RECEIVED 1780



Marceil Morrell*

Assistant Vice President &Associate General Counsel-East Area

Anthony P. Gillman*
Assistant General Counsel

Florida Region Counsel**
Kimberly Caswell
M. Eric Edgington
Ernesto Mayor, Jr.
Elizabeth Biemer Sanchez

* Certified in Florida as Authorized House Counsel

** Licensed in Florida

GTE SERVICE CORPORATION

One Tampa City Center 201 North Franklin Street (33602) Post Office Box 110, FLTC0007 Tampa, Florida 33601-0110 813-483-2606 813-204-8870 (Facsimile)

January 11, 1999

Ms. Blanca S. Bayo, Director Division of Records & Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 980000

00363 JANII &

FPSC-REPRODE --

Re: Undocketed

Transaction between GTE Corporation and Bell Atlantic Corporation, whereby GTE will become a wholly-owned subsidiary of Bell Atlantic

Dear Ms. Bayo:

WAS _____A part of GTE Corporation

OTH ____

ACK AFA	Please find enclosed an original and seven copies of the Comments of GTE Corporation and Bell Atlantic Corporation for filing in the above matter. Service has been made as indicated on the Certificate of Service. If there are any questions regarding this filing, please contact me at (813) 483-2617.
APP	Many thruly yours
CAF	Very truly yours, RECEIVED & FILED
CMU	THINGY CONTRACTOR SECORDS
EAG	Rimberly Caswell
LEG	C KC :tas
LIN	Enclosures
O PO	
ROF	-MIN-Thirteen Maria Managering

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Comments on Transaction Between)
GTE Corporation and Bell Atlantic Corporation,)
Whereby GTE Will Become a Wholly-Owned)
Subsidiary of Bell Atlantic)

Undocketed Filed: January 11, 1999

COMMENTS OF GTE CORPORATION AND BELL ATLANTIC CORPORATION

GTE Corporation ("GTE") and Bell Atlantic Corporation ("Bell Atlantic") (collectively, "Companies") file these Comments in response to the Commission Staff's January 5, 1999, notice seeking input from interested parties regarding the "impacts on competition, market power, and economic development" of the GTE-Bell Atlantic indirect transfer of control. The Commission approved the Companies' Application for Approval of Merger by a Proposed Agency Action Order issued on December 7, 1998. (Order No. PSC-98-1645-FOF-TP.) There were no protests to that Order. As such, it automatically became final and effective on December 29, 1998, and the associated docket (No. 981252-TP) was closed on that date.

GTE and Bell Atlantic understand that this informal comment proceeding does not and cannot affect the Commission's now-final approval of the GTE-Bell Atlantic transaction, nor does it indicate any particular Commission concern about the merger. Rather, this is just the first instance of a process that will, going forward, become a routine part of the Commission's consideration of merger-related transactions. In this way, the Commission can gather information that is outside the scope of its own merger evaluations, but that may nonetheless be useful to federal authorities charged with reviewing the competitive consequences of such transactions.

DOCUMENT NUMBER-DATE

00363 JANII S

FPSC-RECORDS/REPORTING

In this regard, if the Commission decides to report on the GTE-Bell Atlantic merger to the FCC and/or the U.S. Department of Justice, it should recommend unconditional approval. As explained below, the Companies' combination can only be positive for consumers in Florida and across the nation.

I. The Transfer of Control Will Enhance Competition in Numerous Markets.

As GTE and Bell Atlantic stated in their application, this Commission's approving the GTE-Bell Atlantic transaction will not affect the agency's authority and jurisdiction over the Companies' regulated Florida subsidiaries. In particular, GTE Florida Incorporated (GTEFL) will continue to meet all of its obligations under the Commission's rules and GTEFL's current tariffs. GTEFL, as well as other GTE and Bell Atlantic subsidiaries, will retain their existing certificates and remain subsidiaries of GTE and Bell Atlantic, respectively.

Because this is a parent-level transaction, it will have little or no immediate effects in Florida, as the Commission seems to understand. Commissioner Clark has noted, for example, that "it's not an ILEC-to-ILEC [merger] in Florida. Bell Atlantic, to my knowledge, is not an ILEC in Florida. And from that standpoint it seems to me there is very little difference on the impact on the customers in Florida." (Nov. 17, 1998 Agenda Conference Transcript, Item 19 (Ag. Conf. Tr.) at 29-30.) Likewise, Commissioner Jacobs has observed that the issues before this Commission are not the same as those the FCC must address because "in this instance one [company] has a presence in Florida, but the other not and so you wouldn't imagine there would be an immediate market impact." (Ag. Conf.

Tr. at 7.)

For the longer term, the Companies' combination will yield definite consumer benefits, confirming Commissioner Clark's observation that, "I think it may be a very positive impact for customers in Florida." (Ag. Conf. Tr. at 31.) Even the Florida Office of Public Counsel, which typically declines to pass judgment on mergers before this Commission, agrees that the GTE-Bell Atlantic combination could be good for Florida consumers. (St. Petersburg Times, Nov. 17, 1998, at 1 E.)

In fact, the merger creates a company uniquely positioned to enhance competition across virtually the whole range of current and emerging telecommunications markets—in local service markets dominated by other Regional Bell Operating Companies (RBOCs), in bundled-service markets, in Internet and advanced-data markets, and in long-distance and wireless markets. GTE and Bell Atlantic's FCC merger application comprehensively discusses the pro-consumer effects of the merger in each of these areas. Rather than repeat the entire public interest discussion here, GTE and Bell Atlantic attach (as Attachment A) and incorporate into these Comments their public interest narrative filed with the FCC, including the supporting affidavits of GTE and Bell executives, as well as expert economist Thomas W. Hazlett.

Also attached (as Attachment B) is the Companies' Joint Reply to Petition to Deny and Comments at the FCC, along with supporting affidavits from, among others, David J. Teece, Professor and Director of the Institute for Management, Innovation and Organization at the University of California at Berkeley and Chairman of the Law & Economics Consulting Group; and Kenneth J. Arrow, Professor of Economics Emeritus at

Stanford University. The Companies' FCC Reply is included here for the Commission's benefit in the absence of any opportunity for reply comments. GTE does not know who will file Comments or what they will say. However, it is a good bet that the same parties which have most vigorously challenged the merger at the FCC (Sprint, AT&T, and MCI WorldCom) will this opportunity to advance the same kinds of arguments they have at the federal level. The Companies' FCC Reply will thus be useful to this Commission in critically evaluating these arguments.

These Comments briefly summarize the public interest benefits of the merger from a Florida-specific perspective. This Commission will predictably be most interested in the merger's effects on the local and long-distance markets, where the agency exercises its regulatory authority. While other markets, like wireless and Internet, lie principally within the federal jurisdictional sphere, they, too, deserve some discussion here because Florida consumers will experience the salutary effects of the merger in these areas, as well.

Benefits in the Local Market: The Commission's approval of the GTE-Bell Atlantic transfer of control is a decisive step toward attaining the long-held, but frustrating, Commission goal of encouraging local competition. Although GTE has pursued an ambitious strategy of competing out-of-franchise since the passage of the 1996 Telecommunications Act, a number of obstacles have imposed severe limits on GTE's efforts. First, building service and delivery platforms has turned out to be much more expensive than expected. Second, GTE simply does not have the brand strength that is so important for acquiring customers in out-of-franchise areas. Third, GTE lacks the base of anchor customers that is critical

to supporting the introduction of new services and the kinds of packaged offerings customers want.

The merger will remove these obstacles. It will immediately create a carrier with the national footprint and greater scale efficiencies necessary to effectively pursue the out-of-franchise objectives GTE has already adopted. The new, larger company will be able to better support the high costs of building service and delivery platforms and to invest in a much stronger brand. In this regard, GTE today lacks a brand that is compelling outside of its existing territory. In fact, out-of-region brand recall for GTE is just 29%, compared with 90% for AT&T and 69% each for MCI WorldCom and Sprint. (Declaration of David J. Teece, included in Attachment B.) The combination of Bell Atlantic's and GTE's complementary skills and products will provide a competitive, nationally bundled offering that will foster the development of the strong brand image essential to successful out-of-franchise entry.

Indeed, the ability to offer a full range of bundled services that meets <u>all</u> the needs of a typical consumer (including, for example, local voice and data, long distance voice and data, and wireless services) will become increasingly critical for broad penetration of local markets, here in Florida and elsewhere. Today, this national market is controlled by AT&T, MCI WorldCom, and Sprint. The merger will create a fourth player to challenge the Big Three in the provision of full-service telecommunications. This new entity will have a compelling product portfolio, strategic beachheads from which to enter new local markets, and the aforementioned potential to create a strong brand—all important assets for successful out-of-franchise operation. (For a detailed explanation of the obstacles to

GTE's CLEC strategy and an account of the merger's benefits in this regard, see Declaration of Jeffrey C. Kissell, Vice President of National Marketing for GTE Business Development & Integration, included in Attachment B.)

Within 18 months of the merger's closing, GTE and Bell Atlantic seek to provide on an economic basis a complete bundle of services—including advanced data and voice, Internet, long distance, as well as local—to business customers in 21 cities in RBOC territories, including Miami, Orlando, and Jacksonville in BellSouth's Florida region. The combined company will, likewise, offer a bundle of services to residential customers where it is economically feasible to do so. As a first step, GTE and Bell Atlantic have identified four target cities—among them, Miami—for possible expansion into the consumer market. These cities will be just the first wave in a broader roll-out of bundled services for customers. Cities that exchange significant traffic with GTE and Bell Atlantic's other major markets will quickly be added to this list as it becomes economically feasible to do so. In any event, it is certain that the combined company will be able to effectively compete out-of-franchise in Florida much sooner than GTE alone would.

Benefits in the Long-Distance Market: Likewise, the merger will allow GTE-Bell Atlantic to provide national facilities-based long distance service more quickly and efficiently than either could alone. Today, there are only three facilities-based long-distance networks that are truly national in reach: AT&T, MCI WorldCom, and Sprint. GTE's long-distance operation lacks the customer base sufficient to generate the large volumes of traffic to achieve the economies necessary to deploy its own, fully national long-distance network.

(Here in Florida, GTE resells other companies' long-distance--WorldCom has been GTE's chief supplier of this wholesale capacity.) After the merger, GTE and Bell Atlantic will be able to consolidate their traffic onto one network. Thus, the combined entity will be able to provide long-distance service—and all of the other advanced services provided over its national network—at a lower unit cost. The result is a more competitively priced long distance offering.

In addition, traffic volumes directly determine how quickly a company can add switches, electronics, and other facilities to expand both geographic reach and the voice and data capacities of the network. The increased traffic made possible by the merger will lead to the deployment of these facilities on an accelerated schedule and in areas not otherwise possible. It will, in short, spur the development of a fourth national long-distance network–increasing choices and associated competitive benefits for consumers nationwide, including those in Florida.

Benefits in the Internet and Data Services Markets: Federal and European authorities' examination of the relatively recent MCI/WorldCom merger made clear that the market for Internet backbone services is highly concentrated, dominated by the three largest players: MCI WorldCom, the successor to the MCI backbone (Cable & Wireless), and Sprint. GTE Internetworking (formerly BBN) is a distant fourth to these providers.

By combining GTE's national high-speed facilities-based Internet backbone network with Bell Atlantic's customer relationships and marketing channels, the merger will enable GTE-Bell Atlantic to effectively challenge the Big Three in markets for Internet backbone,

connectivity, and hosting services. The ability to effectively market to Bell Atlantic's urban, high-density, business-rich customer base will enhance the volume of data and Internet traffic carried over the backbone, more readily increasing the number of valuable Web sites and customers connected to the backbone. In general, the expanded scale and presence of the combined companies' Internet and data operations will mean more rapid deployment of innovative offerings in all areas of the country, including Florida. (For a more detailed account of the merger's benefits for the Internet and data-services markets, see the Declaration of John Curran included in Attachment B.)

Benefits in the Wireless Market: The merger will create a stronger and more efficient wireless competitor, with substantially greater coverage in a market where national coverage is increasingly important. Bringing together Bell Atlantic's and GTE's complementary areas and highly compatible systems will create a much more geographically extensive wireless system to compete with the several other national or near-national systems like AT&T Wireless, Sprint PCS/Spectrum, NexTel, and SBC/Ameritech. The resulting, systemwide efficiencies and ability to more quickly and uniformly deploy advanced technologies will redound to the benefit of all of the new company's wireless customers. For example, wider calling scopes become cheaper and more reliable as their dependency on roaming agreements with other providers diminishes.

II. The Transaction Will Not Reduce Competition.

While the pro-competitive, pro-consumer effects of the merger for Florida consumers are substantial, there are no countervailing concerns about decreased competition. The market analysis for this Commission is very simple because the Companies have no meaningful competitive overlaps. GTE has three regulated subsidiaries here: GTEFL, an incumbent local exchange carrier (ILEC); GTE Communications Corporation, d/b/a GTE Long Distance, which is certificated as an alternative local exchange carrier (ALEC) and a switchless rebiller and prepaid debit card provider; and GTE Telecommunication Services Incorporated, certificated as a switchless rebiller. Bell Atlantic has two regulated subsidiaries, both certificated as switchless rebillers: NYNEX Long Distance Company, d/b/a Bell Atlantic Long Distance, and Bell Atlantic Communications, Inc.

As the Commission seemed to recognize at its agenda session (see above), there is no cause for concern about negative effects of the merger on local markets. The GTE and Bell Atlantic companies do not compete at all in Florida's local exchange markets. Thus, the merger will not eliminate any actual competitors (as, for example, the MCI/WorldCom merger did in Florida). Indeed, there is no reason to think Bell Atlantic's entry here would have been likely. Bell Atlantic never sought ALEC certification here, and it does not have any adjacent (or even remotely nearby) local markets—the key factor in making out a claim of suppression of potential competition. Local entry here of a standalone Bell Atlantic would not make business sense, particularly since Bell Atlantic is faced with other priorities and more attractive opportunities (such as providing long distance to

its existing, in-region customers) for using its resources.

On the long-distance side, while the Companies both have subsidiaries certificated to resell long-distance services, only GTE's operation has any significant presence and customer base here.

In short, because the GTE and Bell Atlantic companies in Florida do not compete with each other in any meaningful sense, there is no potential for undermining competition.

On the contrary, the effects of the merger for Florida consumers will be uniformly positive.

No party can or has even seriously tried to prove otherwise. No protests were filed against the Commission's Order approving the transfer of control. Since a protest would have been the only way of formally challenging the merger, the lack of such protests is a sure sign that no entity had any defensible or legitimate concerns about any negative effects in Florida.

While the Telecommunications Reseller Association (TRA) filed comments before the agenda where the Commission considered the transaction (even though Commission rules do not contemplate such filings), it did not show up at the agenda where the merger was debated. Sprint has made no written filings, but did appear at the agenda. Neither of these parties raised any plausible challenges to the transaction. In fact, their purported concerns had nothing to do with Florida or the specific transaction before the Commission.

The Telecommunications Resellers Association (TRA) filed the boilerplate Comments it has in other states. In those Comments, TRA made clear that it "does not necessarily oppose the proposed merger of GTE and BA" (Comments of TRA in Docket

No. 981252-TP, Nov. 5, 1998, at 1), but asked the Commission to consider a number of issues in its merger evaluation process. TRA's request, however, was based on a merger review standard purportedly used by the New York Public Service Commission. TRA ignored Florida Statutes, chapter 364.33, the relevant statutory authority guiding the Commission's review of the GTE-Bell Atlantic transfer of control. In addition, TRA's concerns about the merger's effect on competition are based on a gross misapprehension of the nature of the Companies' Florida operations. For instance, TRA asserted that the merger would "marry two carriers who are already serving various local telecommunications markets in Florida and thus effectively reduce the field." This is wrong. As noted, Bell Atlantic is neither an ILEC nor an ALEC in Florida.

In short, TRA's Comments should be seen for what they are—a non-Florida-specific attempt to hold up the merger approval proceeding to obtain more favorable interconnection contracts for TRA's members. TRA's complaints have no nexus to the merger; they are now, in any event, moot. The Commission did not (and could not) undertake the kind of review TRA urged, and the docket in which TRA filed its Comments has been closed.

Sprint also asked the Commission to devote an unprecedented amount of attention to the GTE/Bell Atlantic transfer of control, urging hearings, a step it has never taken before in relation to any merger. The Commission, of course, refused Sprint's request and declined to accept Sprint's expansive view of the Commission's merger review authority. Despite the fact that Sprint did not protest the Commission's Order, it can be expected to raise in its Comments the same kinds of arguments it advanced to the Commission at

agenda. These arguments have not become any more persuasive than they were before, when it was clear Sprint had no Florida-specific concerns to present to the Commission.

Sprint's arguments rest on its characterization of the merger as "involv[ing] two ILECs." (Ag. Conf. Tr. at 11.) As Commissioner Clark pointed out, this is not an ILEC-to-ILEC merger as far as Florida is concerned. GTEFL is the only ILEC involved. Bell Atlantic is not even an ALEC, let alone an ILEC, here. Sprint's challenging the transfer of control on grounds that it will undermine local competition is thus puzzling. The merger will eliminate no local competitors. In fact, as explained above, the Companies' combination has great potential to enhance local competition because it will afford the scope and scale necessary to undertake the expensive business of out-of-franchise local competition.

Sprint's purported concern about maintaining "meaningful choices in access suppliers" (Ag. Conf. Tr. at 13) is equally bewildering. The merger will not eliminate any access suppliers or change GTE's relationship with Sprint as an access supplier. (Indeed, as GTE pointed out at the agenda, GTE's access rate levels are strictly controlled by statute and, in any event, Sprint's access rates are even slightly higher than GTE's.) Again, if anything, the merger has the potential to increase access suppliers by fostering out-of-franchise entry.

In short, Sprint has not and cannot raise any legitimate Florida-specific concerns.¹ Rather, its activities here are part of a nationwide campaign to oppose the merger, with no regard for the circumstances of any given state. Its motivation is not difficult to understand. As discussed earlier, Sprint is part of one of only three combinations capable of providing a full range of telecommunications services on a national level. GTE will be a fourth such full-service competitor. Sprint, along with AT&T and MCI WorldCom, thus have the most to lose from a GTE-Bell Atlantic's ability to offer a national bundle of advanced data, voice, and Internet services. Predictably, the Big Three have been the most vociferous opponents to the merger, serving only to prove that the GTE-Bell Atlantic combination will produce real pro-competitive benefits. Each of these three companies has itself merged its way into participation the national market for ¹bundled services, and is now attempting to fend off, for as long as possible, the full competitive potential of a united GTE-Bell Atlantic.

