C. Detariffing Alone Is Insufficient to Make the Domestic Interstate Interexchange Market Competitive, Because Absent BOC Interexchange Entry, the IXCs Will Have No Effective Constraints on Their Ability to Overcharge Consumers

While BellSouth supports the elimination of tariffs for domestic interstate interexchange services, that alone will not suffice to make the market competitive. AT&T will likely continue to preannounce its price moves, and MCI and Sprint may continue to follow AT&T's lead.[61] Detariffing will eliminate a source of detailed information that is important to the effective maintenance of the regime of tacit collusion that exists today, but there is no doubt that the big three IXCs will gather this intelligence in other ways.[62] Indeed, after the reclassification of AT&T as non-dominant reduced the tariff obligations incumbent on AT&T, AT&T has raised its rates by 4 3%, followed immediately by MCI and Sprint rate increases.[63]

Thus, detariffing is a necessary but not sufficient condition for a competitive interexchange telecommunications marketplace. Even more important is facilitating entry by new facilities-based carriers into long-distance telecommunications markets. The way to end an oligopoly is to add more competitors. For example, Prof. Hausman finds that the elimination of MFJ restrictions on AirTouch after its divestiture from Pacific Telesis has allowed AirTouch customers to obtain long-

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[61] *See* Hausman at 17 ("Public price announcements will suffice in place of tariff notices to allow continued coordinated interaction among IXCs. Indeed, the history of coordinated interaction by other non-competitive oligopolies has typically been advanced price announcements by the industry price leader, which are soon followed by the other major firms in the industry. U.S. Steel followed this behavior during the latter years of its price leadership of the steel industry. AT&T could easily follow a similar practice of announcing price increases for basic MTS service. Since the discount plans are based on this price, both non-discount and discount plans would have their prices go up by the same percentage. MCI and Sprint could then follow AT&T's price increase.").

[62] For example, carriers can obtain information on competitors' services and prices from customers or from consultants who specialize in gathering such information.

[63] Hausman at 17.

distance service for half the price they previously paid to incumbent IXCs.[64] In his view, "eliminating tariffs is extremely unlikely to stop coordinated interaction by the IXCs. Increasing the number of facilities-based carriers is almost certain to solve the problem as the experience of the steel industry, auto industry, and many other non-competitive oligopolies has demonstrated in recent U.S. economic history."[65]

In his book, Prof. MacAvoy conducts a detailed analysis of the benefits to consumers that likely would result from the entry of a new, facilities-based carrier.[66] He demonstrates conclusively that BOC entry into interexchange services would result in lower prices, creating more than $24 billion in annual benefits to consumers, with a present value of over $300 billion, if the BOC does not participate in the IXCs' tacit collusion.[67] In short, "those results demonstrate that consumers would reap large gains from [BOC] entry into the interLATA market. The operating companies are positioned to enter long-distance markets and either set prices independently or totally disrupt the current tacitly collusive price structure."[68]

The BOCs seek to enter the interexchange business to serve customer needs and do so profitably. The supracompetitive prices existing in today's interexchange market provide the BOCs with the ability to provide interexchange service profitably. Indeed, they would not be seeking to enter this market, given the tremendous capital investments that will be needed, if pricing were truly

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64 Hausman at 12 n.17

65 Hausman at 18.

66 *See* COMPETITION IN LONG-DISTANCE at 187-88 (footnote omitted).

67 *Id.* at 193 (Table 6-2). In fact, even if the BOC new entrant were assumed to participate in the tacit price collusion of the IXCs, MacAvoy concludes that consumers would still benefit from the BOC's entry by $4.8 billion annually, the present value of which is $59.9 billion. *Id.*

68 *Id.* at 194.

at competitive levels, because profit-seeking firms have no incentive to enter markets where they will lose money. The BOCs can provide interexchange service at lower prices than the incumbents do under the current regime of tacit collusion—indeed, that is the only way they can garner appreciable market share.

Shielding AT&T, MCI, and Sprint from competition does not serve the public interest. Every day that BOC entry is delayed causes consumers to pay more than necessary for long-distance service—to the tune of $24 billion a year, according to Prof. MacAvoy. Thus, it is essential to the public interest that the Commission expedite its proceedings under new Section 271 of the Communications Act to facilitate BOC interLATA entry.

