly limit pricing flexibility. We can not foresee either the intensity of competition or the segments where competition may emerge in the near future. The Staff and its consultant are evidently concerned that the Commission should not overattribute market regulation properties to the presence of competition. Given the inertial energy of the status quo, I believe there is a much greater danger of underestimating the rate and magnitude of changes that are revolutionizing telecommunications technologies, market structures and competitive dynamics.

The Ameritech Ohio plan can adapt to changing industry conditions over the next several years. As of today, some markets for local exchange services are competitive, others are not. Competition is increasing rapidly, though, both directly through new entry, and indirectly through technological innovation and the development of new means and media

for filling customers' communications and information needs. The firm will need pricing flexibility to respond to those changes. A good regulatory plan creates the conditions for competitive entry by allowing rational economic pricing of services and not handicapping either entrants or incumbents from participating in the marketplace.

28. Q: The Staff's consultant has justified limits on Ameritech Ohio's pricing flexibility on the basis that "the ability to drop prices could scare off all but the most determined and well financed entrants." (NRRI, p. 35) Is this correct?

A: It is not at all correct. Ameritech Ohio faces the prospect of substantially greater competition in exchange services from many "determined and well financed entrants," including CAPs, cable TV operators, IXC's and wireless carriers. As I stated in my testimony, competition is emerging fastest in urban areas, which attract new entrants by their high traffic and user density. As one of the more urban states in America, Ohio is already experiencing, and will continue to experience significantly more telecommunications competition than more rural states. ⁹ According to data from the Statistical Abstract of the United States and the World Almanac, in 1992, Ohio was the 7th most populous state in the country; in 1990, and it ranked 8th among all states in population density, at 264.9 persons per square mile, more than three-and-half times the national average of 70.3. Six of the 75 largest metropolitan areas in the United States are in Ohio: Cleveland/Akron, Cincinnati/Hamilton, Columbus, Dayton/Springfield, Toledo and Youngstown/Warren. Because of population density, incomes and the presence of information intensive

industries, these areas present attractive opportunities for entry in competition with the LECs.

CAPs are beginning to install switches and are seeking authorization to provide exchange services, indicating their clear intent to expand from their base in access services to provide exchange services, by adding end office switches to their existing and/or expanded fiber optic rings.

Teleport, for example, has installed five AT&T ESS switches across the country. ["Teleport Communications Prepares for Local Service Offensive," *Local Competition Report*, October 4, 1993.] In Ohio, CAPs already have or are developing networks in all the largest metropolitan areas except for Youngstown/Ohio.

IXCs are entering access and exchange services from the "opposite direction," so to speak, as they add access facilities to their extensive, existing switching capabilities. MCI, for example, has recently announced its intention of "invading" access and exchange services. A recent article in the New York Times illustrates this:

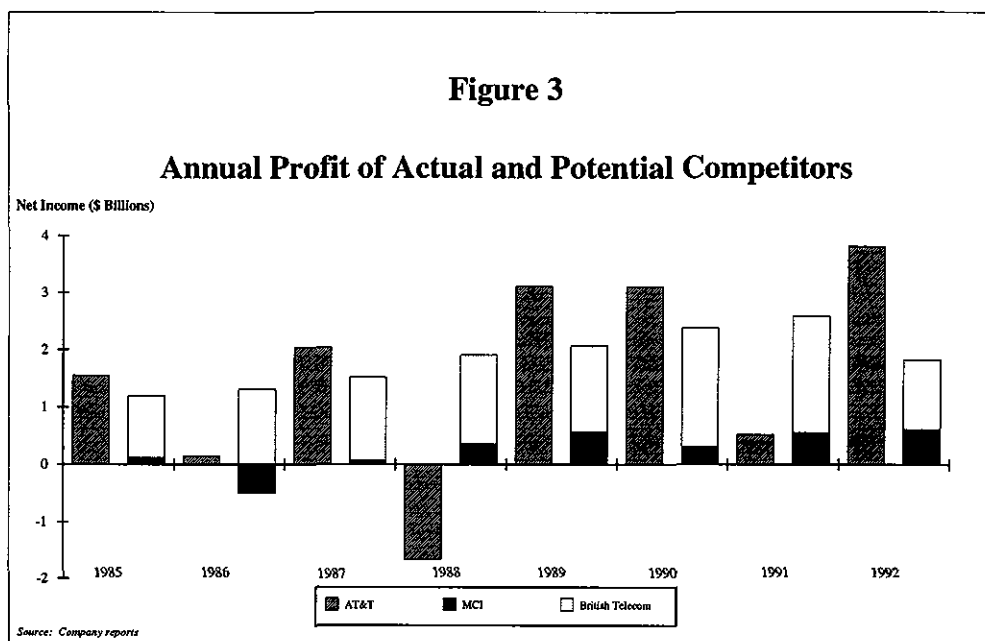
"Initially MCI intends to use the fibers to link its corporate customers directly to its long-distance network, bypassing the local Bell telephone companies -- and avoiding the "access" charges MCI now pays the phone companies for local connections to corporate customers.... MCI officials said today that the first wave of new networks would be built in Atlanta, New York, Chicago, Los Angeles and more than a dozen other big cities. While the plan seems skeletal at first glance, MCI officials said these networks would run through