This Commission, of course, has no mandate to further the competitive interests of any particular entity. Its mission is instead to encourage competition. The Commission can rest assured that its approval of the GTE-Bell Atlantic transfer of control will do just that. The Commission should feel no compulsion to pass onto federal regulators the self-

¹ Nor can Sprint or any other party claim the merger will have anticompetitive effects from the standpoint of a national market analysis. GTE and Bell Atlantic believe this Commission is primarily interested in understanding the merger from a Florida-specific perspective, and that that is the perspective the Commission will necessarily take in any submission to federal regulators. However, to the extent the Commission wishes to educate itself about why the merger will not reduce competition from a national standpoint, see Attachment A at 24-34 and Attachment B.

interested and unavailing arguments of Sprint and others (all of which the FCC has surely already heard) which seek to derail the merger's execution for their own ends.

Conclusion

The Commission has already found the GTE/Bell Atlantic transaction to be in the public interest. Because the merger has already been approved, and because this is the first instance of the Commission's new process of gathering input on mergers, GTE is not sure how the Commission can or will use this information. GTE understands that certain transactions may raise competitive concerns that may merit mention to federal regulators, even though this Commission does not have the authority to consider these issues in its own review process. However, the GTE-Bell Atlantic transfer of control is not one of these transactions. No party has or can raise any plausible concerns about any anticompetitive effects of the merger in Florida (or elsewhere, for that matter). In short, there are no competitive overlaps here that could potentially concern this Commission. From this Commission's perspective, this merger is not in any sense extraordinary. As the Commission's Director of Communications has pointed out, it involves only two out-ofstate players, whereas the recently approved MCI/WorldCom merger involved "two major players in the State of Florida" and much more potential for anticompetitive problems. (D'Haeseleer, Ag. Conf. Tr. at 28.) If the MCI/WorldCom merger did not prompt this Commission to take any concerns to federal regulators, certainly the GTE/Bell Atlantic merger should not. In short, there is no reason for this Commission to signal any unusual level of concern about this merger. (This is particularly true since the FCC's normal pleading cycle on the merger has already closed.)

GTE suggests that, if the Commission believes it is compelled to issue any report to either the FCC and/or the Department of Justice, that report should recommend unconditional approval of the proposed transaction. The faster the merger is approved, the faster Florida consumers will begin to enjoy its pro-consumer results.

Respectfully submitted on January 11, 1999.

Kimberly Caswe

P. O. Box 110, FLTC0007 Tampa, Florida 33601

Telephone: 813-483-2617

Attorney for GTE Service Corporation

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the foregoing Comments of GTE Corporation and Bell Atlantic Corporation were hand-delivered on January 11, 1999 to:

Mary Beth Keating, Staff Counsel Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Kimberly Caswell

Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
GTE CORPORATION.)	
Transferor,))) File No.	
and) I he to:	
BELL ATLANTIC CORPORATION,)	
Transferee.)	
For Consent to Transfer of Control.)	

APPLICATION FOR TRANSFER OF CONTROL

GTE Corporation ("GTE") and Bell Atlantic Corporation ("Bell Atlantic"), pursuant to Sections 214 and 310(d) of the Communications Act of 1934, as amended, hereby request the Commission's consent to transfer control of GTE's Section 214 authorizations and its interests in various radio station authorizations to Bell Atlantic.

GTE and Bell Atlantic have entered into an agreement to merge the companies and combine their operations. As described in the attached public interest statement (Exhibit A), the merger will strengthen the ability of the companies to provide high-quality service and enable them to compete more effectively in both domestic and international telecommunications markets, all of which will benefit subscribers and the public. This document provides an overview of the transaction, identifies the applications that are today being filed with the Commission, seeks a declaration of common ownership under Section 212 of the Act, requests

that all pending and after-filed applications be considered part of the transaction for which approval is being sought, and requests exemptions as necessary from any applicable cut-off rules.

The individual transfer of control applications (Section 214 submissions and applications on FCC Forms 312, 327, 415, 490, 703 and 704) concerning each of the various authorizations controlled by GTE are being concurrently submitted with this application to the office of the Secretary. The filing fees were transmitted electronically to Mellon Bank. The electronic audit codes are shown on the accompanying forms 159. The individual applications are listed on pages 4-5.

I. DESCRIPTION OF TRANSACTION

On July 28, 1998, GTE and Bell Atlantic announced an Agreement and Plan of Merger under which GTE will become a wholly-owned subsidiary of Bell Atlantic. A copy of the Agreement and Plan of Merger is attached as Exhibit B.

Under the terms of the Agreement, a wholly-owned subsidiary of Bell Atlantic will merge into GTE. GTE will be the surviving corporation, thereby becoming a wholly-owned subsidiary of Bell Atlantic. GTE's shareholders will receive 1.22 newly issued shares in Bell Atlantic for each GTE share owned. Following the merger, approximately 57 percent of the shares of Bell Atlantic will be held by the current shareholders of Bell Atlantic, and approximately 43 percent of the shares of Bell Atlantic will be held by the current shareholders of GTE. The board of directors of Bell Atlantic will be made up of an equal number of members from Bell Atlantic's board, on the one hand, and GTE's board on the other hand.

Also attached to this document are the consolidated statements of operations and consolidated balance sheets of Bell Atlantic as of December 31, 1997 (Exhibit C); Bell Atlantic's Form 430 (Exhibit D); a certified copy of Bell Atlantic's Articles of Incorporation (Exhibit E); and a draft protective order (Exhibit F).

GTE will survive as a wholly-owned subsidiary of Bell Atlantic, and the GTE subsidiaries that hold Section 214 authorizations and/or radio licenses will survive as wholly-owned subsidiaries of GTE. The merger does not involve any assignment of GTE's authorizations and licenses, or any change in the licensees that hold such authorizations and licenses, and the same companies will continue to provide service to the public. The only change in ownership will occur at the holding company level. The wholly-owned subsidiaries of Bell Atlantic that hold Section 214 authorizations and/or radio licenses will continue to be wholly-owned by Bell Atlantic. The merger does not involve a change in the control of these companies, which will continue to provide service to the public.

The parties intend to consummate the merger as promptly as possible after the necessary FCC and other federal and state regulatory approvals have been received and certain other preconditions have been met.

II. DESCRIPTION OF APPLICANTS

GTE is a global communications and media company that provides a range of services in the United States and select countries around the world. The company provides local telephone service in 28 states and provides wireless services, nationwide long-distance services, Internet services, as well as video services in selected markets. GTE also has significant investments in communications and information services businesses in Canada, the Dominican Republic, Venezuela, Argentina, Micronesia and China. GTE is also engaged in financing, insurance, leasing and other related activities.

Bell Atlantic is a global communications and media company that provides a range of services in the mid-Atlantic and northeastern United States and select countries around the world.

The company provides local telephone service in 13 states and the District of Columbia, and

provides wireless services, Internet services and video services in selected markets. Bell Atlantic also has significant investments in communications and information services businesses in New Zealand. Mexico, Italy, Indonesia, Thailand, the Philippines. United Kingdom, Greece. Slovakia and the Czech Republic. Bell Atlantic is also engaged in financing, systems integration services, customer premises equipment distribution and telecommunications consulting.

III. APPLICATIONS BEING FILED

The Applicants are filing with the Commission a total of 21 applications requesting consent to the transfer of control to Bell Atlantic of licenses and authorizations controlled or requested by GTE or its subsidiaries. These include GTE's existing and requested Section 214 authorizations and its Title III radio station authorizations as follows:

- -- Part 5 Experimental Radio Service (FCC Form 703)
- -- Part 21 Multipoint Distribution Service (FCC Form 704)
- -- Part 22 Cellular, Paging/Radiotelephone, Rural Radio and Air-Ground (FCC Form 490)
- -- Part 24 Personal Communications Service (Form 490)
- -- Part 25 Earth Stations (FCC Form 312)
- -- Part 78 CTRS (FCC Form 327)
- -- Part 90 Telephone Maintenance and Business Radio (FCC Form 703)
- -- Part 101 Microwave (Forms 415 and 704)
- -- Section 214 Authorizations and Cable Landing Licenses

In four markets which they serve (Greenville, SC - MSA #67; El Paso, TX - MSA #81; Anderson, SC - MSA # 227; Las Cruces, NM - MSA # 285), GTE and Bell Atlantic currently hold interests in the cellular licensees for both channel blocks in overlapping service areas.

Because Section 22.942 of the Commission's rules, 47 C.F.R. § 22.942, prohibits ownership of

both cellular licenses in an overlapping service area, either Bell Atlantic or GTE will divest its interest in each of these four markets at or prior to closing. At this time, however, it has not been determined which interest in each market will be divested. Bell Atlantic and GTE therefore commit that, prior to closing, either the A-side or the B-side interest in each of the four overlapping service areas will be divested in full. The transaction thus complies with Section 22.942.

In eight PCS MTA markets which they serve (Miami and Tampa, FL; San Antonio and Houston, TX; New Orleans, LA; Richmond, VA; Chicago, IL; and Honolulu, HI), GTE and Bell Atlantic hold attributable interests in broadband PCS and cellular spectrum with significant geographic overlap that, when combined, will total more than the current spectrum cap in section 20.6 of the Commission's rules, 47 C.F.R. § 20.6. In these markets, Bell Atlantic and GTE will either divest sufficient interests in the licensed spectrum to comply with the CMRS spectrum cap in effect at the time of closing or obtain a waiver.

In connection with the merger, GTE will also transfer its minority, non-controlling interests in certain licenses to Bell Atlantic where Bell Atlantic already has a controlling interest. These transfers are pro forma and do not require GTE to file an application for approval of the Commission. Federal Communications Bar Association's Petition for Forbearance from Section 310(d) of the Communications Act Regarding Non-Substantial Assignments of Wireless Licenses and Transfers of Control Involving Telecommunications Carriers, 13 FCC Rcd 6293 (1998). In accordance with the Commission's rules, GTE will notify the Commission within 30 days after these pro forma transfers are consummated. 47 C.F.R. §§ 22.137(a)(1), 24.439(a)(3), 24.839(a)(1).

IV. PUBLIC INTEREST SHOWING

Grant of these applications will serve the public interest, as demonstrated in the statement attached as Exhibit A. The merger of Bell Atlantic and GTE is strongly in the public interest because it will promote vigorous competition in telecommunications markets across the country and make possible exciting new services and other benefits for consumers nationwide by dramatically breaking down the geographic and product-line divisions that historically have limited full-scale competition. This merger will advance on a truly national scale the procompetitive policies that Congress laid down in the Telecommunications Act of 1996.

First, this merger will enable the combined company to attack the local markets of other Bell companies on a widespread and effective bases. With its local telephone companies dispersed throughout the areas served by the other Bell companies, GTE is the "enabler" that will allow the combined company to attack other Bell company strongholds across the country. Second, the merger will also add an important new competitor to the top tier of national providers that can offer consumers a full bundle of advanced telecommunications services in all major markets--providers that include MCI/WorldCom/MFS/UUNet, AT&T/TCI/Teleport, and Sprint/Deutsche Telekom/France Telecom. Third, the merger will greatly enhance the competitiveness of GTE's Internet backbone and data services, and by doing so will promote healthy competition in these critical markets. Fourth, the merger also will increase competition in the general long distance market by speeding up the deployment of a national long distance network to compete with the Big Three facilities-based providers. Finally, the merger will combine the comapnies' complementary wireless and international assets to enable the new company to offer a broader range of services more efficiently to more customers. All in all, the combination of Bell Atlantic and GTE services promises to unleash a new generation of

competition and choice for consumers throughout the telecommunications arena and to fulfill the pro-competitive vision embodied in the Telecommunications Act of 1996.

V. <u>APPLICATION FOR FINDING OF COMMON OWNERSHIP</u>

Pursuant to Section 212 of the Act, 47 U.S.C. § 212, and Section 62.12 of the Commission's Rules, 47 C.F.R. § 62.12, the Applicants request that the Commission find and declare that, upon consummation of the transactions contemplated by the Agreement, (1) Bell Atlantic will own more than 50% of the voting stock of GTE, and (2) Bell Atlantic, GTE and their respective subsidiaries will therefore be deemed to be "commonly owned carriers" as that term is defined in Section 62.2 of the Commission's Rules, 47 C.F.R. § 62.2. As described in Section II, above, the merger contemplates that, as a result of the combination of the companies, Bell Atlantic will hold all of the stock of GTE Corporation. This satisfies the requirement of Section 62.12 that the Applicants be commonly owned as a result of the transaction.

VI. REQUEST FOR APPROVAL OF ADDITIONAL AUTHORIZATIONS

As set forth in each of the transfer of control applications, GTE controls entities which hold numerous Commission licenses and other authorizations.

While the applications are intended to list all such authorizations, the licensees involved in this proposed transaction may now have on file, and may hereafter file, additional requests for authorizations for new or modified facilities which may be granted during the pendency of the transfer of control applications. Accordingly, it is requested that the grant of the transfer of control applications include authority for Bell Atlantic to acquire control of (1) any authorization issued to GTE's subsidiaries during the Commission's consideration of the transfer of control applications and the period required for consummation of the transaction following approval: (2) construction permits held by such licensees that mature into licenses after closing; and (3)

applications which are filed after the date of these applications and that are pending at the time of consummation. Such action would be consistent with prior decisions of the Commission. See NYNEX and Bell Atlantic Transfer, 12 FCC Rcd 19985, 20097 (1997) ("Bell-Atlantic-NYNEX"); Craig O. McCaw and AT&T Transfer, 9 FCC Rcd. 5836, 5909, n.300 (1994) ("McCaw Order").

VII. REQUEST FOR EXEMPTION FROM CUT-OFF RULES

Pursuant to Sections 21.23(c)(6), 22.123(a), 24.823(g)(3) and 25.116(b)(3) of the Commission's Rules, 47 C.F.R. §§ 21.23, 22.123, 24.823 and 25.116, the Applicants request a blanket exemption from any applicable cut-off rules in cases where GTE's subsidiaries file amendments to pending applications to reflect the consummation of the proposed transfer of control. This exemption is requested so that amendments to pending applications to report the change in ultimate ownership of GTE subsidiaries which are parties to these applications would not be treated as major amendments. The scope of the transaction between GTE and Bell Atlantic demonstrates that the ownership change which would be reported would not be made for the acquisition of any particular pending application, but is part of a larger merger undertaken for an independent and legitimate business purpose. Grant of such application would be consistent with previous Commission decisions routinely granting a blanket exemption in cases involving similar transactions. See, e.g., Bell Atlantic-NYNEX at 20092. McCaw Order at 5909, Centel Corporation, 8 FCC Red 1829, 1833 (1993); Airsignal International Inc., 81 FCC 2d 472, 476 (1980).

VIII. UNCONSTRUCTED FACILITIES

Nearly all of the FCC authorizations covered by the applications involve constructed facilities. However, certain facilities in the Point-to-Point Microwave Service and the Personal Communications Service are authorized but not yet constructed. The transfer of control of these unbuilt facilities does not implicate any of the Commission's anti-trafficking or unjust enrichment rules.

Microwave. The Commission's anti-trafficking rule for Part 21 permits, 47 C.F.R. § 21.39, is not implicated, because the transfer of these unconstructed facilities is incidental to the larger transaction involving the transfer of control of an ongoing, operating business, and involves a stock-for-stock exchange based upon the valuation of GTE as a whole.

PCS. The PCS authorizations in which GTE holds an interest were obtained through competitive bidding within the last three years. As required by Section 1.2111(a) of the Commission's Rules, a copy of the merger agreement is being filed. 47 C.F.R. § 1.2111(a). As noted above, the transaction involves a stock-for-stock exchange. The unjust enrichment provisions of the Commission's auction rules, 47 C.F.R. § 1.2111(b), (c) and (d), do not apply because the PCS authorizations were not obtained pursuant to set-asides or bidding credits for designated entities. The anti-trafficking rule for PCS authorizations, 47 C.F.R. § 24.839(c), does not apply because the PCS authorizations were not issued for frequency blocks C or F.

IX. FINANCIAL OUALIFICATIONS

The applications seek approval for the combination of Bell Atlantic and GTE through a stock-for-stock merger, in which GTE shareholders will receive shares of Bell Atlantic stock in exchange for their shares of GTE stock (see discussion infra at Section II). No capital will thus need to be raised internally or from outside sources in order to complete the merger. In addition,

as demonstrated by the consolidated statements of operations and consolidated balance sheets of Bell Atlantic as of December 31, 1997 (attached hereto as Exhibit C), Bell Atlantic possesses the requisite financial qualifications to control the authorizations covered by these applications and to operate the systems and facilities covered by these authorizations in the public interest.

<u>CONCLUSION</u>

For the above reasons, and for the reasons set forth in the individual applications filed herewith, the proposed transaction complies with all applicable Commission rules, and will serve the public interest. Bell Atlantic and GTE accordingly urge the Commission to act promptly to grant these applications.

Respectfully submitted,

GTE CORPORATION

William P Barr

Executive Vice President - Government and Regulatory Advocacy and General Counsel

One Stamford Forum

Stamford, Connecticut 06904

BELL ATLANTIC CORPORATION

James R. Young

Executive Vice President - General Counsel

New York, New York 10036

(212) 395-1162

October 2, 1998

PUBLIC INTEREST STATEMENT

INTRODUCTION

The merger of Bell Atlantic Corporation and GTE Corporation is strongly in the public interest because it will promote vigorous competition in telecommunications markets across the country, and make possible genuinely new services and other benefits for consumers nationwide. By dramatically breaking down the geographic and product-line divisions that historically have limited full-scale competition, this merger will advance on a truly national scale the procompetitive policies that Congress laid down in the Telecom Act of 1996.

Local service. First, this merger will finally enable one of the Bell companies to attack the local markets of the other Bells on a widespread and effective basis.

The Commission has concluded in recent orders that the Bell companies themselves may be among the most significant potential competitors to each other in major metropolitan markets where their geographic regions are contiguous. However, Bell Atlantic today is not a significant potential competitor to any of the other Bell companies; its service areas are geographically separated from the major service areas of the other Bells and it lacks the presence that it needs effectively to enter and compete in the key urban markets of the other Bells' regions. The merger with GTE will instantly erase that limitation.