Accordingly, while BellSouth supports the adoption of the mandatory detariffing policy proposed by the Commission, BellSouth urges the Commission to move swiftly and effectively to implement Section 271 and open up interexchange competition to BOC entry. BellSouth thus agrees with the Commission that "allowing for competitive entry in the interstate interexchange market by the facilities-based BOCs and others" is "the best solution to any problem of tacit price coordination," and "increasing the number of facilities-based carriers should make tacit price coordination more difficult."[69] Only new facilities-based entry will eliminate the long-distance oligopoly that AT&T, MCI, and Sprint have maintained for years through tacit collusion.

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[69] *NPRM* at ¶ 81.

CONCLUSION

For the foregoing reasons, BellSouth urges the Commission to require detariffing of all domestic interstate interexchange services. More importantly, however, the public interest requires the Commission to act swiftly to implement Section 271 and thereby facilitate BOC entry into the interexchange market.

Respectfully submitted,

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April 25, 1996

Exhibit A
Hausman Declaration

Declaration of Professor Jerry A. Hausman

I, Jerry A. Hausman, do hereby declare as follows:

1. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. Competition in long distance is one of the primary topics covered in the course. I was a member of the editorial board of the Rand (formerly the Bell) Journal of Economics for the past 13 years. The Rand Journal is the leading economics journal of applied microeconomics and regulation. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards. My curriculum vitae is included as Exhibit 1.

3. I have done significant amounts of research in the telecommunications industry. My first experience in this area was in 1969 when I studied the Alaskan telephone system for the Army Corps of Engineers. Since that time, I have studied the demand for local measured service, the demand for intrastate toll service, consumer demands for new types of telecommunications technologies, marginal costs of local service, costs and benefits of different types of local services, including the effect of higher

access fees on consumer welfare, demand and prices in the cellular telephone industry, and consumer demands for new types of pricing options for long distance service. I have also studied the effect of new entry on competition in paging markets, telecommunications equipment markets, and interexchange markets and have published a number of papers in academic journals and books about telecommunications. I have also edited two recent books on telecommunications, Future Competition in Telecommunications (Harvard Business School Press, 1989) and Globalization, Technology and Competition in Telecommunications (Harvard Business School Press, 1993).

4. I have previously provided affidavits, to the FCC on competition among long distance providers. I submitted an affidavit to the FCC in November 1993 regarding competition for Basket 1 services in the long distance industry as part of the AT&T dominance proceeding. The Commission referred to my submission in its findings. I also submitted affidavits in 1994 and 1995 on competition among long distance providers to the Department of Justice (DOJ) regarding the waiver request of the RBOCs to provide cellular long distance and to provide landline long distance service. For this declaration I have updated my analysis by using newly available data from 1995.

I. Summary and Conclusions

5. Long distance providers are engaged in coordinated interaction and are charging supracompetitive prices to residential customers. The pattern of behavior is established by AT&T, the price leader which has approximately a 60% market share. Every time AT&T announces a price increase, its two main competitors, MCI and Sprint, immediately follow. The most recent such price increase occurred in January 1996 when MCI followed AT&T's announcement on the same day. This pattern of price leadership is characteristic of poorly performing oligopolistic industries, e.g., the U.S. steel industry in the period 1900-1960 and beyond.

6. Costs for long distance providers are decreasing, not increasing. In particular, long distance access charges, the largest cost for long distance providers, have decreased by 27% since 1990. These access costs represent about 1/2 of long distance company costs, according to AT&T and MCI, yet their prices do not reflect fully these cost decreases. At the same time, the price of bulk long distance has decreased markedly over the past few years so that it now can be purchased for less than 1.5 cents per minute (cpm). Thus, the cost of providing bulk long distance has also likely decreased significantly. In spite of the fact that the cost of the two major components of long distance costs, access and transport, have decreased, residential long distance prices, have barely decreased, even after taking discounts into account. Other telecommunications prices, such as cellular prices and intraLATA long distance prices, have decreased considerably more than long distance prices.

7. I have no objection to the FCC removing the requirement that the IXCs file tariffs. Tariffs do not serve a pro-competitive purpose, and indeed they may allow for a greater amount of coordinated interaction among the IXCs. However, removal of the tariff requirement is very unlikely to eliminate the competitive problem which now exists. AT&T can continue to make public announcements of its price increases with the expectation that MCI and Sprint will continue to follow its lead. This type of behavior has been quite common in uncompetitive oligopolies in the U.S., e.g., the steel industry prior to the introduction of significant competition from foreign competitors and from mini-mills.