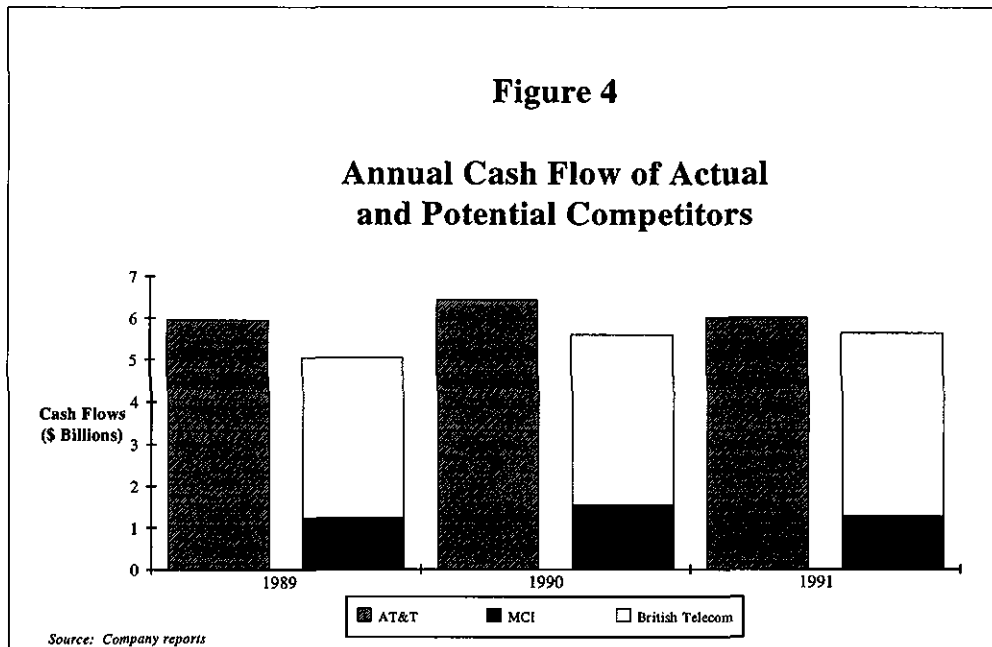
high-traffic corporate corridors that now account for 40 percent of all its long-distance traffic. Bert Roberts, MCI's chairman and chief executive, said, 'By now it is clear that the local telephone monopolies will never give us what we need,' contending they had not provided 'local access capabilities at a decent price.'" "MCI Plans to Enter Local Markets," *The New York Times*, January 5, 1994.

As one of the world's largest switch manufacturers, AT&T supplies not only its own tandem switches, but has roughly half of the U.S. market for end-office switches purchased by LECs. AT&T most certainly has the knowledge and the incentive to create switch software that would give its tandem switches the capability to provide exchange and enhanced services directly to end users. As a major supplier of switches to CAPs, AT&T benefits from their increased market share by purchasing access services from them and by selling equipment to them. According to an article in the *Local Competition Report* Teleport has installed five AT&T ESS switches across the country ["Teleport Communications Prepares for Local Service Offensive," October 4, 1993].