With its local telephone facilities broadly dispersed throughout the United States, GTE is the "enabler" that will allow Bell Atlantic to attack other Bell company strongholds across the country. One glance at a map of GTE's service territories verifies this fact. GTE shares an MSA or serves neighboring suburbs in several of the most attractive Bell markets outside Bell Atlantic's region, including Los Angeles, San Francisco, San Diego, Dallas-Fort Worth, Houston.

Chicago, Cleveland, Indianapolis, Detroit, Miami, Orlando, Jacksonville, Seattle, Portland and others. See Service Territories Map, attached as Exhibit 1.

The new company created by the merger of Bell Atlantic and GTE will have a far greater ability to enter and compete quickly and effectively against the incumbent Bell company in these key markets outside the Bell Atlantic region than GTE would have on its own. Moreover, these substantial pro-competitive benefits will far outweigh any minimal loss in potential competition inside the Bell Atlantic region, where the existing local service areas of the two companies do not overlap and where neither company is a significant potential competitor to the other. Indeed, this merger presents the best possible combination of a Bell company and GTE and one of the best possible vehicles for achieving local competition under the 1996 Act.

Rundled services. Second, from a broader perspective, the merger will add an important new competitor to the top tier of national providers that can offer consumers a full bundle of advanced telecommunications services in all major markets. The ability to offer such bundled services on a national basis will be critical for broad penetration of the local market. With consolidation occurring among telecommunications providers, there is emerging today a small set of players able to roll out national bundled offerings — MCI/WorldCom/MFS/UUNet, AT&T/TCI/Teleport, Sprint/Deutsche Telekom/France Telecom. These new national firms, and others, will soon do battle with each other from the Atlantic to the Pacific and internationally. The merger of Bell Atlantic and GTE will bring into existence a fourth new competitor with the necessary scale and scope to participate in this emerging national market for bundled services. The new company will have a national customer base, the full array of competitive offerings in key markets across the country, and the ability to create a national brand to rival AT&T's or MCI WorldCom's.

Internet and data services. Third, the merger will greatly enhance the competitive strength of GTE's Internet backbone and data services and by doing so will promote healthy competition in these critical markets. GTE Internetworking (formerly BBN) is currently a distant fourth to the most significant providers of Internet backbone services, behind the much larger MCI WorldCom. MCI's successor Cable & Wireless, and Sprint. AT&T is now on the verge of joining the top ranks of Internet backbone providers. Combining with Bell Atlantic's concentrated urban customer base will allow GTE to become a much more potent competitor to the larger backbones and AT&T by:

- Expanding its data and Internet traffic;
- Significantly increasing the number of valuable Web sites and customers connected to its backbone network:
- Accelerating the transition of GTE's backbone to its own network and away from dependence on MCI WorldCom; and
- Making possible the rollout of new Internet products and services that will, in turn, stimulate the creation of vibrant new markets and the entry of new competitors.

In addition, with large-business customer relationships across the country, the new company will be able to market national data offerings like frame relay, ATM and VPN services that GTE alone currently lacks the national customer base to offer.

Long distance. Fourth, the merger will increase competition in the general long distance market by speeding up GTE's deployment of a new national long distance network to compete with the Big Three facilities-based providers. Construction of a national long distance network providing ubiquitous service to all markets, not just the top urban centers, requires large volumes of traffic to achieve necessary economies. Today, there is a dearth of long distance networks that

are truly national in reach: With the MCI-WorldCom merger, there are only three fully national facilities-based carriers. Although GTE hopes to migrate some of its long distance traffic onto its own planned network, known as the "Global Network Infrastructure." GTE's customer base alone will not generate sufficient long distance traffic to deploy a full-fledged national network. The ability to market to Bell Atlantic's customer base will provide the scale necessary to allow the combined company more quickly to construct and operate a national long distance network to compete against the Big Three.

Wireless and international. Finally, the merger will combine fully complementary wireless and international assets to enable the new company to offer a broader range of services more efficiently to more customers.

The synergies created by the merger will provide the resources to fund many of the competitive initiatives described above. The new company will achieve significant cost savings through combined equipment procurement, joint software development and other cost synergies. The merger will also generate enhanced revenue opportunities through the deployment of new products and services.

All in all, the combination of Bell Atlantic and GTE promises to unleash a new generation of choices for consumers throughout the telecommunications arena and to fulfill the pro-competitive vision embodied in the Telecommunications Act of 1996. Far from raising competitive problems, the merger of Bell Atlantic and GTE will be an important affirmative step in transforming into reality the promise of vigorous competition in all relevant markets for telecommunications services.

I. THE MERGER IS STRONGLY PRO-COMPETITIVE

The merger of Bell Atlantic and GTE will produce substantial pro-competitive and pro-consumer benefits in a host of telecommunications markets and no harm to competition in any relevant market. The merger, therefore, satisfies the Commission's repeatedly articulated standards, focusing on markets both as they are and as they are developing.

The merger of Bell Atlantic and GTE is a uniquely beneficial combination of complementary assets. GTE has more significant data capability and long-distance experience than any other such large LEC, including Bell Atlantic: it has a presence across the Nation (including in major metropolitan areas served by the other Bell companies) that Bell Atlantic lacks; and Bell Atlantic has a localized presence and vital customer relationships in the very areas of concentrated population in the Northeast that GTE lacks but needs. And the two companies' wireless and international properties are broadly complementary as well. The contrast between Bell Atlantic and GTE makes their combination a distinctively powerful force for local-service and other forms of competition in the developing telecommunications marketplace.

Combining these complementary strengths will result in improved service, better use of resources, and more competitive markets. While the Commission has called for a market-by-market analysis of merger applications, see, e.g., AT&T-TCG ¶ 15, n.57, the precise boundaries of some telecommunications markets are not easily defined, in part because of rapidly changing

Bell Atlantic-NYNEX, 12 F.C.C.R. 19985, ¶¶ 7, 31, 32, 48, 157 (1997); WorldCom-MCI, CC Docket No. 97-211 (Sept. 14, 1998), ¶¶ 8-14; AT&T-TCG, CC Docket No. 98-24 (July 23, 1998), ¶¶ 11-13; British Telecom-MCI, 12 F.C.C.R. 15351, ¶¶ 2-3, 11, 41-42 (1997) ("BT/MCI II"). Given its "long history and broad experience in communications," Bell Atlantic also readily meets the "citizenship, financial, and technical qualifications to provide service consistent with the public convenience and necessity." Bell Atlantic-NYNEX ¶ 245.

conditions, such as the increasing importance of bundled offerings of previously separate services. See, e.g., WorldCom-MCI ¶ 22, n.60; Bell Atlantic-NYNEX ¶ 39. Moreover, a number of the merger's benefits that result from the combined company's increased scale and its enhanced data and other capabilities plainly will reach across a range of present and emerging markets. Nonetheless, as the attached market-by-market analysis shows, in all conceivably relevant markets, competition — and consumers — will benefit.²

A. Local Services

This merger promises what few other telecommunications providers have been able to offer: a broad-scale attack on the local markets of the other RBOCs across the country. The merger creates the real-world conditions necessary to succeed in such out-of-franchise entry that GTE already has demonstrated an interest in pursuing, and makes meaningful entry possible where the separate companies alone could not succeed.³ It therefore presents one of the most effective vehicles for achieving the local-competition goals of the Telecommunications Act of 1996.

Indeed, based on the simple economic logic of the GTE-Bell Atlantic combination. GTE's Chairman recently testified to Congress that the combined company plans to enter at least 21 markets in SBC's region (Los Angeles, San Francisco, San Diego, Dallas, Houston, Austin, and

² An event study of the stock market reaction to the news of the merger shows that investors viewed the merger not as creating or maintaining market power but, to the contrary, as creating significant new competition to AT&T, MCI WorldCom, Sprint, and SBC/Ameritech.

See Declaration of Thomas Hazlett. Such concrete marketplace reactions are powerful confirmation of the likely pro-competitive effects of the transaction.

³ See, e.g., WorldCom-MCI ¶ 199 ("as a result of combining certain of the firms' complementary assets, the merged entity will be able to expand its operation and enter into new local markets more quickly than either party alone could absent the merger"); AT&T-TCG ¶¶ 2. 11, 34, 48.

San Antonio), Ameritech's region (Chicago, Cleveland, Cincinnati, Indianapolis, and Detroit), BellSouth's region (Miami, Orlando, Jacksonville, Raleigh, Nashville, Memphis, and Louisville), and US West's region (Seattle, Portland) within 18 months of closing.

These plans build on GTE's demonstrated interest in entering the local markets of the other RBOCs. GTE, faced with an imperative to compete given its island-like service areas in the other Bells' seas, already has established a separate corporate unit to plan for entry into territory close to its own few urban franchise areas near Los Angeles. Dallas, Tampa, and Seattle. Carrying out this commitment, it has already developed some of the experience, know-how, and systems that are necessary (but not sufficient) for such entry. In so doing, however, GTE has run into significant obstacles: (1) substantial investments are needed in largely fixed-cost operational platforms (which become more economical with larger customer bases); (2) economical local entry requires truly proximate facilities (which can be more efficiently used and economically deployed with larger volumes of business); and (3) acquiring customers is difficult without a base of anchor customers and without a robust national brand (both of which can be more economically obtained with a national presence creating scale and ties to multi-location businesses). See Declaration of Jeffrey Kissell.

The combination of GTE and Bell Atlantic substantially solves these problems and makes it possible for the CLEC objectives GTE has already adopted to be effectively pursued:

- Bell Atlantic's business customers from the Northeast provide a legion of anchor customers through those businesses' branch offices in many cities across the Nation, including the few urban areas near current GTE service areas and, in addition, cities currently passed by GTE's planned national long distance network, known as the Global Network Infrastructure or "GNI."
- The combined company will be better able to attract even more customers because with GTE's advanced-data expertise, long-distance experience and

national presence — it will be able to offer the very kind of attractive bundle of services, and unified single-network service, that the marketplace is demanding.

- The merged company's greater scale spreads the fixed costs of platform investments.
- The same greater scale makes possible the national advertising needed for economical development of a national brand.
- The merged company's greater scale also makes possible faster deployment of facilities including upgrading or expanding existing facilities for wireline service and the addition of touch-down points to GTE's planned long distance network in cities that otherwise simply would be passed without connection. The merger, therefore, will create a facilities presence in more areas, both those near current GTE service areas and those near the long distance network.
- On the wireless side, the greater scale creates a more attractive wireless product across many regions of the Nation, a potentially attractive part of a bundle that includes local services.

Collectively, these anchor customers, brand reputation, and facilities are the essential steps for broad-scale entry into local markets across the country. See Declarations of Jeffrey Kissell and Debra Covey.

The merger therefore makes possible the first real facilities-based effort to compete on a broad scale against the other RBOCs. This confirms the assessment by former FCC Chairman Reed Hundt that this merger not only "doesn't substantially change the competitive balance in the market" in a negative way but is, in fact, strongly pro-competitive:

[T]he move would mean a triumvirate of telecom giants is likely to emerge, resulting in more competition. . . . [The AT&T/TCI, Bell Atlantic/GTE, and SBC/Ameritech] mergers mean there are three entities large enough to enter local markets and compete head-on, [said Hundt]. They're beefing up like sumo wrestlers to go after each other big time.

Sandberg & Lipin. "Bell Atlantic and GTE Agree on a Merger." Wall Street Journal, July 28, 1998, p. A3, A11 (reporting and quoting statement by Reed Hundt). This merger is an essential step in bringing about such LEC to LEC competition.

B. National and Global Markets for Full-Range Telecommunications Services

Focusing on the broader picture, this merger will directly improve competition in the developing national and global markets for a full range of bundled telecommunications products and services by creating a strong new player to compete with the likes of MCI/Worldcom/MFS/UUNet, AT&T/TCI/Teleport, and Sprint/Deutsche Telekom/France Telecom. Indeed, a principal motivation for the merger is to enable the combined company to become a truly national provider of bundled services.

Today, in the United States, Bell Atlantic is limited to the Northeast, while GTE is dispersed almost entirely outside that area, serving primarily suburban and rural customers and a few major urban centers. Together, in contrast, the two companies achieve a nationwide footprint that includes the urban areas and financial centers of the Northeast and key locations in or near the territory of every other RBOC. The combined company will have wireline local-service assets in 81 of the top 100 local telephone markets, as well as an expanded footprint on the wireless side. Internationally, moreover, the merger will combine complementary assets in Europe, Asia, Canada, and Latin America. The national presence and global reach of the company, together with its rich resources in advanced data services, will add another competitor to the small number of firms able to meet the growing demand for "seamless" full-service offerings across far-flung distances.

The Commission has several times recognized the increasing importance of the ability to offer a bundle of telecommunications services. See, e.g., Bell Atlantic-NYNEX ¶¶ 39, 52; SBC-

PacTel 12 F.C.C.R. 2624 ¶ 48, n.94 (1997). It also has recognized the emergence of a "global seamless services" market. See BT-MCI II ¶¶ 56-57.4 This market, the Commission has explained, is limited to "only a handful of major competitors world-wide," "[c]ompetition in these markets requires significant resources, which must extend throughout the world." Id. ¶¶ 91, 130. The Commission relied on the "pro-competitive effect" of this same global seamless market in approving British Telecom's initial investment in MCI. BT-MCI I, 9 F.C.C.R. 3960. ¶ 51 (1994), and separately has explained that "global telecommunications markets have begun to shift from the traditional model to a more competitive market structure of multiple national carriers and international alliances," Policy Statement on International Accounting Rate Reform, 11 F.C.C.R. 3146, ¶ 6 (1996).

The emergence of these national and global markets where firms provide a full range of telecommunications services has been recognized by the small number of firms currently assembling the capabilities to be participants.⁵ For example, MCI and WorldCom touted the pro-

In 1996, the Commission approved the investment of Deutsche Telekom and France Telecom in Sprint on the basis of its conclusion that "[g]lobal seamless services is an emerging product market of worldwide geographic scope. . . . At present, the product dimension of this market consists of a combination of voice, data, video and other telecommunications services that are offered by a single source over an integrated international network of owned or leased facilities, and that have the same quality, characteristics, features and capabilities wherever they are provided. This end-to-end service offers the advantage to customers of 'one-stop shopping' and single-source billing. The principal customers are high-end users such as multinational corporations, but individuals and carriers may also be customers." Sprint Corp., 11 F.C.C.R. 1850, ¶ 84 (1996).

The definition of a market and the identification of who participates in the market both properly take account of the perceptions of the competitors themselves, because those perceptions largely determine what competitive threats influence firms' pricing and other decisions. See, e.g., 1992 Horizontal Merger Guidelines §§ 1.11, 1.21 (market definition); 1984 Vertical Merger Guidelines § 4.11 ("perceived potential competition"); FTC v. Freeman Hospital, 69 F.3d 260, 269-70 (8th Cir. 1995).

competitive benefits of its "plan to become the first truly global end-to-end competitive carrier." WorldCom/MCI Joint Reply, CC Docket No. 97-211, at 55 (January 26, 1998). AT&T has recently defended its announced venture with British Telecom: "Through the venture, AT&T and BT aim to be the undisputed leader in the fast-growing global communications services market. The venture, together with partners around the world, will provide an outstanding range of global services far greater than either AT&T and BT could provide alone or with their current alliances." SBC's chairman recently testified to Congress: "Consumer demand is transforming the market for telecommunications services into a global marketplace, where ultimately there will be a limited number of integrated global companies competing with an increasing multitude of regional, national and local companies. SBC's strategy is to be one of those U.S. based global

^{6 &}quot;MCI and WorldCom believe that the merger will yield significant benefits for the companies' customers and U.S. consumers generally. A driving force behind the merger of MCI and WorldCom is the desire to create the first truly global end-to-end competitive carrier. As a fully integrated company, MCI WorldCom will offer a complete range of local, long distance, wireless, and international communications services. The merged company plans to move as aggressively as regulatory conditions permit to offer competitive choices to consumers on a global scale. By combining the expertise and resources of the two companies, MCI WorldCom will be a strong and efficient competitor to incumbent carriers world-wide." WorldCom/MCI Joint Reply at 55.

⁷ AT&T, Global Venture Fact Sheet (1998) http://www.att-bt-globalventure.com/news/factsheet.html); "[M]ultinational companies are reaching out and going global and they want that reach to be immediate with the same support and the same services.

we're investing in our network, domestically; we're investing in the consumer business with the TCI and the broadband approach; and we're investing for global reach as well. And all those investments . . . have a common theme and that is that we're investing our own facilities and we're doing that so we can bring a consistent and universal service around the world." Interview with Michael Armstrong, AT&T CEO, Moneyline, CNNFN, Transcript #98072700FN-L10, July 27, 1998; "If you want to be a successful player in the global market, going it alone is not a serious option. . . . The size of the global opportunity has brought both BT and AT&T to a common conclusion that partnership is key — to spread the cost, to bring to bear complementary expertise and research and development, to make sure we can reach further and better than we can alone to meet our customers' needs." Speech by Sir Peter Bonfield, CEO, British Telecom. (June 25, 1998) https://www.att-bt-globalventure.com/news/presentations.html.

telecommunications companies And. as early as 1994. Sprint told the Commission: "In today's international telecommunications environment, customers increasingly demand that their service provider be able to furnish seamless, end-to-end services on a worldwide basis, with consistent standards of quality and service functionality regardless of where the call is originated or terminated."

The view of the market participants — both as to the increasing importance of the kind of scope and scale the present merger will create and the limited number of current firms able to meet the increasing demand — is confirmed by outside analysts. As one Wall Street telecommunications analyst recently explained:

[T]he telecom world ... will evolve to the point where there are six or so fully integrated players. They'll offer end-to-end connectivity to serve business users. They'll all have assets in the top financial centers globally. They'll have long-haul optical fiber in important corridors like North America and Western Europe. In the Pacific Rim, they'll have strategic hubs in Tokyo, Hong Kong, Singapore and Sydney, and undersea fiber cable to connect the dots, so to speak. They'll also have an Internet backbone to provide sophisticated broadband data services to business customers. Such large-cap fully integrated players will create value on an ongoing basis. . . . [O]nly one of them exists today, and it's WorldCom.