II. Coordinated Interaction Among Long Distance Providers

8. Coordinated interaction has been long discussed by economists as an example of non-competitive oligopoly behavior. The DOJ and FTC Horizontal Merger Guidelines (April 2, 1992, MG) describe coordinated interaction as

follows: "Coordinated interaction is comprised of actions by a group of firms that are profitable for each of them only as a result of the accommodating reactions of the others. This behavior includes tacit or express collusion, and may or may not be lawful in and of itself." (¶ 2.1) The pricing behavior of the 3 major long distance carriers satisfies this description extremely well. AT&T, MCI, and Sprint have engaged in "lock-step" pricing with 7 price increases over the past 4 years. Each time the pattern has been the same. AT&T has announced a price increase, and both MCI and Sprint have followed with their own price increase, by virtually the same amount, almost immediately. Notably, AT&T's price increases have required the "accommodating reactions" of MCI and Sprint. Given their modern fiber optic networks, if MCI and Sprint had not raised their prices along with AT&T, it is likely that sufficient customers would have switched from AT&T to either MCI or Sprint to force AT&T to rescind its price increase.[1] However, MCI and Sprint each time decided that it would be profitable to follow AT&T's price increase. Residential customers have been forced to pay the increase in prices each time.

9. In Exhibit 2, I demonstrate the lock step pricing behavior of AT&T, MCI, and Sprint. Each time AT&T announced a price increase, MCI and Sprint followed. The remarkable economic fact about most of these price increases was that they were not the result of changes in AT&T's economic costs. Instead, they were the result of changes in the FCC price cap regulation of AT&T, which allowed for price increases when the "Z factor" changed because of non-economic accounting regulation changes. For instance, in 1993, AT&T's price cap index was increased by over $200 million, primarily because of the adoption of accrual accounting for certain post-retirement benefits (SFAS 106). Effective August 1, 1993, AT&T raised its rates for residential services by about one percent and its commercial rates by about 3.9 percent.

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[1] In the language of oligopoly behavior, participants often talk about whether a price increase will "stick," which typically depends on whether the other oligopolists raise their prices together with the price leader.

10. MCI and Sprint almost immediately matched AT&T's rate increases. In reporting on this event, the trade-press noted the following.

> "Following hard on AT&T's heel's, MCI Telecommunications Corp. and Sprint Communications Co. L.P. have proposed across-the-board increases in their interstate rates for business and residential services. Exactly one week after AT&T filed tariff revisions with the FCC raising its business service rates by an average of 3.9% and its residential rates by about 1% overall, Sprint and MCI both filed tariffs on July 23 introducing similar rate increases. A veteran Washington observer said last week that the rate increases 'don't say much for the level and intensity of competition in the interstate services market.'
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> .....
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> Asked why MCI appears to be matching AT&T's rate increase, MCI's spokesman said the company 'historically has been competitive in pricing our services relative to AT&T's rates. Despite this increase, our prices remain competitive with AT&T's,' he said. Similarly, Sprint's spokeswoman said: 'We face the same costs and competitive pressures as the rest of the long distance industry, and we routinely adjust our rates to reflect those pressures."[2]

11. However, accounting changes in post-retirement costs are changes in regulatory costs, not economic costs which should lead to price changes in a competitive situation. Instead, they are a change in financial reporting requirements for costs which have long been recognized.[3] Thus, in a competitive situation changes in accounting costs should <u>not</u> affect the competitive price. For instance, the price of computers or cars did not go up when IBM and Ford made accounting changes similar to AT&T's. AT&T's price increase was unrelated to a change in economic costs and instead reflected a realization of regulatory costs.

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[2] <u>Telecommunications Reports</u>, August 2, 1993. The costs that Sprint refers to are the <u>accounting</u> cost changes AT&T included in its price cap index filing. Interestingly, Sprint and MCI raised their prices in response to AT&T's lead, in spite of not being under price cap regulation.

[3] Indeed, numerous economic studies have tended to show that changes in accounting regulations have little or no influence on a company's market valuation because their existence has previously been recognized by market analysts. For instance, in the 4th quarter of 1992, numerous firms reported large accounting losses because of changes in FASB regulations. However, these firms' stock prices did not decrease because the market was aware that no fundamental economic changes had occurred.