Due to the rapid growth of competitors, their increasing size and resources means they have no disadvantage in obtaining financial, human and technical resources for competing with Ameritech Ohio. As shown in Figures 3 and 4, several of Ameritech Ohio's leading potential competitors are very large, profitable companies with substantial cash flow to fund expansion and entry into access and exchange service. Several of these firms -- most notably AT&T and MCI -- have built substantial "brand name

equity” from millions of dollars in national advertising campaigns. Such brand equity will serve as an important competitive advantage as they expand into additional lines of business through growth or acquisition. AT&T has announced that it will use the AT&T brand name for McCaw’s cellular services once the acquisition is consummated. MCI will bring its “marketing clout” to Nextel, according to a recent Wall Street Journal article reporting MCI’s purchase of a 17% equity stake in Nextel’s national specialized mobile radio service. [“MCI’s Entry Adds New Dimension to Wireless Race,” *The Wall Street Journal*, March 1, 1994]





Technological change is increasing the range of services that can be economically provided by each mode of communications, thereby increasing the potential for intermodal competition in communications. Intermodal competition -- among telephone, cable, terrestrial wireless and satellite networks -- will greatly intensify in communications, just as it has in transportation (e.g., railroads, motor carriers, waterways, pipelines and air freight). The following developments illustrate the growing potential for intermodal competition:

- Cable systems operators: deployment of new digital technologies will significantly increase capacity of cable systems, including potential for two-way communications;
- Cellular carriers: dramatic increases in market penetration and usage shows that cellular service increasingly competes with wireline, especially for intensive users who get high value-added from communications, and users who need site-specific access for short durations. Cost-modeling exercises indicated that, "in a

typical European greenfield case, up to 20%-30% of lines would be better served by radio than by a conventional telephone network." [Network Europe: Telecoms Policy to 2000, Analysis Publications, 1993]

- Personal Communications Services (PCS) deployment will increase wireless competition: the number of wireless competitors will triple within the next few years due to new allocation of 120 MHz of spectrum, with seven new licenses for each geographic market. Mercer Management, Inc. of Lexington Massachusetts recently conducted a national survey, analyzed several market and cost possibilities, and interviewed telecommunications industry experts. A recent article in the *New York Times* summarizes the expectations for PCS:
"Nearly half of the industry experts that Mercer interviewed projected wireless service would become a 'viable substitute' for traditional wire-line service within 10 years... Half of those experts interviewed predicted more than 15 percent of the public would be using a wireless handset in five years, compared with the current 7 percent. They expect that figure to rise to more than 30 percent in 10 years." *The New York Times*, February 9, 1994.;
- Extraterrestrial Wireless: satellite-based communications services, including VSAT, DBS (direct broadcast satellite) and LEOs (low earth-orbiting satellites), will also grow very fast, increasing their market penetration and becoming even more competitive with wireline access, exchange and interexchange services.

Finally, combinations of communications modes through strategic alliances, cross-ownership and intermodal mergers will further facilitate competitive entry and intermodal competition. In addition to the growing size and increasing resources of competitors, most competitors have undertaken a variety of acquisitions, mergers, joint ventures and strategic alliances to further strengthen their competitive positions. While the Bell Atlantic-TCI merger will not occur, many other mergers have occurred, and many more will occur.

29. Q: The Staff has proposed limits on the pricing flexibility of Cell 2 and Cell 3 services. Are these appropriate?

A: No. Pricing limits on these services are unnecessary and hamper the ability of Ameritech Ohio to be an effective competitor.

The existence of substitutes limits the ability of Ameritech Ohio to exercise monopoly power. Given the rate at which competition is emerging, the risk of overregulating is significant. The Commission should not overly hamper Ameritech Ohio's ability to meet current and future competition in Cell 2 services, which it would through the Staff's proposed pricing limits.

There is a solid economic basis for having a "discretionary" category: It reflects the fact that when customers have generic substitutes for those services or don't particularly need them, those services have a high elasticity of demand. In order to get more customers to buy such discretionary services, the LEC will have to lower its prices, improve service quality and otherwise take steps to increase market penetration. Regulators have themselves recognized the difference between essential and discretionary services: consider that the rates for basic residential service are typically kept at or below cost, while the rates for discretionary services like custom calling features are often relied upon to provide substantial contribution to common costs.

Market Power Measures

30. Q: The Staff suggested various market tests for determining whether a service belonged in a particular Cell. Are these appropriate tests?