Jack Grubman, Salomon Smith Barney, quoted in "Barron's International Telecom Forum: Right Numbers: Our Experts Pick the Likely Winners in the Global Telecom Wars," Barron's, May 18, 1998, at 35.

Testimony of Edward E. Whitacre, Jr., Chairman and CEO, SBC Communications, Inc., before the Antitrust, Business Rights, and Competition Subcommittee, Senate Judiciary Committee, May 19, 1998. A central theme of SBC and Ameritech's pending merger application is that they view the marketplace for large and medium businesses as ever more national and global in scope.

⁹ Sprint Petition for Declaratory Ruling Concerning Sections 310(b)(4) and (d) and the Public Interest Requirements of the Communications Act of 1934, as amended, at 17-18 (File No. ISP-95-002, Oct. 14, 1994).

Neither Bell Atlantic nor GTE would alone be as strong a competitive force in these markets as the combined company. GTE has little presence in the major East Coast business centers and, more generally, a weak presence among large businesses. Bell Atlantic has virtually no presence outside the Northeast. The merger allows the combined company to capitalize on the new business-rich, high-density, geographically complementary customer base. As one analyst explained, "[c]ombining with GTE sharply enhances Bell Atlantic's product portfolio"—not just GTE's long-distance experience and assets but "GTE's internetworking capabilities and national data network." Nationsbanc Montgomery, Bell Atlantic, Inc., July 29, 1998.

As already noted in discussing local service, the national coverage will allow the combined company to compete more effectively for the business of a host of firms that have offices both in Bell Atlantic's region and near to GTE's franchise areas across the rest of the country. For these and other customers, moreover, new and improved services and multi-product offerings will be made possible by the combination of advanced data capabilities, long-distance experience, and established business relationships. The additional scale of the merged company will allow for development of a national brand (by justifying national advertising), as well as faster and wider build-out of new national data and long distance networks (including by adding otherwise-unjustifiable touch-down points) and other facilities (such as data centers for speedier Internet access). See Declarations of Jeffrey Kisseil, John Curran, and Debra Covey.

Internationally, moreover, the two companies have a range of complementary, nonoverlapping interests that will make the merged firm a stronger competitor in international markets. See International Map, attached as Exhibit 2.10 GTE's international interests are concentrated in the Americas, while Bell Atlantic's interests include a wireless venture in Mexico and otherwise are focused on Europe and Asia. These varying interests — tied together with the complementary assets of Bell Atlantic's fiber optic loop around the globe, or "FLAG," that extends from London to Japan and GTE Internetworking's overseas assets — provide a foundation for more efficient international services to compete with the global providers now being formed.11

All of these factors will be mutually reinforcing. This merger presents an even stronger version of what the Commission recognized in <u>WorldCom-MCI</u> as a pro-competitive benefit: the enhanced ability of the merging parties to serve "multi-location customers over their networks," enabling "such customers to receive higher quality and more reliable services."

<u>WorldCom-MCI</u> ¶ 199. The present merger will create a truly national, reliable provider of an

[&]quot;On the international front, GTE is oriented towards the Americas: its operations stretch from British Columbia and Quebec in the north, to the Dominican Republic, Puerto Rico and Venezuela to the south. GTE also has major traffic termination agreements in the Pacific Rim." Shawn Burke, Bell Atlantic To Merge With GTE Corp., PaineWebber Fixed Income, July 29, 1998. Bell Atlantic's "portfolio of international communications properties is dominated by its wireless investments in Mexico, Italy, Greece, Slovakia and the Czech Republic. Its wireline telephone investments include properties in the UK, Thailand, Indonesia, the Philippines, and a UK-Japan undersea fibre optic cable." Id. Moreover, the assets of FLAG and GTE Internetworking "creates a 'global and domestic network barter currency' that should make it possible for GTE and Bell Atlantic to negotiate for network capability where [their] networks presently do not extend." Nationsbanc Montgomery, Bell Atlantic, Inc., July 29, 1998.

In U.S. markets for international message telephone services and international private line services, the merger can only have positive effects as well. AT&T, MCI WorldCom, and Sprint dominate those markets, and GTE and Bell Atlantic have very small shares. See Federal Communications Commission, "Trends in the U.S. International Telecommunications Industry." Table 21: Market Share Based on Net Revenue from International Services by Carrier (Aug. 1998). The merged company will be a stronger competitor in the markets for U.S.-originating international long-distance traffic.

ever-increasing range of telecommunications services, adding much-needed choice to the burgeoning national and global full-service markets.

C. Advanced Data Services

The merger also will have a profoundly pro-competitive effect on the critical markets for Internet and advanced data services, most particularly in the concentrated market for Internet backbone services, where it will strengthen GTE as a competitor of the three dominant backbone providers. See WorldCom-MCI ¶ 148.

The proceedings that examined the merger of WorldCom and MCI — in this Commission as well as before the U.S. and European antitrust authorities — have made clear that the market for Internet backbone services is already concentrated and today is dominated by the three largest players: MCI WorldCom, the successor to the MCI backbone (Cable and Wireless), and Sprint. AT&T also is on the verge of joining this top rank of Internet backbone providers. In contrast. GTE Internetworking (formerly BBN) currently is a distant fourth to the largest backbone providers and is largely dependent on capacity leased from other carriers (primarily MCI WorldCom).

Because the value of each backbone's network increases as the number of customers on the network increases, unilateral growth of any one of the three largest backbones will push more and more customers to that network, creating a snowball effect. This possibility is enhanced by placing the MCI backbone in Cable and Wireless's hands: because that backbone is exceedingly hard to extricate from MCI's other operations, Cable and Wireless may be distinctly hobbled in its ability to compete with the other dominant backbones. Today, moreover, the major Internet backbones exchange traffic through peering arrangements, under which the major backbone providers do not charge one another to exchange traffic. But these arrangements only work

where the backbones handle roughly comparable traffic volumes. If one of the backbones were to grow significantly larger than the others, its competitors would become dependent on the larger backbone, and it could refuse to continue the existing peering arrangements.

The threat posed by the existing concentration among the top tier of Internet backbones will be materially alleviated by strengthening GTE's backbone. This result will flow directly from its combination with Bell Atlantic and the ability to market to Bell Atlantic's urban, high-density, business-rich customer base by taking advantage of its marketing and distribution channels. This will enhance the volume of data and Internet traffic carried over the backbone, and the number of valuable Web sites and customers connected to the backbone, can be more readily increased. See Declaration of John Curran. By doing so, moreover, the merger will accelerate GTE's transition of its backbone onto its own facilities, and away from dependence on other competitors such as MCI WorldCom.

More broadly, the combination of Bell Atlantic and GTE will feed businesses and consumers hungry for an ever-expanding range of advanced data services. Bell Atlantic currently has limited experience and presence in Internet and data-services markets. GTE, through GTE Internetworking (formerly BBN), is one of the leaders in developing and selling such services, but it lacks critical high-density customer bases to deploy many such services as soon as they are technologically available. The merger of the two companies will give each what it currently lacks alone.¹²

¹² See Nationsbanc Montgomery, <u>Bell Atlantic</u>, Inc., July 29, 1998 ("GTE will give Bell Atlantic the applications and the national network to offer high bandwidth packet data-based applications and products. . . . GTE has one of the most sophisticated suites of offerings in the web hosting business.")

For example, amidst the 4,000-6,000 Internet service providers serving tens of millions of customers. Bell Atlantic and GTE today have very modest Internet Service Provider offerings to consumers: GTE.net has 600,000 customers, whereas BellAtlantic.net has only about 160,000. Their role in the market is far too small for the merger to raise any competitive concerns. On the other hand, these businesses will immediately achieve important cost savings from the scale provided by a combination of customer bases. These businesses require a scale well above Bell Atlantic's and even GTE's customer base to successfully compete. And, even beyond such minimum scale, substantial efficiencies are gained by eliminating a raft of otherwise duplicative costs, including mail systems, news groups, hardware purchases, marketing, billing, customer assistance and the like.

In addition, customers will see more rapid deployment of innovative services as a result of the combination of GTE's expertise and experience in the area with Bell Atlantic's customer base and well-established marketing and distribution channels. GTE's lack of an adequate high-density customer base in, for example, Boston, New York, Newark, Philadelphia, Wilmington, Baltimore, metropolitan Washington, DC, and Richmond has impaired its ability to roll out new services. Examples of already-developed services include:

<u>Cyber-ID</u>, which allows a recipient of a call, when connected to an Internet Service Provider, to choose among responses to the call: to send a busy signal; to direct the call to voice mail or to a second line; or to answer using a voice-over-IP connection.

Site Patrol, which allows customers to protect their Internet connections from hackers.

<u>Universal Messaging</u>, which allows customers to have voice, fax, and e-mail messages all sent to a single computer-accessible mailbox.

These services require significant capital investments to deploy that are not justified without access to the kind of customer base that Bell Atlantic will supply; after the merger, the combined

justified. The roll out of such new products and services will, in turn, create demand among consumers, causing new markets to develop, and new competitors will enter in response.

The higher customer density also will permit the combined company to create more data centers to host Web sites that are located closer to customers: the result will be both faster and more efficient use of the Internet. The merger, by combining the new customer base with the GTE expertise, will make it possible to proliferate data centers, introduce beneficial new services, and speed and enrich user access to information over the Internet. The result is strongly pro-consumer and also pro-competitive, as competitors are spurred to speed their own innovations. See Declaration of John Curran.¹³

E. Domestic Long Distance

The merger will produce similar pro-competitive benefits in the domestic general long-distance market. See SBC-PacTel ¶ 74 (recognizing that long-distance competition can be improved by a combination of two regional local exchange carriers).

Today, there are only three facilities-based long distance networks that are truly national in reach: AT&T, MCI WorldCom, and Sprint. While some competing network providers are

Accordingly, to the extent that the merger involves "vertical" integration of local-exchange inputs and downstream data services, the merger is powerfully pro-competitive. Far from adversely affecting competition in the downstream data markets (see AT&T-TCG ¶ 42), the merger will improve competition and services in those markets. The Commission's regulations protect information service providers' access to local exchange basic services, and there is no evidence of downstream market abuses by Bell Atlantic or GTE on behalf of their information service provider affiliates. In particular, the Internet Service Provider affiliates of the two companies, far from achieving dominance because of the LEC affiliation, have played only a small role in the highly competitive ISP marketplace. The merger creates only benefits, not problems, insofar as it vertically integrates downstream data services with local exchange services.

entering the market, their focus is on serving the top urban centers rather than on deploying a network providing ubiquitous service to all markets nationwide. Moreover, while GTE plans, over time, to migrate some of its long distance traffic onto its own planned long distance network. GTE's customer base alone will not generate sufficiently large volumes of long distance traffic to achieve the economies necessary to deploy a fully national long distance network.

The current merger, however, will accelerate the new company's ability to construct and operate a national long distance network to compete against the Big Three. Traffic volumes critically affect how quickly switches, electronics, and other facilities are added to expand both the geographic reach and the voice and data capacities of the network. See Declaration of Debra Covey. The increased traffic made possible by this merger will lead to the deployment of such facilities on a schedule, and in areas, not otherwise possible. Significantly, one of the premises of the Commission's recent approval of the MCI WorldCom merger — between the number two and number four firms in the long-distance market — was the emergence of new facilities-based competitors. See WorldCom-MCI ¶¶ 36, 51. This merger helps to make that premise a reality and, more generally, enhances long-distance competition by spurring the development of a much needed fourth national network.

Likewise, once the combined company is permitted to enter the long-distance market in Bell Atlantic's states, the entry will be faster and stronger by virtue of its having access to GTE's experience over the last several years in the business. It will also be more efficient, as many otherwise-redundant startup and operational costs can be avoided. The result will be a greater

Bell Atlantic hopes to have needed Section 271 approvals by the time this merger closes. If that process is not complete, applicants will request any necessary transitional relief from the Commission.

ability to offer lower prices or better services as the merged firm fights the three main incumbents to attract customers. Consumers will benefit directly, and the incumbent long-distance providers will have to innovate, lower prices, and otherwise improve service to stay competitive.

F. Wireless

The merger also is pro-competitive in wireless markets, where it will create a stronger and more efficient wireless competitor with substantially greater coverage in a market where national coverage is increasingly important.

With relatively small exceptions, the wireless service areas of the two companies are complementary. See Wireless Map, attached as Exhibit 3. Moreover, both companies use highly compatible CDMA technology. As a result, bringing the businesses together will create a much more geographically extensive wireless system to compete with the several other national or near-national systems like AT&T Wireless, Sprint PCS/Spectrum, NexTel, and SBC/Ameritech. 15

[&]quot;interconnected mobile phone service," and has considered the geographic markets as being "relatively localized." Applications of PacifCorp Holdings, Inc. and Century Telephone Enterprises, Inc., 13 F.C.C.R. 8891, 8906-8907 (1997). As the Commission itself has recognized, however, the rapid growth in available spectrum in recent years has produced an increase in the spectrum that can be put to a host of competing uses. Moreover, the formation of national (or near national) competitors has led to the development of a market that is increasingly national, rather than local, in scope. Nonetheless, given the Commission's historical focus, the local markets where the combined firm would hold an increased total of CMRS spectrum are addressed in part II (B) below.

Markets for air-to-ground service (where GTE participates, but Bell Atlantic does not) and for paging services (which are vigorously competitive, see Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services, 12 Comm. Reg. (P&F) 623 (1998) ("Competition Report")) are not discussed further here.

The integrated larger network will make possible systemwide efficiencies (uniform engineering and management, common purchasing), and faster, more uniform, and more stable deployment of advanced technologies. Wider calling scopes become cheaper and more reliable as their dependency on roaming agreements with other providers diminishes. The Commission has recognized that such integration of wireless operations produces important public-interest benefits. See SBC-PacTel ¶ 72: Bell Atlantic Mobile-NYNEX Mobile, 10 F.C.C.R. 13,368 ¶ 48 (1995); Corpus Christi Cellular Tel. Co., 3 F.C.C.R. 1889 (1988); see also Competition Report. These benefits are of particular competitive importance now that several wireless providers are national or almost national in scope and the wireless marketplace is becoming crowded with vigorous competitors. 16

G. Substantial Synergies Make The Pro-competitive Benefits Possible

The merger also will produce substantial synergies — in the form of both cost savings and enhanced revenue opportunities — that will free up the resources needed to produce the benefits described above. These are the same kinds of synergies that the Commission recently relied upon in approving the merger of MCI and WorldCom, concluding, for example, that the merger "will allow them to service multi-location customers over their own networks, and that this will enable such customers to receive higher quality and more reliable services than each company is currently able to offer separately." WorldCom-MCI ¶ 199.¹⁷

¹⁶ See Shawn Young, <u>BA/GTE Deal Seen Creating Wireless Mammoth</u>, Dow Jones News Service, July 28, 1998 ("The merged company . . . could use its scale to cut costs, a potentially critical advantage in a crowded wireless market where prices are dropping so companies must stay lean to stay alive.").

¹⁷ See also WorldCom/MCI Joint Reply at 12, 31, 33 (advancing such resource synergies to support merger).

Applicants have estimated — and the officers responsible for the various segments of the business will have to commit themselves and their compensation to achieving — substantial synergies from this merger. The cost reductions — from eliminating duplicative staff and information and operation systems, reducing procurement costs, and more efficiently using long-distance capabilities — are estimated to reach \$2 billion annually by the third year after closing. The revenue enhancements — from creating and more widely deploying innovative data and other services, improving the value and speeding the widespread deployment of long-distance offerings, and the spreading of best practices to more efficiently market existing services — are estimated to be an additional \$2 billion in the third year after closing. Additional capital savings of \$0.5 billion are estimated. See Declaration of Doreen Toben.

The merger also makes other benefits to consumers possible by spreading each company's best practices to the entire new merged company. Bell Atlantic's strengths will be spread to GTE's customers, and GTE's strengths will be spread to Bell Atlantic's.

There are compelling reasons to rely on these prospective benefits:

First, the Commission itself has recognized that a merger of two large, noncompeting local exchange carriers can result in savings through elimination of duplicative operations in wide areas of the companies' business, such as management, customer billing and related services, and research and development. SBC-PacTel ¶ 76. Likewise, the Commission has recognized the benefits of combining largely complementary wireless operations, and acknowledged that "the efficiencies in management and uniform marketing, pricing and sales would be practically impossible without a merger." Bell Atlantic-NYNEX Mobile ¶ 46.

Second, independent analysts — with both money and reputations on the line — have confirmed the existence of opportunities to produce substantial savings and the reasonableness of the synergy levels that the companies have projected. 18

Third, the ability of the two companies to achieve such synergies is confirmed by actual experience. For example, only one year after its formation, Bell Atlantic NYNEX Mobile had become the industry's low cost provider, and its performance has continued to improve since. Still more recently, the experience with the Bell Atlantic-NYNEX merger has reconfirmed that such savings are real: the very substantial cost savings estimated at the time of the transaction have been achieved since the companies have merged. See Declaration of Doreen Toben.

BU4 (interview with Michael Mahoney, manager of AIM Global Telecommunications fund: "the structure of the U.S. industry is somewhat inefficient. It's a lot like the banking industry, where for regulatory reasons, a historical accident, you end up with a number of organizations where a smaller number would be more efficient. . . . They're talking about \$2 billion in cost synergies for Bell Atlantic and GTE, and that's pretty reasonable."); Nationsbanc Montgomery, Bell Atlantic, Inc., July 29, 1998 ("We estimate that revenue and cost synergies should ramp to \$4 billion on an annual basis by year three after the merger."); J.P. Morgan Securities Inc., BEL and GTE Agree To A Merger Of Equals — Attractive Upside Potential & Limited Downside, July 29, 1998 ("With effective execution, the two companies should be able to generate the \$2 billion of revenue and \$2 billion of cost synergies identified by management.").

See Application for Transfer of Control, Bell Atlantic-NYNEX, File No. NSD-L-96-10, Exhibit B at 3 (and authorities cited therein); Nationsbanc Montgomery, Bell Atlantic Corporation, July 23, 1998. ("Domestic Bell Atlantic Mobile (BAM) subscribers grew more than 17% over second quarter 1997.... Revenue per customer declined 4.0% to \$51.89 as cash expenses per customer declined an impressive 13.2% to \$24.2. This is the lowest cash expense per customer ever reported by BAM. Acquisition cost per additional customer also fell sharply, by 17.1%, reflecting the improving productivity of BAM's direct and indirect sales channels as well as lower handset costs.").