12. Researchers in industrial organization have dedicated a significant portion of their theoretical and empirical research to understanding how firms' pricing practices and polices differ in competitive and strategic (non-competitive) circumstances.[4] Models of non-competitive behavior differ widely in terms of the underlying dynamic of price formation. However, in virtually all such models, important (and observable) outcome differences allow the researcher to test empirically whether a particular industry is performing competitively. In particular, individual firms cannot raise prices in response to cost changes that are unique to that firm in competitive models of price formation; rather, industry prices can only rise in response to general increases in true economic costs for all firms. Any price increase based upon firm-specific cost changes would prove unprofitable for that firm in a competitive model, as consumers would switch in sufficient numbers to competing firms to render the price increase unprofitable. Evidence of pricing behavior to the contrary suggests non-competitive price formation. For example, MCI and Sprint must follow AT&T's price increases for AT&T's announced price increase to be profitable. So long as the 3 major IXCs go along with the price increase, each firm's profits will increase.

13. An even more troubling outcome of AT&T's price increase is that MCI and Sprint followed along. Certainly, MCI's and Sprint's economic costs did not change significantly.[5] MCI and Sprint could have kept their prices at the old level and gained share from AT&T. Instead, they decided it would be more profitable to increase their prices along with AT&T. Another price increase episode soon followed, in January 1994, when AT&T raised its prices yet again by about $700 million. Soon afterwards, Sprint and MCI filed

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[4] Non-competitive pricing refers to the ability of a firm to price in such a way that its economic return from assets devoted to the market in question are above the return for assets deployed into the overall economy at comparable risk.

[5] Indeed, MCI and Sprint should be much less affected by retirement considerations than AT&T given the relatively short periods the companies have been in business.

tariffs for similar price increases. Thus, once again, the dominant price leader, AT&T, increased its prices followed soon thereafter by its two closest competitors, which in aggregate control about 85% of long distance markets.

14. This "price leadership" behavior is often found in oligopolies which exhibit a low level of competition. Given that the common industry elasticity estimates for interstate long distance service are in the range of 0.5-0.75, AT&T finds it profitable to raise prices so long as it is confident that MCI and Sprint will follow the price increase.[6] Thus, when AT&T raises price by 5%, which is very close to the price increase in January 1996, and MCI and Sprint follow, demand would decrease by only about 3.7%. The price increase would be profitable because revenue would increase by about 1.3% and costs would decrease due to not meeting the 3.7% decrease in demand.

15. Economists have long been aware of this type of behavior in poorly performing oligopoly situations. To quote Professor Scherer's textbook:

> "Business firms have an understandable desire to find alternative means of coordinating their behavior without running afoul of the law. One such means (which lies in the grey area of American antitrust law) is price leadership. Price leadership implies a set of industry practices or customs under which list price changes are normally announced by a specific firm accepted as the leader by others, who follow the leader's initiatives....According to Markham, collusive price leadership is most likely to emerge when five conditions co-exist: The industry is tightly oligopolistic, the sellers' products are close substitutes, the oligopolists' cost curves are similar, there are barriers to the entry of new competitors, and demand for the industry's output is relatively inelastic (so that price raising pays)." (F.M. Scherer, Industrial

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[6] The magnitude of elasticities is reported where the negative sign is understood. This same range of estimates is given in testimony previously filed by experts for AT&T. Indeed, AT&T employees have also reported an estimate of 0.72.

Market Structure and Economic Performance, 2d Ed., Chicago, 1980, p. 176)

Each of the 5 conditions are satisfied in the long distance industry: (1) 3 firms control about 85% of output; (2) the products are nearly perfect substitutes; (3) the cost curves are similar because the technology used is similar; (4) huge barriers to entry exist because of the requirement of hundreds of millions of dollars to construct a fiber optic network; and (5) demand is relatively inelastic, as AT&T itself has stated in previous filings and econometrics has demonstrated.[7] Prof. Scherer describes United States Steel Corporation's price leadership and a "tradition of lock-step followership behind U.S. Steel's price leadership". (pp. 178-180).[8] Similar lock step activity has been practiced by MCI and Sprint who follow each AT&T price increase. Prof. Scherer finds that price leadership often leads to coordinated interaction:

> "One of the most important institutions facilitating tacitly collusive pricing behavior is the existence of a well-established system of price leadership." (p. 520)

Lock step price increases which occur in oligopolies are often called "conscious parallelism" in the antitrust field, and the price increases are often indicative of non-competitive oligopoly behavior if they are not based on increased costs.[9]

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[7] Wide agreement exists that the price elasticity for long distance is in the range of 0.5-0.75.

[8] By the 1970s, and even more in the 1980's, the non-competitive oligopoly situation changed in the steel industry because of the new entry of foreign competition and mini-mills. Similarly, the long distance industry awaits new entry to end its non-competitive pricing to residential customers.