A: No. The Staff has proposed an exceedingly narrow view of competition and has relied on an inappropriate set of measures of market concentration to determine whether a service falls in one category or not. By proposing a mechanical approach to establishing market power based on market metrics, the Staff is confusing measures of market concentration with real market power. The goal of the Commission should be to control market power and encourage competition, not in passing tests of market concentration.

The Staff proposed among other measures that "no [existing] service for which [Ameritech Ohio] has as much as 70 percent of the market [could] be considered for Cell 2 classification." [p. 6 Staff Executive Summary] In addition, the Staff required that "a Cell 2 service must face at least one viable competitor... which [was] capable of providing adequate alternative service and [was] actively soliciting business throughout the relevant geographical area...[as well as] evidence that existing customers [were] choosing the competitor's services over the Applicant's offerings and that new customers must consider the alternate providers to be effective competitors." [p. 6 Staff Executive Summary] For Cell 4 services the Staff required that "at least three viable competitors" be present and "actively soliciting business in the relevant geographical area." In addition, the Staff proposed that no service for which Ameritech Ohio had "over 45% of the market [could] be" classified in Cell 4. It further required that "at least two identifiable competitors [had to have] at least 10% of the market, or one... competitor [had to have] at least 25% of the market." [Staff Executive Summary, p. 6]

These criteria are flawed in many respects. In addition to the obvious market definition difficulties, there are measurement biases that distort the true picture of competition in the market and, additionally, the use of market concentration measures as an indicator of market power is often incorrect.

There are more dimensions to competition than those measured by the Staff's proposed market shares. Many telecommunications services face competition even though the LEC may be the sole provider of that service within a geographical area. In virtually ignoring substitutable products and services, the Staff is according more market power to the LECs than they actually have. The Commission ought to focus on the ability of the LEC to engage in, and sustain, monopoly pricing in various markets and not on the actual market share that the LEC actually achieved. This is best measured in elasticities of demand for LEC services rather than by market shares measures.

There is a systematic reporting bias in the calculation of market shares. Regulated firms are required to report their revenues, unit sales, capacity or other forms of market share measures. Unregulated firms, however, are not subject to the same reporting requirements. This creates an upward bias in the reported share of regulated firms since missing or miscalculating the shares of unregulated firms would distort the market share of the reporting firm. If deregulation of a firm is tied to reported market share figures for that firm, then there exists an additional incentive to underreport share figures for unregulated firms to maintain regulatory controls on the regulated firm.

This measurement bias is compounded when there are large numbers of self suppliers. There are significant limits on the feasibility of compiling accurate figures on the extent of self-supply. As long as self suppliers form a significant segment of any telecommunications market, the market share of Ameritech Ohio will be overstated.

Many competitors will not target large numbers of customers. There are significant segments of the market that the LEC serves that would not be served by competitors. Including these customers in any market share measure would overstate the degree of market power that Ameritech Ohio actually has in those markets.

Further, the application of static market metrics, in general, overstates the strength of incumbents in markets with significant technological change, ignores the threat of potential competition to discipline pricing behavior, and understates the effect of potential mergers and organizational change in creating new competitors and altering the dynamics of competition in the telecommunications markets. If any of these conditions are present, market concentration will be an upwardly biased measure of market power.

In an industry such as telecommunications, where significant technological change is occurring and will occur, the application of market metrics such as those proposed by the Staff will understate the pressures that technological change will exert on Ameritech Ohio. The Justice department and the Federal Trade Commission, in Horizontal Merger

Guidelines, recognized the role that technological change and innovation may play in assessing the relevance of market metrics:

“Recent or ongoing changes in the market may indicate that the current market share of a particular firm either understates or overstates the firm’s future competitive significance. For example, if a new technology that is important to long-term competitive viability is available to other firms in the market, but is not available to a particular firm, the Agency may conclude that the historical market share of that firm overstates its future competitive significance.”[Horizontal Merger Guidelines, April 2, 1992, pp. 31-32]

Changes in market structure such as mergers, alliances and joint ventures can introduce new competition, strengthen existing competitors or throw the focus of competition into entirely new directions. There have been hundreds of mergers, alliances and other deals just in the past few months in the telecommunications industry. As I discussed earlier in this testimony, the financial capabilities of many of those new entrants are significant and the forms that competition will take will be very different from those today. For example, the deployment of PCS networks will likely allow wireless communications to emerge as an economic alternative to basic wireline services.