See also, e.g., Id. ("Merger cost synergies are on schedule to release \$450 million in 1998 savings to Bell Atlantic that management can use immediately to enhance earnings growth, or reinvest in growth initiatives that will result in strong benefits in future periods. We are confident that Bell Atlantic will have in excess of \$750 million in 1999 synergies."); Joel I. Klein, Making the Transition from Regulation to Competition, Jan. 21, 1998 ("the evidence").

Fourth, other participants in the marketplace recognize these points as well. For example, WorldCom and MCI recently relied on comparable savings and synergies to support their merger. See WorldCom-MCI 1914-195. Indeed, those parties explained that the "combined company will achieve significant cost savings and efficiencies," and the "increased scale of activities in the combined company's operations will result in opportunities to reduce costs by avoiding expenditures on duplicative activities, greater purchasing power, and the adoption of best practices in cost containment." See WorldCom/MCI Joint Reply at 12 (internal quotes omitted). As a result, "[a]pproval of the proposed transaction will enhance competition by increasing the resources, facilities, and personnel available to the combined company and [by] allowing it to take optimal advantage of operational synergies, cost savings, and complementary service offerings." Id. at 31 (internal quotes omitted). The same is true here.

In sum, both a solid track record and internal incentives stand behind the estimates of synergy benefits to be achieved through this merger, which are of a kind the Commission and competitors have recognized to be real.

II. THE MERGER DOES NOT LESSEN COMPETITION

The pro-consumer, pro-competition benefits of the merger are substantial. On the other hand, there are no substantial countervailing concerns about lessened competition. Any concerns about lost potential local-service competition are insubstantial, both by themselves and weighed against the pro-competitive benefits of the merger. And any wireless overlaps that are not permitted by the Commission's rules will be eliminated.

indicated that real efficiencies were likely to result from the merger — some of which have already been realized — and that, over time, those efficiencies would lead to better service in the affected areas").

A. Local Services

In <u>Bell Atlantic-NYNEX</u>, the Commission found that, without imposition of certain conditions, the merger raised a competitive concern in certain local-service markets. In the present case, as already explained, the merger has powerful pro-competitive benefits for local-services competition. It makes possible entry into other Bell companies' service areas; and even within current Bell Atlantic and GTE areas, the improvement of services is itself pro-competitive. Against the prospect of those pro-competitive benefits, there is no significant countervailing negative competitive concern.²¹

The basic fact is that the existing local service areas of the two companies do not overlap, and there is no actual local-service competition between Bell Atlantic and GTE. The merger, therefore, does not reduce competition that exists today, and the only issue is one of potential competition. That issue is itself limited to the Pennsylvania and Virginia areas where GTE has franchises in rural and suburban areas with (populations of about 600,000 in Pennsylvania and 700,000 in Virginia) near Bell Atlantic franchises.²² But, for those areas, the merger does not

While the Applicants include an analysis of the merger's impact on all relevant markets, they nevertheless preserve three contentions. First, under the Communications Act, the Commission's authority to review the merger's impact on local telecommunications markets is limited by the jurisdictional constraints of section 2(b) of the Act, 47 U.S.C. § 152(b). Second, its authority to review a transfer of licenses or certificates is properly limited to assessing the interstate uses of those particular licenses or certificates, and does not extend to other aspects of the merger. Third, to the extent the Commission has authority to enforce section 7 of the Clayton Act with respect to interstate matters, paragraph 4 of that provision contains an express exemption where, as here, one common carrier extends its lines by acquiring another common carrier, as long as "there is no substantial competition between" the two carriers overall. See Navajo Terminals, Inc., v. United States, 620 F.2d 594, 601 ((7th Cir. 1979).

The Commission has noted that local geographic markets may be analyzed separately when customers face different competitive choices and prospects. See AT&T-TCG ¶ 21. As in Bell Atlantic-NYNEX, the only areas warranting separate discussion are those where Bell Atlantic and GTE have nearby service areas. In GTE's local-service territories outside the

present a cognizable problem of lost potential competition because it does not deprive any local-service market of a substantial competitive force unavailable from other firms. See, e.g., Bell Atlantic-NYNEX ¶ 138-139.²³

Neither company is a "perceived" potential competitor of the other having a present impact on the incumbent's market behavior. See Declaration of Hugh Stallard: Declaration of Jeffrey Kissel. The issue, therefore, is only whether analysis under the "actual potential competition" doctrine identifies a meaningful anticompetitive effect from eliminating the possibility that either firm will enter the other's local-service territory. See WorldCom-MCI & 20 (noting that Commission's "analytical framework . . . reflects the values of, and builds upon, the 'actual potential competition' doctrine established in antitrust case law"). There is no such anticompetitive effect.

This analysis must proceed with caution, for reasons that have placed the actual potential-competition doctrine at the outer reaches of competition law. The doctrine requires multiple predictions about what firms will enter, at what times, in what market segments, and at what

Northeast — in, for example, Los Angeles, Dallas, Tampa, or the outskirts of Seattle — there is no basis for any conclusion that Bell Atlantic, on its own, would be an entrant at all, let alone an economically significant one. There is likewise no colorable basis for suggesting that GTE might be an economically significant entrant into Bell Atlantic service areas distant from GTE franchise areas.

²³ If the market is not concentrated, no market harm occurs from loss of a mere potential entrant. In a concentrated market, the 1984 Vertical Merger Guidelines contemplate the possibility of market harm in two different situations: "perceived potential competition"; "actual [i.e., non-perceived but actual] potential competition." §§ 4.111, 4.112. The former involves loss of a present competitive constraint, for it applies when the market incumbent is actually influenced in its current pricing and other decisions by the perception that the other firm is one of only a few potential entrants. The latter doctrine aims at projected loss of a future competitive improvement: it applies when, despite lack of perception by the market incumbent, the other firm is actually a likely future entrant that, because it is nearly unique, would play an otherwise-unavailable competitive role in the market.

scale; and if the market participants do not "perceive" the potential competition, any regulatory prediction of an economically significant effect must, by definition, be contrary to the assessments of the current market participants with money on the line. In light of the high degree of speculation and low degree of reliability involved (compared to the usual inquiry into competitive effects of eliminating existing competition), the Supreme Court has several times reserved the question of the doctrine's validity in antitrust law,²⁴ the doctrine has often been narrowed by insisting on actual company-adopted and funded plans for entry,²⁵ and there appears to be no case in which the actual potential competition doctrine has been sustained as the basis for blocking a merger among "non-perceived" potential competitors.²⁶ Because the

United States v. Marine Bancorporation, 418 U.S. 602, 639 (1974); United States v. Falstaff Brewing Corp., 410 U.S. 526, 537-38 (1973); see also Tenneco, Inc. v. FTC, 689 F.2d 346, 352 (2d Cir. 1982).

organization who were charged with decision making responsibility, and those whose function it was to make preliminary studies and recommendations" <u>United States v. Penn-Olin Chem. Co.</u>, 246 F. Supp. 917, 919 (D. Del. 1965), <u>aff'd</u>, 389 U.S. 308 (1967); <u>see United States v. Siemens</u>, 621 F.2d 499, 508 (2d Cir. 1980); <u>In re R.R. Donnelley</u>, 5 Trade Reg. Rep. (CCH) ¶ 23,876, at p. 23,663 (FTC 1995); <u>In re B.A.T. Indus., Ltd.</u>, 104 F.T.C. 852, 930 (1984) (relied on in <u>SBC-PacTel</u> n.45); <u>cf.</u> 1984 Merger Guidelines § 4.133 n.28.

Application of the doctrine has been rejected in case after case. E.g., Tenneco, supra; Siemens, supra; Penn-Olin, supra; FTC v. Atlantic Richfield Co., 549 F.2d 289 (4th Cir. 1977); Merantile Texas Corp. v. Board of Governors, 638 F.2d 1255 (5th Cir. 1981); see ABA Antitrust Section, Antitrust Law Developments 342-50 (4th ed. 1997). The doctrine was cited to support the FTC's blocking of a merger in Yamaha Motor Co. v. FTC, 657 F.2d 971 (8th Cir. 1981), cert. denied, 456 U.S. 915 (1982), but the potential entrant was clearly a perceived potential competitor having present market impact. Id. at 975; see also In re Brunswick Corp., 94 F.T.C. 1174, 1273-74 (1979); United States v. Phillips Petroleum Co., 367 F. Supp. 1226 (C.D. Cal. 1973), aff'd, 418 U.S. 906 (1974). The FTC, for its part, has regularly rejected application of the doctrine (e.g., R.R. Donnelley, supra; B.A.T. Indus., supra), and it is hard to find any modern contested case where the FTC has rested liability entirely on the doctrine (where, for example, the potential competitor was not a "perceived" threat having present market impact), except where it was overturned in the courts.

Commission's approach is built on, though not strictly constrained by, this doctrine (WorldCom-MCI ¶ 20; Bell Atlantic-NYNEX ¶ 138-139), its recognized difficulties supply strong reason to exercise skepticism before relying on the needed predictions to block an otherwise pro-consumer merger.

The fundamental requirement for the doctrine's application (even before weighing offsetting benefits) is a well-grounded finding that one of the merging firms "in the near future" would, but for the merger, supply significant competition against the other that would not be forthcoming from other present or potential market participants. See WorldCom-MCI ¶ 20.27 No such finding can be made in this case — in sharp contrast to Bell Atlantic-NYNEX, the most recent order to analyze a merger between two large incumbent local exchange carriers. There, the Commission narrowed its focus to the local-services mass market and emphasized three factors in assessing the likelihood of entry: the two companies had "a major center of population and telecommunications on their border" with physical facilities already present and able to serve customers; established relationships with telecommunications customers (both to build on and to protect against loss); and recognized brand name (including reputation for strong service) in the other's territory. Bell Atlantic-NYNEX ¶¶ 62, 69, 132; see also SBC-PacTel ¶ 24. And while the Commission recognized that the three most important entrants were the large long-distance carriers who already have customers, facilities, and reputation (Bell Atlantic-NYNEX ¶ 82), it nonetheless concluded that, because of the unique circumstances there, Bell Atlantic "would have been most likely to target mass market, not large business, customers" (id. ¶ 73). In the present case, by contrast, the threshold findings cannot be made.

Such a distinctive role is the logical precondition to any finding of anticompetitive unilateral effects or coordinated action.

1. GTE Entry Into Bell Atlantic's Markets

There is no reason to think that GTE would be a significant entrant into Bell Atlantic's current local-service markets (whether for the mass market or for larger businesses, see WorldCom-MCI ¶ 164), even in Pennsylvania or Virginia. It has no special set of advantages over other CLECs such that its removal as a potential competitor — which it has no relevant plans to be — would reduce the overall competitive pressure on Bell Atlantic. In particular, it has no significant facilities (to use) or customer relationships (to build on or to protect), and lacking a current substantial presence, it is unlikely to have a distinctively strong brand reputation. The long-distance carriers possess all three assets. A raft of CLECs targeting narrower classes of customers also have a strong head start. And unlike even a year ago, cable companies have now actually begun to offer vigorous high-speed data competition. In this developing marketplace, GTE cannot stand out.

Even today, Bell Atlantic is already facing extensive competition in Pennsylvania and Virginia. In Pennsylvania, Bell Atlantic faces 51 certified CLECs (another 51 are pending). It has 29 facilities-based interconnection agreements signed (13 approved) and another 46 resale agreements (11 approved). It has 76,000 resale lines in service, has sold 20,000 unbundled loops, furnished 21,000 ported numbers, provided 60,000 interconnection trunks to CLECs (running in one direction or the other), and competitors have in place an estimated 145,000 facilities-based lines. See Declaration of Daniel Whelan.

In Virginia, Bell Atlantic faces 54 certified CLECs (12 more are pending) and has 30 facilities-based interconnection agreements (22 approved) and 30 resale agreements (17 approved) with CLECs. It has provided almost 11,000 resale lines, has sold about 600 unbundled loops, has provided about 4,000 ported numbers (generally indicating service by a

CLEC's own switch), has furnished more than 15,000 interconnection trunks to CLECs (in one direction or the other), and competitors have in place an estimated 40,000 facilities-based lines.

See Declaration of Hugh Stallard.

GTE has entered into essentially pro forma interconnection agreements with Bell Atlantic in Virginia and Pennsylvania — agreements whose content is simply borrowed from agreements negotiated by others. Unlike the many other CLECs that have actually entered these markets, however, GTE has taken no steps to compete. See Declaration of Jeffrey Kissell. It is simply unreasonable to conjecture that GTE, even if it had relevant plans, would supply competitive pressure that Bell Atlantic otherwise would not face from AT&T, MCI WorldCom, Sprint, NEXTLINK, e.Spire, Winstar, RCN, Teligent, and the many other CLECs that have already entered.

Not surprisingly, then, GTE has exceedingly limited "plans" for competitive entry into Bell Atlantic's local-service markets. Consumers have not been targeted. Small businesses have been targeted by GTE's CLEC affiliate in select areas near to the more urban parts of GTE's franchise areas in states served by other Bell companies, but not in Virginia and Pennsylvania. GTE's overall plans for service in Virginia and Pennsylvania outside its franchise area are limited to following a small number of "strategic accounts" derived from its franchise areas, and even as to them, GTE plans only to offer frame relay service, not local telephone service. Moreover, GTE has no plans to sell local service to the small number of out-of-franchise long-distance customers it has in Virginia and Pennsylvania. The overall economics of near-term CLEC entry in these areas, even by resale, are too unattractive. See Declaration of Jeffrey Kissell. In

²⁸ See Nationsbanc Montgomery, <u>Bell Atlantic, Inc.</u>, July 29, 1998 ("Only 1% of GTE's long distance customers are domiciled in Bell Atlantic's territory.")

short, GTE's "plans" and likely role in Bell Atlantic's service areas in Virginia and Pennsylvania are, in the terms of any potential competition analysis, simply not significant.

2. Bell Atlantic Entry Into GTE's Markets

For a different mix of reasons, a conjectured economically important role for Bell Atlantic in GTE's predominantly rural or suburban and dispersed service territories is likewise unlikely, and Bell Atlantic has no relevant plans to undertake such a role.

Indeed, the economics of entry into such areas have proven too unfavorable to expect substantial entry on a large scale by any competitor in the near term, and this is all the more true in the case of Bell Atlantic, which is faced with other higher priorities and more attractive opportunities (such as providing long distance to its existing in-region customers). While some highly targeted entry to serve select business customers in the larger-business segment of these markets may occur, there is no reason to single out Bell Atlantic as important for that purpose; indeed, existing CLECs with fewer competing priorities are more likely competitors. The net result is that there is no local-service market segment in which Bell Atlantic, without useful onsite facilities or existing customer relationships, is likely to play an economically significant. otherwise-unavailable role.

In the mass market (which was the focus of the Commission's concern in <u>Bell Atlantic-NYNEX</u>), the experience of the last several years has changed original expectations and taught the economic difficulty of mass market entry, particularly in less dense rural and suburban areas. Although Bell Atlantic presumably has a recognizable brand, it lacks the most immediately important assets: actual customer relationships (to protect and to build on) and existing on-site facilities, which the long-distance carriers already have. As a result, mass-market entry by Bell Atlantic into GTE's service areas is unattractive, especially relative to other opportunities.

In the business market, which is in any event very small in GTE's rural and suburban areas, an economically significant role for Bell Atlantic is likewise implausible. For business customers, new CLECs can as readily make the choice to sell services as can Bell Atlantic, perhaps more readily, given real-world freedom from obligations to serve all comers. See AT&T-TCG ¶ 39 (for large business customers, mass-market reputation and brand name, and even scale for access to capital, "appear less essential for successful entry"); Bell Atlantic-NYNEX ¶ 53 (even medium-sized business "are targeted by specialized firms that do not necessarily seek to address the mass market"). At the same time, the substantially more vigorous competitive threat to urban areas faced by Bell Atlantic requires it to concentrate its resources on improving service and otherwise competing to hold onto its lower-cost, higher-revenue customers there.²⁹

For those reasons, Bell Atlantic has shown exceedingly little interest in the past several years in any competitive activities in GTE's territory in Virginia or Pennsylvania: it has not even sought certification to provide local service, but has considered only selected "rifle shot" opportunities not requiring such certification.³⁰ Several years ago, some Bell Atlantic managers

Exchange Carriers, 9 F.C.C.R. 1687, 1706 (1994) ("Competition in local exchange access services is likely to develop unevenly. This in turn may encourage price cap LECs to direct repair, maintenance, introduction of new services and features, and other efforts toward downtown businesses and affluent residential customers."); Shawn Burke, Bell Atlantic Corp. To Merge With GTE Corp., Paine Webber Fixed Income, July 29, 1998 (stressing Bell Atlantic's focus "on its basic backyard telephone and wireless units").

At Dulles International Airport, which is in GTE's service area, Bell Atlantic, which has a facility located nearby (at Horsepen Road), has pursued select opportunities (to sell to the airport authority that operates Dulles) that might be available without CLEC certification, such as a pay-telephone contract, limited SONET-based services, and a private Airport Communications System. In Virginia Beach, Virginia, the service territories of Bell Atlantic and GTE adjoin. Bell Atlantic, while not making any plans, has discussed with Cox

took a rosy view of the prospects for entry into "independent" areas in Bell Atlantic's service territory, essentially as a resale adjunct to a statewide long-distance offering. Experience during the last two years has substantially altered that view, which never went beyond the paper-analysis stage. That prior view always assumed that a resold local service would be offered only if it was preceded by a successful long distance offering. But in close by out-of-region markets where Bell Atlantic has offered long distance since the Act was passed, such as North Carolina, its long distance offering has been anything but successful. As a result, when Bell Atlantic is authorized to enter the long-distance market, it plans to offer long-distance service statewide, but its overwhelming focus will be on selling to its existing customer base. Although Bell Atlantic may obtain long-distance customers in GTE's territories, there is no present expectation of making concerted efforts to seek such customers, and the theoretical possibility that the long-distance service might be bundled with a resold local service is not even attractive enough to be the subject of active study, let alone of adopted (or even drafted) plans. See Declaration of Hugh Stallard ³¹

In short, a prediction of losing an otherwise-unavailable role for Bell Atlantic could not soundly be based on "'probabilities' not 'ephemeral possibilities." SBC Communications Inc. v. FCC, 56 F.3d 1484, 1494 (D.C. Cir. 1995) (affirming McCaw Order, 9 F.C.C.R. 5836 (1994)). The merger will therefore produce significant local competition benefits at no material cost.