[9] See e.g. F.M. Scherer, op. cit. pp. 514-520.

16. The lock step price increases in long distance are even more troubling because the major cost component, long distance access, has decreased significantly over the same time period.[10] In Exhibit 3, the national average for access charges as computed by the FCC is given. During the period January 1990-August 1995, average access charges fell by 27%. Since AT&T and MCI have stated on numerous occasions that access charges are 45-50% of their costs, the decrease in access charges implies that their costs from this input fell by 12% or more. Furthermore, other cost components of long distance have decreased, especially the electronics which are used in the fiber optic networks. For instance, over the last 3 years, the price of bulk long distance for large volumes has decreased from 4.5 cpm to about 1.5 cpm. As one would expect the bulk long distance price to be affected primarily by the marginal costs of transport, this decrease in prices demonstrates that the marginal cost of transport certainly did not increase, and almost certainly has decreased. Thus, two major cost components of long distance service -- access and transport -- have both decreased significantly over the past few years, yet residential long distance prices have not reflected these price decreases. This outcome is another indication of non-competitive behavior.

17. Another example of non-competitive behavior by AT&T, MCI and Sprint is their anti-competitive price discrimination against cellular customers. It is well known that a firm or group of firms cannot anti-competitively price discriminate unless they have market power. (Tirole, The Theory of Industrial Organization, Cambridge, MIT Press, 1988, pp. 137-139.) Price discrimination is defined by economists to be the practice of charging different prices for goods or services which have the same cost, or equivalently, to be charging prices which lead to different margins (price - cost) for similar goods or

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[10] Prof. Scherer describes how U.S. Steel usually only increased prices to coincide with industrywide wage or energy cost increases. (p. 180) As described above, AT&T has raised prices when its regulatory costs have increased while its actual economic costs have decreased.

services.[11] AT&T, MCI, and Sprint are charging BOC cellular customers the same price for long distance calls as landline MTS long distance calls, in spite of a significantly lower cost for the cellular.[12] This situation is a "textbook" example of price discrimination.

18. The IXCs have significantly lower costs for cellular calls than for landline calls because they are not required to pay switched access rates for cellular long distance calls; instead, the IXCs usually pay only for transport. Southwestern Bell's interstate switched access rates and transport rates is an example.[13] For all switched interLATA landline calls, AT&T is required to pay Southwestern Bell an access fee of about 2.8 cents per minute for both originating and terminating access. These access fees are significant; AT&T has estimated they are about 45% of its total costs. However, when a long distance call originates from a cellular telephone, AT&T is not required to pay Southwestern Bell for originating switched access; usually, only transport is charged for. The amount charged to AT&T for this transport is about 1.0 cent per minute, which is a significant cost savings. Thus, AT&T's total originating and terminating access costs are 32% lower for a cellular long distance call than for a landline long distance call.[14] On

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[11] See e.g., J. Tirole who defines price discrimination as follows: "Hence, we will say that there is no price discrimination if differences in prices between consumers exactly reflect differences in the costs of serving these consumers (this amounts to considering the net cost of serving a consumer)." (J. Tirole, op. cit., pp. 133-134.)

[12] The MFJ required BOC cellular customers to buy long distance service from IXCs, generally at retail rates.

[13] This example is for Type II Interconnection (via a BOC access tandem switch), which is the most common type of cellular interconnection from the BOC cellular MTSO to the AT&T POP. Type I Interconnection (via a BOC end office) is used only rarely according to Southwestern (and Pacific) Bell personnel. The other type of cellular access, Direct Connection from the cellular MTSO to the AT&T POP, is discussed in the following paragraph.

[14] AT&T's cost savings are even greater in some other BOC regions. For instance, in California, AT&T's access cost savings are 47% for cellular access compared to landline switched access, assuming that both calls terminate to a landline phone. If the cellular call terminates at a cellular phone, AT&T's access cost savings are 64% in Southwestern Bell's territory. For cellular to cellular calls in California, AT&T's cost savings are 74%.

an incremental cost basis, I estimate that AT&T's costs are about 27% less for a cellular long distance call that terminates on a landline phone rather than a regular landline long distance call. However, AT&T does not reflect this lower cost in its cellular long distance prices. Thus, AT&T is engaged in price discrimination.