Furthermore, it is well established in economics that, in addition to actual competition, potential competition is an important factor in market

dynamics and competitive behavior -- especially in controlling prices. If entry and exit is relatively easy, then the threat of entry is enough to control prices, even of a monopolist with close to 100% market share of the relevant market. The Staff proposes various market metrics tests on Cells 2, and 4 which face or will face significant competitive threats of entry or which, by their discretionary nature, have considerably higher elasticities of demand. Both these factors prevent Ameritech Ohio from exercising monopoly power over these services.

Most often, the LEC is subject to regulatory constraints not imposed on competitors (for example, when the LEC is required to provide services to many customers at prices below costs). The requirement to price below cost artificially inflates Ameritech Ohio's market share in various markets where no economic entry could be possible further casting doubt on the advisability of using market share measures to determine Ameritech Ohio's market power. In addition, the use of "competitive safeguards" such as imputation, unbundling and rate averaging handicap the LEC while at the same time not only encourage selective targeted competition (cream-skimming) but also, often promote uneconomic entry.

Finally, I should point out that under the restrictive definition of competitive markets proposed by the Staff, the long distance market would still not be considered competitive. AT&T's market share of toll service revenues in 1992 was 48.6% (including toll revenues received by the Local Exchange Carriers). MCI's share that year stood at 13.3% of total toll revenues and Sprint's was 9.5% [FCC's Common Carrier Statistics 1992/93.] If toll service revenues received by the LECs were excluded, then AT&T's share

of the toll market would be 59.8%, MCI's 16.4% and Sprint's 9.5%. Under the Staff's criteria, this would not justify classifying various toll services as competitive. This would be a hard conclusion to justify today.

Given all the above factors, market measures of concentration understate the degree of competition facing the LEC and unduly hamper Ameritech Ohio's ability to compete in the marketplace. The Staff's focus on current market metrics is misguided, at best.

Duration of Plan

31. Q: "The Staff believes that the Commission should establish a five-year sunset provision for the Plan." (p. 53) Do you agree?

A: In deciding the specific provisions of an alternative regulation plan for Ameritech Ohio, the Commission must recognize that Ameritech Ohio will be making investment decisions that constitute long run commitments. Just as Ameritech Ohio must evaluate the potential returns on those investments over their respective economic lives, so too must the Commission adopt a plan that provides appropriate incentives over the economic lives of those investments. This requires a regulatory plan that can accommodate substantial changes in technology, market conditions and competition over a long period.

The Staff and their consultant tend to emphasize the current -- or even past -- state of the industry as the basis for evaluating alternative regulatory plans. In my view, one should instead take a forward-looking view. The plan adopted in this proceeding could serve Ohio until the 21st

century. Hence, the Commission should consider not only how things are today, but the rate and direction of change: where things are headed, how fast they are moving, and what that implies for the viability and sustainability of regulatory alternatives.

The Commission surely must recognize that the rate of technological change over the past few years has been breath-taking -- even faster than was anticipated five years ago. Furthermore, all of the signs I see indicate that the rate of change is still increasing. In order to succeed, an alternative regulatory plan adopted now should reflect expected conditions over the duration of the regulatory plan. In short, this Commission is shooting at a very rapidly moving target; if it aims at the current conditions -- much less the past -- it will surely miss the target.

Encouraging Competition

32. Q: Is the Staff's support of a transition to "a viably competitive market" consistent with their recommendations?

A: The Staff stated:

"The Staff fully supports the ongoing transition to a viably competitive marketplace for telecommunications services and recognized the need to provide flexible regulation for those services which face competition." (p. 74)

Yet, the Staff has proposed a plan that is often directly at odds with its goal of promoting competition and encouraging entry. The best way to ensure competition is to allow pricing, quality and investment to be driven

by markets rather than regulation. A good regulatory plan should be trying to eliminate regulations, unnecessary reporting requirements, allow economically rational costing and pricing, and favor neither the incumbent or the entrant.

If prices for various services are priced below cost and are not allowed to converge at least to their LRSICs then, what incentive would a potential entrant have to compete in a market where it knows one of its competitors is forced to charge below cost? Or if prices are artificially kept above costs, then inefficient entry would be encouraged to exploit Ameritech Ohio's mandated cost mark-up.