Communications the possibility of a partnership to use Cox's fiber facilities to serve the city government's several offices, some of which are in Bell Atlantic's territory and some in GTE's. See Declaration of Hugh Stallard.

In any event, as noted, even if such an offering were to materialize, it would not be a competitively significant force in the marketplace. See Declaration of Hugh Stallard.

B. Wireless

While the wireless interests of Bell Atlantic and GTE are largely complementary, there are a small number of instances in which their interests overlap. In particular, Bell Atlantic and GTE have overlapping cellular properties in four markets: Greenville, South Carolina; El Paso, Texas; Anderson, South Carolina; and Las Cruces, New Mexico. Under the Commission's current rules, 47 C.F.R. § 22.942, a single company is prohibited from owning interests in overlapping cellular properties. Accordingly, one of those properties in each market will be divested. In addition, GTE and Bell Atlantic hold attributable interests in overlapping broadband PCS and cellular spectrum in eight PCS MTA markets that, when combined, will exceed the Commission's current spectrum cap (47 C.F.R. § 20.6): Tampa, Miami, New Orleans, Houston, San Antonio, Honolulu, Chicago, and Richmond. In these markets, Bell Atlantic and GTE will reduce their interests to comply with any spectrum caps in effect at the time of closing (through divestiture or disaggregation) or obtain a waiver. 12

In several additional markets, the merged company will, by virtue of combinations of cellular and PCS licenses that are permitted under the current caps, have an increased total of wireless spectrum. That increase is not anticompetitive in light of the other participants in these vigorously competitive markets, which include at least one facilities-based cellular provider and several PCS providers who have been steadily bringing prices down, making full-bore

See 47 C.F.R. § 24.714; Geographic Partitioning and Spectrum Disaggregation by Commercial Mobile Radio Services Licensee, 11 F.C.C.R. 21831, 21833-35 (1996). If that process is not complete by the time of the license transfer, applicants request that the transfer be approved subject to their coming into compliance with the spectrum caps within the time allowed under 47 C.F.R. § 20.6(e). The Commission has previously approved transfers subject to such conditions. See Bell Atlantic Mobile-NYNEX Mobile, 10 F.C.C.R. 13368 (1995); GTE-Contel, 6 F.C.C.R. 1003 (1991).

competition incumbent on the merged company.³³ Indeed, the fact that the resulting spectrum levels are below the Commission's spectrum caps is enough to dismiss any competitive concerns, for those caps (which, if anything, are too low) have been set based on competitive and other policy considerations.³⁴

1 400 4

CONCLUSION

The merger of Bell Atlantic and GTE is powerfully pro-competitive. It creates a company that is uniquely positioned to add competition across virtually the whole range of current and emerging telecommunications markets — in local-service markets dominated by other RBOCs, in bundled-service markets, in Internet and advanced-data markets, in long-distance and wireless markets. The Commission should find the merger in the public interest to speed the introduction of such competition, and should grant the requested transfers of control.

¹³ A table listing several of the competitors in each area where the interests of the combined company would exceed the existing spectrum caps, or where the merger would produce an increase in total wireless spectrum, is attached as Exhibit 4. The table includes only cellular, broadband PCS and ESMR, and does not include the host of additional spectrum now available that the Commission itself has recognized can be put to competing uses.

¹⁴ See Amendment of Parts 20 and 24 of the Commission Rules, 11 F.C.C.R. 7824, ¶ 95 (1996) ("We adopted the 45 MHz CMRS spectrum cap...'to discourage anti-competitive behavior while at the same time maintaining incentives for innovation and efficiency."").

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
GTE CORPORATION,)	
Transferor.)	
Transferor,)	
and) File No. 98-184	
BELL ATLANTIC CORPORATION,)	
Transferee,)	
For Consent to Transfer of Control)	
	PRPORATION AND GTE CORPORATION ENY AND COMMENTS	
James R. Young	William P. Barr	
John Thorne	GTE CORPORATION	
Michael E. Glover	One Stamford Forum	
Robert H. Griffen	Stamford, Connecticut 06904	
BELL ATLANTIC CORPORATION		
1095 Avenue of the Americas	Steven G. Bradbury	
New York, New York 10036	Theodore W. Ullyot	
	John P. Frantz	
	Kelion N. Kasler	
	KIRKLAND & ELLIS	
	655 Fifteenth Street, N.W.	
	Washington, D.C. 20005	
	R. Michael Senkowski	
	WILEY, REIN & FIELDING	
	1776 K Street, N.W.	
	Washington, D.C. 20006	
Counsel for Bell Atlantic Corporation	Counsel for GTE Corporation	
December 23, 1998	Received	
December 23, 1998	Legal	
	JAN 7 1999	
	PACE COLUMN TO A SECOND TO A S	

EXECUTIVE SUMMARY

The proposed merger of Bell Atlantic and GTE will bring dramatic benefits to consumers, in the form of greater competition for local, advanced voice and data, long distance, and Internet services in markets throughout the nation, as well as bundled product offerings tailored to the demands of the modern telecommunications marketplace. These substantial benefits, moreover, would be unachieveable without the merger, as they flow from the particular combination of GTE's facilities-based national network, Bell Atlantic's base of large business customers, and the ability of the combined company to create a nationally recognized brand.

The principal opponents of this procompetitive merger, not surprisingly, are those carriers that are already serving, or positioning themselves to serve, the emerging market for bundled telecommunications services. These opponents have failed to identify any basis for this Commission to conclude that the merger is not in the public interest. They have not even attempted to refute the most critical procompetitive gains created by the merger -- benefits in the national market for bundled services and in the markets for advanced data and Internet services -- and their attempts to portray the merger as anticompetitive are tired and unavailing. Simply put, the Applicants have demonstrated that the merger will enhance competition, and the opponents have failed in their attempt to show otherwise. Accordingly, Bell Atlantic and GTE respectfully ask that the Commission grant the Applications.

The merger of Bell Atlantic and GTE is strongly in the public interest, because it will produce substantial procompetitive gains in nearly every major telecommunications market, will allow the merged company to introduce a wider range of Internet and data services, and will spur broad-scale local competition in markets across the country. The GTE-Bell Atlantic merger will combine complementary capabilities to create a national facilities-based provider of the advanced services demanded by business customers, and will thus add a much-needed player to the concentrated national market for bundled telecommunications services. Moreover, the merger will bring broad, sustained, and effective competition to the local franchise territories of BellSouth, U S WEST, SBC, and Ameritech.

The comments filed in opposition to the merger serve only to prove that the marriage of GTE and Bell Atlantic will produce these real procompetitive benefits. The most vociferous objections have come from competitors who stand the most to lose from GTE-Bell Atlantic's combined ability to offer a national bundle of advanced data, voice, and Internet services -- the Big Three interexchange carriers AT&T, MCI WorldCom, and Sprint. Each of these three companies has itself merged its way to participation in the national market for bundled services, and is now attempting to fend off, for as long as possible, the full competitive potential of a united GTE-Bell Atlantic.

But the Big Three's assertions that the merger might produce anticompetitive consequences are insupportable. *First*, the merger will produce no loss of potential competition in GTE and Bell Atlantic's franchises. Neither GTE nor Bell Atlantic has plans to enter each other's markets, nor would they be among the most significant potential competitors if they did. *Second*, although the Big Three assert that the merger will enhance GTE and Bell Atlantic's

TABLE OF CONTENTS

			Page	
I.			ER WILL PRODUCE DRAMATIC PROCOMPETITIVE BENEFITS ELECOMMUNICATIONS MARKET	
	A.	GTE-Bell Atlantic Will Be the First ILEC To Challenge the Big Three in National Provision of Full-Service Telecommunications		
		1.	The Merger Will Allow GTE-Bell Atlantic To Deploy a Broad Range of Advanced Data Services and Bring These Services To New Markets Across the Country	
		2.	The Merger Will Bring New Services To Internet Customers Including Internet Telephony and Will Help Ensure That the Market for Backbone Service Remains Competitive	
		3.	The Merger Will Allow GTE-Bell Atlantic To Provide National Facilities-Based Long Distance Service More Quickly and Efficiently Than Either Could Alone	
		4.	Section 271 Is No Impediment To GTE-Bell Atlantic's Entry Into the Market for Bundled Services	
	B.		Merger Will Create an Effective National Provider of Local Telephone ee	
	C.	Merge	er Synergies and Sharing of Best Practices	
II.	THE	THE MERGER WILL NOT PRODUCE ANTICOMPETITIVE EFFECTS28		
	A.		forizontal Concerns Posited By the Merger's Opponents Do Not tand Scrutiny	
		1.	The Merger Will Not Eliminate One of the Most Significant Potential Competitors in Each Applicants' Territory	
		2	The Merger Will Not Increase Any Supposed Incentives of Bell Atlantic and GTE To Engage in Anticompetitive Behavior	
		3.	The Merger Will Not Hinder the Ability of This Commission or Other Regulators To Detect and Deter Any Anticompetitive Conduct	

B.	The Merger's Claimed Adverse Vertical Concerns are Likewise Illusory 40		
	1. The Merger Will Not Increase the Merged Entity's Ability To Discriminate, Either By Raising Local Access Prices or By Non-Price Means		
	2. The Merger Will Not Reduce Competition in Markets for		
	Internet Services		
C.	Any Theoretical Concern Is Resoundingly Outweighed by the Merger's Broad Procompetitive Benefits		
THE N	MISCELLANEOUS ALLEGATIONS OF BAD ACTS BY GTE AND		
	ATLANTIC ARE NOT GERMANE TO THIS PROCEEDING, ARE		
PROF	PERLY RESOLVED ELSEWHERE, AND ARE MERITLESS		
THE	COMMISSION SHOULD REJECT ALL OF THE CONDITIONS		
PROF	POSED BY THE APPLICANTS' COMPETITORS		
CON	CLUSION54		
	C. THE N BELL PROF		

incentive to engage in anticompetitive conduct in downstream markets, these identical claims have been repeatedly rejected by the Commission. Finally, despite the efforts of AT&T, Sprint, MCI WorldCom and others to relitigate every interconnection dispute they have had with GTE or Bell Atlantic, their grab bag of specific grievances is the subject of other ongoing proceedings and has no nexus with the merger. The merger of GTE and Bell Atlantic presents no risk to competition, and certainly none that can eclipse the nationwide procompetitive gains it will bring to consumers of local, data, long distance, and Internet services, and is, therefore, decidedly in the public interest.

- I. THE MERGER WILL PRODUCE DRAMATIC PROCOMPETITIVE BENEFITS IN EVERY TELECOMMUNICATIONS MARKET.
 - A. GTE-Bell Atlantic Will Be the First ILEC To Challenge the Big Three in the National Provision of Full-Service Telecommunications.

One of the most significant procompetitive benefits of the GTE-Bell Atlantic merger -the creation of a new, fourth player in the national market for facilities-based bundled
telecommunications services -- is not seriously contested by the merger's opponents. This
emerging market, which is currently controlled by the Big Three, is of critical importance to the
fulfillment of the Telecommunications Act's competitive goals, including the development of
broad local competition.

See In re Southern New England Telecommunications Corp., CC Docket No. 98-25, at ¶ 37 (Oct. 23, 1998) (hereafter SBC/SNET Order); In re Applications of NYNEX Corporation and Bell Atlantic Corporation for Consent to Transfer Control, FCC 97-286, 12 F.C.C.R. 19985. at ¶¶ 115-24 (Aug. 14, 1997) (hereafter Bell Atlantic/NYNEX Order); In re Applications of Pacific Telesis Group and SBC Communications for Consent to Transfer Control, FCC 97-28, 12 F.C.C.R. 2624, at ¶¶ 53-57 (Jan. 31, 1997) (hereafter SBC/PacTel Order).

There can be no dispute that the merger's primary opponents, AT&T. Sprint, and MCI WorldCom, are believers in the emerging national market for facilities-based bundled services -- a market that includes Internet backbone and connectivity services, advanced voice and data services, long distance service, and local telephone service. Each one of the Big Three has announced acquisition after acquisition to fill voids in their facilities-based product offerings and grow the scale of their existing businesses. The most obvious example is the merger of MCI and WorldCom, which combined the second and fourth largest long distance providers and -- but for the actions of this Commission and other regulators -- would have combined the first and second largest Internet backbones. WorldCom itself built its Internet backbone business by acquiring UUNet, ANS, and CompuServe, and gave itself local capability by purchasing MFS, Brooks Fiber, and now MCIMetro. Now that these acquisitions have been consummated, MCI WorldCom has launched a national "On-Net" advertising campaign asserting that it alone is able to offer a fully-integrated bundle of Internet, data, and voice services over a "wholly owned" and seamless global network." In MCI WorldCom's own words, "Only one company has it," and its opposition to the GTE-Bell Atlantic merger is a veiled attempt to keep it that way.³

² MCI WorldCom two-page advertisement, Wall St. J., Nov. 5, 1998, at B18-19 (hereafter MCI WorldCom Advertisement); see also MCI WorldCom 12-page advertising supplement, Wall St. J., Oct. 1, 1998, at R6-7 ("With MCI WorldCom On-Net, you get one connection for everything. Instead of separate lines for local, long distance, international voice and data, there's only one network, one contract and one company to take full responsibility. Somewhere a choir of angels is singing[!]... No handoffs to other carriers. One network. One contract. One company. Nothing could be simpler. Or more cost-efficient.") (emphasis added).

³ MCI WorldCom Advertisement, *supra* note 2, at B18-19.

Likewise, AT&T -- perhaps the most notable supporter of a national facilities-based strategy -- has announced or consummated six acquisitions or joint ventures in the last few years. After expanding its wireless footprint by acquiring McCaw, AT&T recently announced a second cellular acquisition, agreeing to purchase Vanguard Cellular. In 1998 alone, AT&T announced that it will acquire Teleport Communications Group -- a local service provider -- and Tele-Communications, Inc., the second largest cable company in the United States and a direct gateway into one-third of the nation's homes. AT&T also recently formed a \$10 billion joint venture with British Telecommunications, allowing it to expand its international capabilities, and, just this month, announced a \$5 billion deal to purchase IBM Global Networks -- an Internet backbone provider. There is no dispute over why AT&T is pursuing this relentless acquisition strategy. As the New York Times recently reported:

Shortly after he arrived at AT&T, the No. 1 long distance company, [AT&T's Chairman C. Michael] Armstrong said the company needed to strengthen its strategies for breaking into the local communications market, for expanding its international presence and for beefing up its advanced data services, especially those based on Internet technologies.

I.B.M.'s Internet service, which is a major part of its data network, has more than a million individual users in 59 countries. More important, it has local ports into its network all over the world. This is a big plus in attracting the large corporate customers that are the grand prize for telecommunications companies.⁵

⁴ See Rebecca Blumenstein & Stephanie N. Mehta, AT&T Says it Shouldn't Have to Grant Internet Access Via Upgraded Cable Lines, Wall St. J., Nov. 17, 1998, at B6 ("TCI and its various partners potentially give AT&T access to one-third of American homes.").

⁵ Seth Schiesel, AT&T Buying I.B.M. Network, N.Y. Times, Dec. 9, 1998, at C1 (emphasis added).

The Commission itself has recognized that there is an emerging market for "global seamless services," that there is a "consumer benefit associated with bundling," and that competition in this market is limited to "only a handful of major competitors world-wide." Competition in this market is not keeping pace with the demand for bundled Internet, data, long distance, and local services. GTE market research establishes that 86 percent of large business customers are interested in purchasing multiple telecommunications services from one provider and 68 percent are interested in having a single supplier serve all of their offices, regardless of geographic location. This research is confirmed by numerous reports from independent analysts and industry experts. and by first-hand testimonials from large business customers.

⁶ Bell Atlantic/NYNEX Order ¶ 112; In re Merger of MCI and British Telecommunications, GN Docket No. 96-245, 12 F.C.C.R. 15351, at ¶ 91 (Sept. 24, 1997); see also id. ¶ 56-57 ("global seamless services market... will prove to be one of growing importance over time"); In re Sprint Corporation, File No. ISP 95-002, 11 F.C.C.R. 1850, at ¶ 84 (Jan. 1, 1996).

⁷ See Reply Declaration of Thomas W. Hazlett (attached as Appendix D) (explaining why a properly conducted event study of the stock market confirms that GTE-Bell Atlantic's merger is viewed as increasing competition with the Big Three).

⁸ See Joint Declaration of Jeffrey C. Kissell and Scott M. Zimmerman ¶ 5-6 (attached as Appendix B) (hereafter Kissell-Zimmerman Declaration).

⁹ See Declaration of David J. Teece ¶¶ 13-18 (attached as Appendix A) (hereafter Teece Declaration); see also Business Branding & Bundling Telecommunications Services. Strategis Group (visited Dec. 18, 1998) http://www.strategisgroup.com/ press/pubs/bbz.html> (79 percent of business telecommunications managers would prefer to receive a bundle of two or more services from a single provider).

¹⁰ See, e.g., Letter from Occidental Petroleum Corp. in Support of GTE-Bell Atlantic Merger at 1 (Nov. 18, 1998) ("This merger is a positive attempt to address telecommunication user needs and interest. As a user, it will satisfy my requirements for access to services on a regional, national, and global basis. It will provide the full bundle of telecommunications capabilities. These are the clear signals that I not only hear from my peers but that I strongly endorse.");

Nevertheless, only a small percentage of business customers currently purchase a full bundle of telecommunications services from one provider. The merger will allow GTE-Bell Atlantic to compete on equal footing with the Big Three in this critical emerging market by enhancing its capabilities in three key market segments: advanced voice and data services, Internet services, and long distance service.

1. The Merger Will Allow GTE-Bell Atlantic To Deploy a Broad Range of Advanced Data Services and Bring These Services To New Markets Across the Country.