19. AT&T's access cost savings for cellular long distance calls are even greater than the calculation in the example. A significant proportion of BOC cellular long distance calls are carried by direct connections from the cellular MTSO to the AT&T POP by, e.g., DS-1 (T1.5) service. In this situation, the 1.0 cent per minute transport cost is avoided, and a monthly charge for the DS-1 which typically would be about 0.3 to 0.4 cents per minute of cellular long distance traffic would be paid by AT&T.[15] Here AT&T's access cost savings compared to its usual switched access cost is 44%. This cost difference reflects the situation that switched access is significantly more costly than special access for long distance calls.

20. Price discrimination can be pro-competitive if it leads to an increase in output as I demonstrated in my 1988 Rand Journal article, and as other economists have discussed.[16] Here, however, AT&T, MCI, and Sprint's price discrimination will lead to lower output because they are charging cellular long distance customers a higher price and is not reducing the long distance price to their landline customers. Thus, the price discrimination by the IXCs is anti-competitive. This anti-competitive price discrimination demonstrates the IXCs' ability to use coordinated interaction to harm consumers.

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[15] This calculation is based on a monthly price of a DS-1 of about $400 per month from Southwestern Bell and a price of about $300 per month from a competitive access provider (CAP).

[16] J.A. Hausman and J.K. MacKie-Mason, "Price Discrimination and Patent Policy", Rand Journal of Economics, 19, 1988. For a demonstration that overall quantity must increase for economic welfare to increase see J. Tirole, The Theory of Industrial Organization, Cambridge, MIT Press, 1988, p. 138.

21. With the passage of the Telecommunications Act of 1996, BOC cellular companies began to provide cellular long distance, since the prohibition of the MFJ no longer applied. While it is too early to determine the competitive outcome of this new competition, the BOC cellular companies are charging long distance prices for cellular significantly below the price charged by the IXCs.[17] These lower prices demonstrate the non-competitive prices charged by IXCs to cellular long distance customers.

III. The IXCs' Response Regarding Lack of Competition in Long Distance

22. The IXCs have responded previously to my analysis which demonstrates non-competitive outcomes in residential long distance.[18] While I do not intend to go over these contentions, I will point out some major problems in their analyses. Professors Glenn Hubbard and William Lehr (HL), in an affidavit submitted to the DOJ on behalf of AT&T, reviewed the various promotion and discount plans offered in the long distance market. (pp. 7ff) However, they fail to note that the increased discount plans have been "paid for" by non-discount buyers of long distance, estimated to be about 30-40 million customers of AT&T alone. Indeed, data showed that only about 36% of AT&T residential long distance calls were made under a discount plan using data collected during the spring and summer of 1994.[19] Thus, non-discount customers made about 64% of long distance calls. Their calls were billed at the Tariff 1 rates, which had increased about 10% over a 12 month period in 1993-94 and increased by another 4.3%-5% in January 1996.

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[17] When AirTouch separated from Pacific Telesis in 1994, it began to provide cellular long distance because it was no longer subject to the MFJ. AirTouch lowered long distance prices by about 50% to its cellular customers.

[18] They replied in their affidavits to the Department of Justice filed in early 1995.

[19] This proportion is based on a sample of actual long distance bills from a sample of 7431 households during spring and summer of 1994. Source PNR and Associates, "Long Distance Company Call Plans".

23. Prof. Hubbard and Lehr (HL) agreed with my submission that price should be the primary focus of how well competition is working in the long distance market. (p. 5) Price outcomes were the focus of my first affidavit in the MFJ proceeding. The data used by HL basically demonstrate my point: long distance prices for Basket 1 services have not decreased over the past few years as would have been expected if the long distance market were competitive.

(1) In their Figure 1, HL plot the deflated consumer price index (CPI) for interstate toll and the producer price index (PPI) for interstate MTS. For the years 1991-1993 (which were covered in my previous affidavit), it is quite clear that almost no decrease occurred. Indeed, the index for interstate toll decreased only from 49 to 47. Since HL use the GDP price deflator for this period (which itself increased from 113.3 to 124.2 over this period), the nominal CPI for interstate toll <u>increased</u> over this period. From 1990 to 1993, the interstate CPI increased from 68.2 to 69.6, and in 1994, the index increased to 75.2. Similarly, the interstate PPI increased during 1990-92 from 107.8 to 109.8, and in 1994 the index increased to 117.7. This price performance is extremely poor since most telecommunications prices were decreasing over that period. For instance, a price index for the 30 largest cellular MSAs over the same period shows prices decreasing by 7% instead of increasing like the price index for long distance. See Exhibit 4.