Pure price caps best mimics competitive markets. The introduction of a sharing provision, with all the accompanying rate base, rate of return regulatory baggage, would unduly complicate the plan and saddle Ameritech Ohio with incentives that would work at cross-purposes from competitive unregulated markets.

Infrastructure Commitments

33. Q: The Staff and their consultant advocate significant reporting requirements and forecasts of Ameritech Ohio's infrastructure commitment (p. 104-105), propose that Ameritech Ohio file supplemental testimony addressing "its... efforts to build redundancy into the network" (p. 104). Do you think that is appropriate?

A: I cannot imagine a less appropriate role for this Commission to play. This Commission has a responsibility to protect the interests of Ohio

consumers and businesses and to promote the growth and development of a healthy telecommunications services sector for the state. It can best perform those roles by providing the proper set of pricing limits and economic incentives to induce telecommunications services providers to invest in expanding and modernizing their networks, offering new and improved services and making technological innovations. The Commission has neither the expertise nor the resources to get involved in the actual process of network planning.

The Staff and their consultant have focused on the size of the incremental commitment Ameritech Ohio is making to infrastructure investment. While an investment commitment does represent one way in which an alternative regulatory plan can increase infrastructure investment, it is certainly not the only way. In my opinion, the Staff and their consultant generally fail to acknowledge the inherent advantages of price regulation over rate of return regulation in stimulating faster investment in the infrastructure. Historically, rate of return regulation was an effective means of achieving adequate levels of infrastructure investment because regulators could ensure that shareholders would recover their investments and earn a reasonable rate of return. Because regulators can no longer ensure capital recovery or reasonable returns on investment, rate of return regulation is no longer an effective means of stimulating infrastructure investment by Ameritech Ohio.

Moreover, the Commission should recognize that not only Ameritech Ohio's investment decisions are affected by its regulation of Ameritech Ohio. If the alternative regulatory plan adopted by the Commission

facilitates fair competition, then other suppliers are more likely to invest in the telecommunications infrastructure of Ohio as well. The dynamics of market competition will likely increase investment levels by other carriers and suppliers above what would occur in a less dynamic environment. •

I would also stress the Staff's failure to connect the size of the productivity adjustment factor and the incentive of Ameritech to invest in the telecommunications infrastructure of Ohio. As a matter of economic logic, the higher the productivity adjustment factor is set, the lower the expected rate of return on investments in Ohio, hence the lower level of investment under normal rules governing capital allocation decisions. By providing Ameritech Ohio with a reasonable opportunity to earn its cost of capital, the Commission would be providing an additional incentive for the Company to invest in Ohio.

Concluding Comments

34. Q: Do you have any final comments in response to the Staff report?

A: Yes, two. The Staff and their consultants have made a multiplicity of recommendations for adding additional features to Advantage Ohio. I would caution the Commission that, in constructing a good regulatory plan, parsimony and simplicity should be a very high priority. Adding terms and conditions, contingencies and exigencies, unduly complicates the understanding and administration of a plan. Each element of an alternative regulation plan should pass a test of essentiality: is it really necessary or can we get along without it? Each element should also pass a stiff cost-benefit test: will the benefits of including the provision clearly

exceed the costs of administering it, including the costs it imposes by dampening incentives for efficiency and innovation?

Second, I would caution the Commission to be especially wary of arguments that emphasize the risks of change and, therefore, the need to keep much of the current rate of return form of regulation in a rapidly changing environment. I am not really surprised by those arguments, because they reflect the power of the emotional and institutional status quo. And I recognize -- and have myself advocated -- the need for caution and moderation in making public policy changes, when circumstances dictate and time allows. Whatever the risks of change in regulatory policy may now be, however, the risks of not making a substantial change are far greater. If we cling too long to the past, we harm our own future. The status quo offers some comfort, because we know it so well -- or at least think we do. What we actually know is how the current policy has worked in the past. We do not know at all how it will work in the future. Yet the comfort and familiarity of the status quo too often prevent institutions from changing their policies and practices in response to, much less in anticipation of, changes in their environments. One need only recall the recent failures of General Motors or IBM to recount the devastating costs of the failure to change with the times. Having taken an important step toward a policy framework that recognizes the need for change, the Commission should continue its leadership in telecommunications by taking the next logical by approving Advantage Ohio in this proceeding.

35. Q: Dr. Harris, does that conclude your supplemental testimony?

A: Yes, it does.