The merger will allow GTE and Bell Atlantic to integrate their data traffic onto a unified national network, which will bring a number of substantial benefits to consumers. *First*, the merger will allow the combined company to expand into far more cities than either company is currently planning to reach. Both GTE and Bell Atlantic have projected the amount of traffic they can expect to generate by offering service in cities across the United States. GTE is currently planning to build points of presence (POPs) on its Global Network Infrastructure (or GNI -- GTE's national network) in cities across the United States, but predictably, many cities fall below the traffic volume cut-off required to justify the necessary investment. These traffic projections were reviewed by our expert economist, David Teece, who concluded that, when aggregated, the combined company's projected traffic volumes would be large enough to justify

Letter from Bear Stearns & Co. in Support of GTE-Bell Atlantic Merger at 1 (Nov. 19, 1998) ("We believe that the merger will foster competition, thus providing Bear Stearns with product and service choices that were previously unavailable to us. We look to the new company to provide a blanket of services to cover our company instead of the patchwork solutions that we are forced to assemble today.").

¹¹ See Kissell-Zimmerman Declaration ¶ 5.

bringing advanced voice and data services to at least 11 new markets that neither company alone could reach. If the new company were to add these markets to the GNI -- 9 of which are outside of the Northeast -- that would create roughly a 15 percent increase in the geographic coverage of GTE's network.¹²

Second, by aggregating GTE and Bell Atlantic's traffic onto a single network, the merger will lower the unit cost of providing advanced services by at least 10 percent, making the combined company's offering more competitive than either company's alone.¹³ This unit cost reduction is only a fraction of the total GNI efficiencies that will be realized, because it only accounts for data traffic, and not Bell Atlantic's large combined volume of long distance and Internet Protocol traffic.¹⁴

Finally, the merger will extend to Bell Atlantic customers the advantage of connecting to a national -- as opposed to a regional -- facilities-based network. This benefit is substantial because many large business customers will only purchase advanced services from suppliers that offer national facilities-based coverage. Indeed, facilities-based providers enjoy a number of advantages over resellers:

 Ability to provide a full-range of services. Some services in high demand by large business customers -- and particularly by multi-locational Fortune 500 companies -- are not available for resale on competitive terms. Virtual Private Network services (VPN),

¹² See Teece Declaration ¶¶ 47-48.

¹³ See id. ¶ 49.

¹⁴ See id.

for example, are not available for resale on terms that can compete with the Big Three's retail offerings. 15

- Broader geographic coverage. Even those services that are available for resale are not available in as many locations as can be reached by a facilities-based provider. For example, if Bell Atlantic wished to achieve national ATM reach, it would have to resell services from multiple wholesalers, increasing its costs for billing, back-office support and back-haul, and rendering its ATM offering uncompetitive. Because GTE is planning to place ATM switches in dozens of cities outside of the Northeast (and could place them in numerous additional cities if Bell Atlantic's traffic is added to the GNI), the merger will dramatically expand GTE-Bell Atlantic's ability to compete for out-of-franchise customers.¹⁶
- Lower unit cost. Facilities-based providers of advanced data services also enjoy a lower unit cost than resellers, stemming from their ability to aggregate larger amounts of traffic onto a single network and make network investment decisions driven by their own (as opposed to resellers' generic) marketing strategies.¹⁷
- Ability to provide service guarantees. Resellers are handicapped in their ability to
 provide service guarantees to customers -- something that most large businesses will not
 do without. Facilities-based providers can provide these guarantees readily, because they
 have the ability to engineer and control their own networks and can therefore react
 quickly and directly if trouble occurs.¹⁸

These procompetitive benefits, none of which is contested by the merger's opponents, will be substantial. Because these services are designed, in significant measure, to link a customer's distant offices, large business customers want to purchase them from a company with a network that reaches as many markets as possible. By allowing GTE-Bell Atlantic to reach more markets than either could alone, the merger will make the combined company a more

¹⁵ See Second Declaration of Debra R. Covey ¶¶ 5-6 (attached as Appendix C).

¹⁶ See id. ¶ 7.

¹⁷ See id. ¶ 4.

¹⁸ See id. ¶ 8.

competitive provider of advanced data services to customers seeking to link a number of remote locations. This capability, in turn, will make GTE-Bell Atlantic a more powerful competitor in out-of-franchise local markets, because it will allow the new company to compete effectively for business customers with anchor offices or affiliates in out-of-franchise locations.¹⁹

2. The Merger Will Bring New Services To Internet Customers -- Including Internet Telephony -- and Will Help Ensure That the Market for Internet Backbone Service Remains Competitive.

As AT&T's recent agreement to purchase IBM Global Networks demonstrates, Internet services are an integral element of the bundle demanded by both business and residential customers. GTE's own market research indicates that, among businesses that spend \$60,000 or more on telecommunications services per year, 43 percent want Internet services to be provided as part of a product bundle.²⁰ As these businesses get larger -- particularly among Fortune 500 companies -- demand for Internet services approaches 100 percent.²¹ By combining GTE's national high-speed facilities-based Internet backbone network with Bell Atlantic's customer relationships and marketing channels, the merger will enable GTE-Bell Atlantic to compete effectively against the Big Three in the markets for Internet backbone, connectivity, and hosting services.

Not one of the commenters disputes that the merger will allow GTE-Bell Atlantic to offer a broad range of Internet services to customers in new markets across the United States.

¹⁹ See id. ¶¶ 9-10.

²⁰ See Kissell-Zimmerman Declaration ¶ 6.

²¹ See id. ¶ 7.

including CyberID, Site Patrol, and Universal Messaging -- all of which are directed at residential and small business customers. Moreover, the merger will speed the introduction of Internet telephony as a competitive alternative to local and long distance telephone services. GTE and Bell Atlantic have highly complementary Internet telephony programs: GTE has developed much of the required technology, while Bell Atlantic owns a number of patents in the area that, when integrated with GTE's system, will make the service more efficient. Bell Atlantic also has technology and expertise managing gateways between IP telephony and PSTN networks, and providing Internet-based customer interfaces for operations support services -- capabilities GTE lacks. When these assets are combined with GTE's national IP network, the combined company will be in a unique position to offer Internet telephony as a competitive alternative to local and long distance service to business and residential customers across the country.

The merger of GTE and Bell Atlantic will also help to guarantee that the market for Internet backbone services remains competitive.²³ Because GTE Internetworking (GTEI) is the smallest backbone provider in the top tier, it faces a risk of losing its competitive position – a result that would create anticompetitive levels of concentration in the backbone market. This risk is only exacerbated by AT&T's proposed acquisition of IBM Global Network. Two of the three largest Internet backbone networks are controlled by MCI WorldCom and Sprint. The only other player in the top tier – Cable & Wireless – has yet to prove its competitive mettle; but if

²² See Declaration of John T. Curran ¶ 4 (Oct. 2, 1998) (filed with original Application).

²³ See id. ¶¶ 7-8.

the difference between the price it paid for internetMCI (\$1.8 billion for a 20 percent market share) and the price AT&T is offering to pay for IBM (\$5 billion for a 2 percent market share) is any guide, Cable & Wireless is unlikely to remain a significant competitive force for long.²⁴ This leaves only GTEI -- which is significantly smaller than the three largest backbones -- as a bulwark against the Big Three's successful acquisition of oligopolistic control over the market for Internet backbone service.²⁵

3. The Merger Will Allow GTE-Bell Atlantic To Provide National Facilities-Based Long Distance Service More Quickly and Efficiently Than Either Could Alone.

The GTE-Bell Atlantic merger will also have significant procompetitive benefits in the market for long distance service. Because GTE and Bell Atlantic will be able to consolidate their traffic onto one network, the merged company will be able to provide nationwide long distance service -- and all of the other advanced services provided over its national network -- at a lower unit cost. ²⁶ The merger will therefore make GTE-Bell Atlantic's long distance service more competitive.

The price that an acquiror pays for an Internet backbone is both a function of the value of the network's customer base and the acquiror's ability to maintain that backbone's standing in the marketplace. (A company that has little use for an asset, no matter how valuable, will not be able to outbid a more efficient user of that asset.) Because Cable & Wireless was MCI's hand-picked successor -- selected in a back-room deal rather than a competitive bidding process -- and because their agreement was saddled with a number of conditions designed to weaken Cable & Wireless as an effective competitor, the low purchase-price paid for internetMCI strongly suggests that Cable & Wireless was intended to be little more than a shell.

²⁵ See Teece Declaration ¶ 52-54.

²⁶ See id. ¶ 49.

None of these points is disputed by the Big Three. Instead, they assert that the market for long distance service is already competitive -- relying presumably on the Commission's decision to approve the MCI WorldCom merger -- and hence would not benefit from the addition of a new facilities-based competitor.²⁷ This assertion is false.²⁸ In reaching its conclusion that the long distance market is *on the road to competition*, the Commission relied on the fact that new entrants, like GTE, were building national long distance networks.²⁹ But GTE can fulfill its role as a check on the Big Three's market power only if it can operate its network at an efficient unit cost -- something that it will have difficulty doing without concluding its merger with Bell Atlantic. Moreover, this response ignores the vital role that long distance service plays in the service bundle; 67 percent of large business customers want long distance service to be provided by the same carrier that supplies their other telecommunications services.³⁰ Without an efficient, competitively priced long distance offering, GTE and Bell Atlantic risk being frozen out of the already concentrated national market for bundled services.

²⁷ See, e.g., Petition to Deny of Sprint Communications Company L.P. at 67 (hereafter Sprint).

²⁸ See, e.g., Paul W. MacAvoy, The Failure of Antitrust and Regulation to Establish Competition in Long-Distance Telephone Service 182 (1996) (describing "pattern of current coordinated price-setting behavior of the three large interexchange carriers").

²⁹ See In re Application of WorldCom and MCI for Transfer of Control, CC Docket No. 97-211, at ¶ 42 & n.119 (Sept. 14, 1998) (hereafter MCI WorldCom Order).

³⁰ See Kissell-Zimmerman Declaration ¶ 6.

4. Section 271 Is No Impediment To GTE-Bell Atlantic's Entry Into the Market for Bundled Services.

The Big Three and other commenters claim that the GTE-Bell Atlantic merger should be blocked because Bell Atlantic has not explained how it will comply with the 1996 Act's section 271 requirements. Their claims do not provide a basis for halting the transaction.

As an initial matter, the Commission recently approved SBC's acquisition of SNET over similar objections. It did so based on those parties' commitment to take whatever steps were needed to ensure that SBC complied with section 271 and related FCC orders.³¹ Here, GTE and Bell Atlantic are equally committed to complying with all their legal obligations, including those that arise under section 271 with respect to the Bell Atlantic territories.

Moreover, contrary to the claims of the Big Three, Bell Atlantic has opened its local markets and is well on its way to obtaining section 271 relief. Its first application -- for New York -- will be filed with the FCC in the first quarter of 1999. That application will be unlike any filed previously. Beyond the fact that New York already is the most competitive local telephone market in the United States, the application will build on almost three years of extensive evidentiary proceedings at the state level that have resolved hundreds of issues raised by competitors. The application will include proof that each of the 14 checklist items not only is available, but actually is used by competitors, and that Bell Atlantic's operations support systems, and the interfaces to access them, can handle levels of demand in excess of current

³¹ See SBC/SNET Order ¶ 37.

levels.³² This proof includes both actual commercial experience successfully processing several thousand orders per day, and *two* thorough tests by independent third parties -- the most recent of which is being conducted under the supervision of the New York Commission and the Department of Justice. Moreover, the application will be based on a number of additional measures that Bell Atlantic agreed to in a pre-filing statement to the New York Commission³³ -- measures that go well beyond the requirements of the 1996 Act and that the Chairman of the New York Commission and the Department of Justice have made clear will cause them to support the application.³⁴ As a result, even competing local carriers agree that Bell Atlantic is entitled to long distance relief in New York.³⁵

³² See, e.g., Letter from Randal S. Milch, Bell Atlantic, to John C. Cary, Secretary - New York Public Service Commission, and Accompanying Joint Affidavit Case 97-C-0271 (Sept. 11, 1998); Results of Competitive Analysis, Case 97-C-0271 (Jan. 15, 1997) (identifying all 14 checklist items as being used by competitors).

³³ See Pre-Filing Statement of Bell Atlantic-New York, In re Draft Filing of Petition for InterLATA Entry pursuant to Section 271 of the Telecommunications Act of 1996, Case 97-C-0271 (filed with New York Public Service Commission, Apr. 6, 1998).

See New York Public Service Commission News Release, PSC Chairman Supports Conditions for Bell Atlantic's Entry Into Long Distance (April 6, 1998) ("[I]f Bell Atlantic-New York meets all the steps outlined in its pre-filing . . . the local telecommunications market in New York will be fully and irreversibly open to competition and I would recommend that Bell Atlantic be permitted to enter into the long distance market."); Letter from Joel I. Klein, U.S. Department of Justice, to John O'Mara, Chairman - New York Public Service Commission (April 6, 1998) ("T]he Department of Justice has announced it will support applications under Section 271 based on a showing that the local telecommunications markets in a state are fully and irreversibly open to competition [I]t is our view that the Pre-Filing Statement filed by Bell Atlantic-New York, if fully and properly implemented, should support a conclusion that the New York local telephone market is 'fully and irreversibly open to competition.'").

³⁵ See Pledging Allegiance to telco competition; Royce Holland, MFS's former chief, in the telecom game again, Network World (Dec. 7, 1998) (Quoting Allegiance CEO Royce Holland:

In addition, Bell Atlantic will draw upon its New York experience to file prompt applications in a number of additional states -- a process that already has begun. For example, Bell Atlantic already has submitted pre-filing statements patterned on the New York model in two additional states -- Pennsylvania and New Jersey -- and proceedings in those states currently are underway.

Nor is there any question that Bell Atlantic has opened its local markets. The actions of competitors themselves are the best proof of this fact. Not only have competitors raised capital and invested in facilities in Bell Atlantic's region -- or in the case of the long distance incumbents, invested billions to buy local competitors with a major presence in Bell Atlantic's region³⁶ -- but they already are in business and operating. In fact, competitors already have captured approximately 1.3 million lines in Bell Atlantic's service areas, almost 800,000 of which are being served over the competitors' own facilities. Another half million of these lines are being served through resale, and over 60,000 lines are being served over unbundled loops. In addition, the number of interconnection trunks has grown to approximately 470,000 and more than 650 collocation sites already have been completed.

Consequently, Bell Atlantic reasonably expects to win long distance relief in the vast majority of its states prior to consummating its merger with GTE. It is possible, of course, that

[&]quot;If Bell Atlantic does everything it is promising the New York Public Service Commission it will do, then I expect Bell Atlantic will get approval by the first quarter next year to get into long distance.").

³⁶ For example, AT&T acquired TCG for \$11.3 billion and is paying \$48 billion for TCI, while MCI WorldCom acquired MFS and Brooks Fiber for a combined \$39.4 billion.

the multi-stage long distance approval process may still be underway in one or more states by the time the companies determine to close the merger. If that turns out to be the case, Bell Atlantic may request limited interim relief from the Commission until it completes the long distance approval process in any remaining states.

The Big Three assert that the Commission is categorically barred from providing any measure of temporary relief. But this claim is contradicted by the plain terms of the Act and by Commission precedent. The Commission's authority to grant Bell Atlantic the limited relief it might require is expressly set forth in 47 U.S.C. § 153(25), which defines a "LATA" as "a contiguous geographic area . . . established or modified by a Bell operating company after [the Act's date of enactment] and approved by the Commission." Relying on this provision, the Commission has concluded that it does have authority to modify LATA boundaries and indeed, since passage of the 1996 Act, has "approved a significant number of LATA boundary modifications."

The Commission could grant precisely the same kind of temporary relief here. For example, the long distance incumbents devote much of their attention to GTE's Internet backbone business, which they say is subject to section 271. Even assuming that is true, this is a perfect example of a market in which interim relief would be especially appropriate. An interim LATA boundary modification would ensure that the significant procompetitive benefits

In re Deployment of Wireline Services Offering Advanced Telecommunications Capability. Notice of Proposed Rulemaking, CC Docket No. 98-147, at ¶ 190 (Aug. 7, 1998).

that the merger promises for Internet services will be realized while Bell Atlantic completes the section 271 approval process in one or more remaining states.

There is nothing radical or new about this result. In administering the Modification of Final Judgment (MFJ), Judge Greene granted numerous requests to modify LATA boundaries
-- allowing traditionally interLATA services to be provided over a wider geographic area
-- when doing so would enhance competition or speed the development of new telecommunications services.³⁸ That is precisely the result here. The merger of GTE and Bell Atlantic will bring a powerful new competitor to the markets for advanced voice and data, Internet, and long distance services. It would be affirmatively harmful for competition to stymie GTE-Bell Atlantic's ability to provide these services once the Commission has determined that Bell Atlantic has opened its local markets to competition in other 271 proceedings.

Nevertheless, the Big Three assert that 47 U.S.C. § 160(d) is an absolute bar to granting such relief.³⁹ Section 160(d) does not establish such a categorical rule; it only provides that the

³⁸ See, e.g., United States v. Western Elec. Co., No. 82-0192 (D.D.C. Apr. 28, 1995) (wireless services); United States v. Western Elec. Co., 1986-1 Trade Cas. 67,148 (paging services); United States v. Western Elec. Co., No. 82-0192 (D.D.C. Feb. 26, 1986) (paging services); United States v. Western Elec. Co., 1987-1 Trade Cas. (CCH) 67,452 (cellular services); United States v. Western Elec. Co., No. 82-0192 (D.D.C. Feb. 18, 1993) (cellular services); United States v. Western Elec. Co., No. 82-0192 (D.D.C. Sept. 20, 1994) (video and audio programming by satellite and other means); United States v. Western Elec. Co., No. 82-0192 (D.D.C. Sept. 21, 1993) (cable service); United States v. Western Elec. Co., No. 82-0192 (D.D.C. Oct. 24, 1994) (same); see also United States v. Western Elec. Co., No. 82-0192 (D.D.C. Nov. 14, 1988); United States v. Western Elec. Co., No. 82-0192 (May 11, 1994); United States v. Western Elec. Co., 604 F. Supp. 256, 261 (D.D.C. 1984).

³⁹ See, e.g., Petition of AT&T Corp. to Deny Application at 40-41 (hereafter AT&T); Sprint at 56-59.

"Commission may not forbear from applying the requirements of Section . . . 271 until it determines that those requirements have been fully implemented." Bell Atlantic, in seeking a limited and temporary LATA boundary modification pursuant to clear statutory authority, would not be asking the Commission to "forbear" from applying 271. If the Commission were to grant a limited LATA boundary modification, Bell Atlantic would not be providing "interLATA" services, and thus no forbearance from section 271 would be necessary.