(2) In their Figure 2, HL consider average revenue per minute for AT&T. Again, for the years 1990-1993, HL find that the index for MTS decreased only from 100 to 94 after deflation by the Bureau of Labor Statistics (BLS) CPI. Since the BLS CPI decreased by 6% during this period, HL have demonstrated that AT&T revenues per minute were changing at the same rate as the BLS CPI. This finding is extremely troubling since access charges decreased by 14% over the period 1990-1993, as demonstrated in Exhibit 3. Again, cellular prices have decreased much more over this same period. Adjusted by the CPI, they have fallen by 8.4%, which is about 50% more than the amount of the decrease of AT&T's prices. Thus, HL have demonstrated that

AT&T's average MTS prices, taking full account of all discounts, decreased by considerably less than cellular prices did over the same period. See Exhibit 4 to this affidavit. HL have demonstrated my point that the market for residential and small business customers, who are the primary users of MTS, is not competitive.

(3) In their Figure 3, HL plotted changes in AT&T's average revenue per minute after removing access charges (again relative to the GDP price deflator). When actual access price decreases of 12% over this period are considered, the HL data demonstrate that net of access charges, AT&T MTS actual prices remained essentially constant over the period 1990-1993.[20] Thus, after all discounts for Basket 1 services are taken into account, the AT&T data used by HL demonstrate that AT&T's average revenue did not decrease once access price reductions are netted out.

Thus, AT&T prices are not declining as they should be given cost decreases in the range of 6% per year, in addition to the access price decreases of 12% per year.[21]

24. Prof. Hall, for MCI, also claimed that long distance prices have fallen. In his main demonstration, Figure 3 (p. 18) he graphs the real (inflation adjusted) government indices of long distance prices. In his graph, this inflation adjusted price index is relatively constant over the period 1990-1993.[22] By contrast, the non-inflation adjusted government price indices increased during this period by 10.3%, with an 10% increase in 1993-94, in spite of decreasing access costs and lower costs for telecommunications

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[20] Net of access charges, AT&T actual prices decreased by only 0.6% over the 4 year period.

[21] The cost decreases have arisen from falling prices of telecommunications equipment, e.g., switches and transmission electronics for fiber optics, as well as increasing productivity because of technological advances in telecommunications.

[22] Over the period 1982-1989, long distance prices decreased mostly because of decreases in long distance access costs. However, as Prof. Hall emphasizes, "current conditions" in the long distance market are relevant to this proceeding, not the history of the 1980's.

equipment. Using the same deflation technique as Prof. Hall, cellular prices decreased by 15% over this same period, while long distance prices were almost constant.

25. Prof. Hall also provided an index of revenue per minute for AT&T, MCI, and Sprint. (Fig. 4, p. 21.) First, the absence of a significant decline over the period 1990-1993 is notable. Since he has used an inflation adjusted index which increased by 8.8% over this time period, Prof. Hall's graph actually demonstrates that nominal revenue per minute barely decreased over the period 1990-1993, and actually may well have increased over the period 1991-1993 when both cellular price and other long distance prices were decreasing. Indeed, in Prof. Hall's Figure 5, it is quite clear for the period 1990-93, that revenue per minute, net of access charges, increased given the general inflation over this period. However, we know that IXC costs decreased over this period. Increasing revenue per minute with decreasing costs demonstrates the uncompetitive outcome in the long distance market.

26. Perhaps the most interesting admission by an IXC economist was found in Prof. Kwoka's declaration on behalf of Sprint. Prof. Kwoka agreed that competition in long distance markets is "inadequate". (p. 3, p. 28.)

IV. Updated Long Distance Price Data

27. To analyze more recent long distance price data, I used the random sample of telephone bills collected by PNR for 1995. These were collected in the spring and summer of 1995, and I have 9259 observations of long distance customers. In the 1995 sample, AT&T has 68.4% of the customers.[23] In the sample, only about 40% of AT&T's customers are on a discount plan. Thus, approximately 60% of AT&T's customers pay "list price" which increased by about 11% in 1994 and increased another 5% in January 1996. Among IXCs,

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[23] This percentage is close to FCC statistics on pre-subscribed lines which reports AT&T to be at 68.2% as of June 1995 according to recent data from the FCC.

approximately the same percentage of all customers did not receive a discount in 1995 so that they are paying the list price, which increases in lock step every time AT&T announces another price increase.

28. AT&T average revenue per minute increased between 1994 and 1995 for both discount and non-discount customers. For discount customers, average revenue per minute rose from 14.7 cpm to 14.9 cpm, or an increase of 1.4%. For non-discount customers, average revenue per minute rose from 19.1 cpm to 19.5 cpm, or an increase of 2.1%. Overall, AT&T's average revenue per minute decreased slightly as more customers switched to discount plans between 1994 and 1995.

29. To take account of customers switching plans and thus changing the plan sample composition between 1994 and 1995, I estimated a fixed effects econometric model which compares the same customers' bills over the two years.[24] The estimate of percentage change in AT&T's customers average revenue per minute was -1.8%, and it was not statistically significant (t statistic = 0.794) despite having 5163 customer observations.[25] Thus, individual customers have not had their long distance bills decrease by a significant amount, despite a decrease in average access charges during this period of between 6%-15%. These individual customer bills also demonstrate the lack of competition for residential customers.

30. While AT&T's customers average revenue per minute decreased by only -1.8% despite a significant decrease in access charges, other

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[24] This procedure accounts for unobservable individual effects such as calling patterns and preferences. See J. Hausman and W. Taylor, "Panel Data and Unobservable Individual Effects," Econometrica 49, November 1981.

[25] The AT&T average revenue per minute for the median customer decreased by 1.7% between 1994 and 1995, which is consistent with this regression estimate. MCI's average revenue per minute for the median customer decreased by 1.1% between 1994 and 1995.

telecommunications prices decreased by significantly larger amounts. For instance, average cellular prices decreased by -4.9% between 1994 and 1995.[26] Thus, the decrease in average cellular prices is over 2.5 times as great as the decline in long distance prices, despite cellular not benefitting from decreased access charges like long distance. The competitive performance of long distance is considerably worse than cellular which will begin to face new facilities based competition this year.

V. Elimination of Tariffs Is Unlikely to Solve the Lack of Competition

31. In its NPRM (CC docket No. 96-61, March 21, 1996), the Commission tentatively concludes that tariff filings are not necessary for the protection of consumers of interexchange services. (¶ 23.) Indeed, the Commission concludes that a tariff filing requirement may harm consumers by undermining competition. I do not disagree with the Commission's tentative findings. I made similar conclusions in affidavits I filed with the Commission in its recent proceedings on regulation of cellular telephone.

32. However, I want to point out that removal of the tariff filing requirement is extremely unlikely to end the coordinated interaction of the IXCs. As the NPRM notes, some parties (including myself) claimed that reclassification of AT&T would lead to an increase in basic rates for domestic residential service. (¶ 80.) Since AT&T raised its rates by 4.3% in January 1996, and MCI and Sprint followed immediately, this claim has already proven valid. Over the same time period, average access rates decreased by 10% so AT&T's costs decreased by 5% from access charge decreases. It would be incredible that AT&T's other costs of providing long distance rose by 18% during this time period, which would be the required amount for a cost based 4.3% price increase. Note that inflation in the U.S. economy was extremely

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[26] This calculation holds the minutes of use (160) constant between the two years as well as other features to ensure comparability.

low in 1995 with the PPI increasing by only 2.2% while the CPI increased by 2.5%.

33. Public price announcements will suffice in place of tariff notices to allow continued coordinated interaction among the IXCs. Indeed, the history of coordinated interaction by other non-competitive oligopolies has typically been advanced price announcements by the industry price leader, which are soon followed by the other major firms in the industry. U.S. Steel followed this behavior during the latter years of its price leadership of the steel industry. AT&T could easily follow a similar practice of announcing price increases for basic MTS service. Since the discount plans are based on this price, both non-discount and discount plans would have their prices go up by the same percentage. MCI and Sprint could then follow AT&T's price increase. Furthermore, secret price cuts for residential customers seem unlikely since residential customers buy small amounts relative to overall industry demand, and information on actual prices charged is not difficult to gather.

34. Thus, I agree with the NPRM that "the 1996 Act provides the best solution to any problem of tacit price coordination, to the extent that it exists currently, by allowing for competitive entry in the interstate interexchange market by the facilities-based BOCs and others. Increasing the number of facilities-based carriers should make tacit price coordination more difficult." (¶ 81.) In my view, eliminating tariffs is extremely unlikely to stop coordinated interaction by the IXCs. Increasing the number of facilities-based carriers is almost certain to solve the problem as the experience of the steel industry, auto industry, and many other non-competitive oligopolies has demonstrated in recent U.S. economic history.

I declare the foregoing to be true and correct under penalty of perjury. Executed on April 23, 1996.

Jerry A. Hausman

April 23. 1996

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