B. The Merger Will Create an Effective National Provider of Local Telephone Service.

By marrying a broad range of complementary capabilities, the merger of GTE and Bell Atlantic will create a strong local competitor able to enter out-of-franchise markets across the United States swiftly and effectively. Within 18 months of the merger's approval, GTE and Bell Atlantic are seeking to provide on an economic basis a complete bundle of services -- including advanced data and voice, Internet, long distance, and local services -- to business customers in 21 cities spanning the territories of every other RBOC.

GTE-Bell Atlantic will likewise offer a bundle of services to residential customers in cities where it is economically feasible to do so. In the first instance, GTE and Bell Atlantic have identified four target cities for possible expansion into the consumer market as Bell Atlantic receives its 271 approvals: Chicago, Miami, San Francisco, and Los Angeles. These cities, which were selected because they share calling affinities with New York and other cities in the Northeast, will be the first wave in a broader roll-out of bundled services for consumers. Cities

that exchange significant amounts of traffic with GTE and Bell Atlantic's other major markets will quickly be added to this list as it becomes economically feasible to do so.

The merger of GTE and Bell Atlantic will give the combined company four new assets or capabilities that will make it a more effective out-of-franchise competitor:

- 1. Ability to provide a full suite of facilities-based services. As described above, the merger will allow GTE-Bell Atlantic to provide the complete bundle of facilities-based services demanded by anchor large business customers in more locations, and at a lower cost, than either company could alone.⁴⁰
- 2. Relationships with anchor customers. The merger will also allow the combined company to market this full bundle of services to Bell Atlantic's large business customers in the Northeast that have offices or affiliates out-of-franchise. These customers have a great demand for bundled services, and want to purchase them from a provider that can offer facilities-based service to all of their remote locations. By bringing together Bell Atlantic's customer relationships and GTE's network capabilities, the merger will make it much more economical

Throughout their submissions, AT&T, Sprint, and MCI WorldCom attempt to conflate the GTE-Bell Atlantic merger and the SBC-Ameritech merger and assert that the two mergers will have an identically deleterious impact on the public interest. See, e.g., Comments of MCI WorldCom, Inc. at iii (hereafter MCI WorldCom). But the analogy between the two mergers is not apt. While the SBC-Ameritech merger would join two adjacent regional companies offering similar services, the GTE-Bell Atlantic merger is a marriage of GTE's national facilities-based Internet, data, and long distance network with Bell Atlantic's customer base. In short, the SBC-Ameritech merger combines two like firms; the GTE-Bell Atlantic merger combines two companies with dramatically different, yet highly complementary capabilities.

for the new company to provide local service to those customers in the 21 out-of-franchise cities identified by GTE's Chairman.

Bell Atlantic serves the headquarters of 175 of the Fortune 500 companies; GTE's ILEC franchise covers only 20.41 Nevertheless, the merger's opponents contend that both GTE and Bell Atlantic could acquire the necessary number of anchor customers to reach most or all of the merged company's 21 target cities. In particular, the Big Three assert that, because "[1]arge business customers are sophisticated, ... there is no reason to believe that GTE would have a competitive handicap in pursuing large businesses outside GTE's in-region service area."42 Likewise, they assert that Bell Atlantic could follow its customers out-of-franchise on its own, and that none of the deficiencies in its suite of services, "separately or in combination, has the effect of precluding Bell Atlantic from pursuing its 'anchor customers' out-of-region without GTE."43

These assertions entirely ignore the substantial competitive disadvantage GTE and Bell Atlantic suffer without the ability to offer a full menu of facilities-based services throughout the country. GTE cannot target large business customers in Bell Atlantic's territory successfully because it lacks the ability to provide facilities-based local service to customers in the

⁴¹ See Kissell-Zimmerman Declaration ¶ 15.

⁴² Sprint at 63-64; see also, e.g., Declaration of Stanley M. Besen, Padmanabhan Srinagesh and John R. Woodbury at 36 (hereafter Besen-Srinagesh-Woodbury Declaration).

⁴³ Sprint at 65; see also, e.g., Declaration of Kenneth C. Baseman and A. Daniel Kelley ¶ 62 (hereafter Baseman-Kelley Declaration) ("Bell Atlantic, which under this theory is providing the important increments in traffic, would have had incentives for out-of-region entry even without the GTE merger.").

Northeast.⁴⁴ Likewise, without the ability to provide facilities-based Internet and advanced data services outside of its region, Bell Atlantic cannot compete effectively in the market for multi-locational customers.

The Big Three's claim that both GTE and Bell Atlantic could go it alone is also belied by an examination of the large business market in each of the 21 target cities. As detailed in the Kissell-Zimmerman and Teece Declarations, ⁴⁵ GTE has prepared an illustrative analysis of the economics of entry into two of the markets that GTE Chairman Charles Lee identified to Congress: one in which the combined company will have some facilities and existing brand recognition; and another, in which the merged company will have neither facilities nor brand recognition. The results of GTE's analysis were overwhelming: Entries that were profitable for neither company alone were profitable for the merged company. Under one studied scenario, facilities-based entry in a medium-sized market employing an existing wireless switch was

Indeed, GTE's current out-of-franchise local exchange plans do not include the Northeast and, otherwise, are exceedingly limited. To date, GTE has only marketed local service to small business customers on a resale basis -- not to consumers or large businesses -- in eight near-franchise markets. In 1999, GTE is planning to provide out-of-franchise service in only one additional city. See Kissell-Zimmerman Declaration ¶ 13. Nevertheless, the Big Three point to hortatory statements in GTE's annual report, and made by GTE executives, to support their argument that GTE can mount a national out-of-franchise attack. See AT&T at 45; MCI WorldCom at 17-18. These statements do not bear the weight the Big Three try to lay upon them. For example, the Big Three tout GTE's statement that it will provide service "without regard to franchise boundaries," AT&T at 45 -- but that statement says nothing about the scope, depth or pace of GTE's out-of-franchise offering. Likewise, the Big Three's invocation of GTE's statement that it "can go it alone and win" -- a statement that was referring only to "GTE's ability to succeed in the competitive marketplace" -- says nothing about whether the merged company would be a more effective out-of-franchise competitor. Id.

⁴⁵ See Teece Declaration ¶ 41-43; Kissell-Zimmerman Declaration ¶ 16-19.

profitable for the combined company after 4.6 years, but was not for either company alone. 46 Moreover, the merger will allow GTE and Bell Atlantic to recover their initial investment, and earn a positive return, in a very short time frame. 47 Thus, in a second studied scenario, a facilities-based entry into a large market relying on the placement of a new switch turned profitable after only three years, whereas the analysis showed that neither company alone would be profitable within any reasonable planning horizon.

Because all of the other cities on GTE's target list fit one of the two profiles matching the studied entry cities, these examples show the benefits of the merger for the combined company's out-of-region entry plans. Moreover, this analysis comports with the Big Three's own statements before the Commission. As MCI WorldCom stated in its effort to secure approval for *its own* merger:

For meaningful, facilities-based competition to develop, what is required is not more competitors, but *stronger* competitors. The merger will create a more forceful local competitor by combining two companies with complementary advantages. MCI has a broadbased marketing experience, and an expansive residential and large business base. WorldCom has a diverse business base and the local networks of MFS Communications, Inc. and Brooks Fiber Properties, Inc. Because the merged company can expand and accelerate the reach of its local facilities and draw on the existing customer base of the two companies, it will be far better able to compete in more locations than would either entity standing alone.⁴⁸

⁴⁶ See id. ¶ 17. -

⁴⁷ See Kissell-Zimmerman Declaration ¶ 18.

⁴⁸ Second Joint Reply of WorldCom, Inc. and MCI Communications Corporation, CC Docket 97-211, at v (March 20, 1998).

- 3. Broader deployment of GTE's bundled service operations support systems. The merger will allow GTE-Bell Atlantic to take advantage of GTE's experience in developing its bundled service platform. GTE has spent two years building and operating this platform -- experience that should prove valuable in supporting GTE-Bell Atlantic's out-of-franchise strategy.⁴⁹
- 4. Creation of a new national brand. Finally, the merger will allow GTE-Bell Atlantic to create a national brand at a much lower cost then either company could alone. Neither GTE nor Bell Atlantic has significant levels of brand recognition out-of-franchise. GTE, for example, has only 26 percent unaided brand recognition among consumers out-of-franchise and only 29 percent recognition among business executives out-of-franchise. Yet, neither company alone can expect to generate enough return on its advertising investment to justify the creation of a national brand, because neither has the national presence required to serve a national customer base. The combined company, on the other hand, will be able to develop a national brand more cheaply than either could alone by building on GTE and Bell Atlantic's complementary in-region brand strengths and capitalizing on enhanced marketing and advertising efficiencies. This efficiency is substantial and, when coupled with the fact that

⁴⁹ See Kissell-Zimmerman Declaration ¶ 20.

⁵⁰ See id. ¶ 24. -

For this reason, the Big Three's assertion that GTE and Bell Atlantic have the resources to build a national brand misses the mark. See. e.g., Sprint at 21.

⁵² See Kissell-Zimmerman Declaration ¶ 27-29.

GTE-Bell Atlantic will be able to earn a much greater return on its out-of-franchise advertising dollars, will make the combined company a far more powerful out-of-franchise competitor.⁵³

The Big Three -- who have themselves invested hundreds of millions of dollars to build their own national brands -- attempt to minimize this benefit by making a number of arguments that are contrary to fact and flatly inconsistent with their own behavior. *First*, the Big Three argue that "the Commission should not put much faith in the claims of large 'global' . . . companies that they do not have strong brands. Both GTE and Bell Atlantic have strong brands." This argument is contradicted by GTE's own marketing studies, identified above.

Second, the Big Three argue that GTE and Bell Atlantic's "brand is certainly well known by the large 'anchor' tenants they claim they need to succeed." This assertion -- which is inconsistent with the marketing data identified above -- ignores the critical distinction between knowing a brand name, and knowing what that name represents. Neither GTE nor Bell Atlantic is known by large business customers as a national provider of a full bundle of telecommunications services. Without this kind of brand image, GTE-Bell Atlantic will be unable to convince anchor customers that it is able to serve all of their needs without regard to geographic boundaries. Large business customers will not commit to switch all of their services

⁵³ See Teece Declaration ¶ 31-37.

⁵⁴ AT&T at 51-52.

⁵⁵ *Id.* at 52.

to GTE-Bell Atlantic without being convinced of this fact, and for large businesses as well as any other customers, brand recognition is a critical part of creating this impression.⁵⁶

It is thus quite clear that the merger of GTE and Bell Atlantic will facilitate a more rapid out-of-franchise expansion and will allow the combined company to offer a broader range of services to out-of-franchise customers. The merger's opponents repeatedly point to GTE and Bell Atlantic's size as strong evidence that both companies could compete out-of-franchise on their own. MCI WorldCom asserts, in a characteristic accusation, that "CLECs, which are much smaller in revenue and profits, have invested substantial sums in order to attempt to enter the local exchange market that companies like GTE and Bell Atlantic are preventing them from entering." But these accusations misconceive the requirements for broad and effective competitive entry into the territory of every other RBOC within 18 months. GTE and Bell Atlantic do not dispute that alone -- like many other successful CLECs -- each company would have the capabilities to enter a small number of new markets.

It is simply not relevant to the Commission's inquiry whether, given the size of the two companies' market capitalization or annual revenues, GTE and Bell Atlantic could purchase or build independently the capabilities each would need to compete on a national basis. Filling out GTE and Bell Atlantic's portfolios in this way would take *years*, and would bring out-of-franchise entry in a trickle rather than a torrent. By entering rapidly into as many as seven cities

⁵⁶ See Teece Declaration ¶ 31; Kissell-Zimmerman Declaration ¶ 23.

⁵⁷ MCI WorldCom at 14.

per RBOC, the GTE-Bell Atlantic merger will spark competition throughout the territories of BellSouth, U S WEST, SBC, and Ameritech.

C. Merger Synergies and Sharing of Best Practices.

Three years after the merger's close, GTE and Bell Atlantic estimate that the combined company will achieve \$2 billion in annual revenue synergies, \$2 billion in annual cost synergies, and \$0.5 billion in annual capital synergies. Additional detail supporting these synergy estimates is provided in the Reply Declaration of Doreen Toben, attached as Appendix E.

The Big Three argue that GTE and Bell Atlantic's synergy estimates "are not sufficient to demonstrate either the magnitude of any gains attained subsequent to the merger or that the gains [a]re merger related." But efficiency claims need only be concrete and nonspeculative, and are sufficient if verifiable by "reasonable means." As MCI WorldCom asserted in support of its own merger -- and contrary to the Big Three's self-serving statements here -- efficiencies need not

be individually quantifiable and audited. It would be unreasonable for Applicants to be held to this unreasonable standard: the efficiencies that will result from the merger are based on

⁵⁸ Besen, Srinagesh & Woodbury Declaration ¶ 50; see also, e.g., Sprint at 81 ("[n]o support" for synergies "is provided, and thus the applicants have not satisfied their burden of proof"). The Big Three assert, for example, that public interest gains stemming from the sharing of best practices "could occur without a merger" by "contractually exchanging best practice technology." Id at 83-84. But the merger alone allows GTE and Bell Atlantic's best practices to be diffused. Because there is no way for firms operating at arms-length to see into one another's operations with any clarity, contractual arrangements for sharing best practices cannot be as effective as full integration. Only by placing GTE and Bell Atlantic under unified management can the companies' best practices be shared fully.

⁵⁹ Bell Atlantic/NYNEX Order ¶ 158.

reasonable projections.... Obviously, future synergies are based on reasonable projections, and are necessarily subject to some uncertainty. WorldCom has traveled this road before and it has established a record of fulfilling, if not exceeding, the estimated synergies related to its acquisitions. It is particularly significant that, in estimating these projected savings, WorldCom relied on its substantial experience in acquiring other telecommunications carriers.⁶⁰

In approving the MCI WorldCom merger, the Commission relied on proposed synergies and procompetitive benefits indistinguishable from those here to "conclude that Applicants have made a sufficient showing here of potential benefits to find that, on balance, the merger is in the public interest, convenience, and necessity." Indeed, the Commission approved the MCI WorldCom merger primarily because,

as a result of combining certain of the firms' complementary assets, the merged entity will be able to expand its operations and enter into new local markets more quickly than either party alone could absent the merger. For example, the Applicants claim that MCI Metro and Brooks Fiber will accelerate local city network deployment in secondary markets by 1-2 years. The complementary assets of the merged entity include MCI's national brand name, marketing experience and broad residential base, and WorldCom's extensive local exchange facilities, small and medium business customer base and foreign networks. We also find persuasive Applicants' assertions that the merger will allow them to service multi-location customers over their own networks, and that this will enable such customers to receive higher quality and more reliable services than each company is currently able to offer separately.⁶²

⁶⁰ Joint Reply of WorldCom, Inc. and MCI Communications Corporation, CC Docket No. 97-211, at 99-100 (Jan. 26, 1998)

⁶¹ MCI WorldCom Order ¶ 197.

⁶² *Id.* ¶ 199.

The merger of GTE and Bell Atlantic will achieve precisely the same procompetitive benefits -from accelerating entry into all RBOC local markets within 18 months, to combining
complementary brand assets and customer bases, to creating a new competitor able to provide
a complete bundle of "higher quality and more reliable services" to "multi-location customers."
The \$4.5 billion in annual merger synergies identified by GTE and Bell Atlantic will help to
finance all of these procompetitive ventures, and offer a compelling reason to approve the
requested license transfer.

II. THE MERGER WILL NOT PRODUCE ANTICOMPETITIVE EFFECTS.

Beyond attempting to cast doubt on the numerous procompetitive benefits the merger promises to generate, the Big Three and other opponents seek to convince the Commission that the merger will give rise to a host of anticompetitive consequences. Broadly speaking, these anticompetitive arguments fall into two categories. *First*, the Big Three raise horizontal concerns about the impact of the merger: They contend that the merger will reduce competition in the market for local service by removing a potential competitor in certain markets, ⁶³ by increasing the supposed incentives of GTE and Bell Atlantic to engage in anticompetitive behavior, ⁶⁴ and by curtailing the ability of the Commission and other regulators to detect such behavior. ⁶⁵ Second, the Big Three posit a variety of vertical concerns -- i.e., concerns that the

⁶³ See, e.g., AT&T at 22-30; MCI WorldCom at 21-25; Sprint at 11-25.

⁶⁴ See, e.g., AT&T at 12-14, 19-20; MCI WorldCom at 30-32; Sprint at 27-31.

⁶⁵ See, e.g., AT&T at 20-22; MCI WorldCom at 32-37; Sprint at 40-55.

merged company will exploit its strength in the market for local service to attain unfair advantage in the markets for interLATA⁶⁶ and Internet services.⁶⁷

These arguments are undoubtedly familiar to the Commission, because they differ little from those that have been raised in opposition to prior transfer applications, including SBC/PacTel, Bell Atlantic/NYNEX, SBC/SNET and, most recently, SBC/Ameritech.⁵⁸ The Commission has declined to block mergers on the strength of these arguments in the past, and the Big Three offer no persuasive reason to view the arguments any more favorably this time around. Under the Commission's well-settled standards, in order for a merger to be blocked on the ground that it will have anticompetitive effects, it must be shown that any incremental effect the merger would assertedly have on the Applicants' incentive and ability to engage in anticompetitive behavior is so severe as to outweigh the benefits to consumers that will flow

⁶⁶ See, e.g., AT&T at 30-33; MCI WorldCom at 37-39; Sprint at 31-33.

⁶⁷ See, e.g., MCI-WorldCom at 39-52.

⁶⁸ Indeed, Sprint does not even attempt to disguise the fact that it is resorting to stock antimerger material, and has simply re-filed the same affidavits it recently submitted in opposition to the SBC-Ameritech merger. As noted above, the rationales for these two mergers, and the likely competitive effects, are not similar.

from the merger.⁶⁹ As we show in this section, and in the accompanying declarations.⁷⁰ the GTE-Bell Atlantic merger's opponents have not come close to meeting that standard.

C. The Horizontal Concerns Posited By the Merger's Opponents Do Not Withstand Scrutiny.

The Big Three contend that GTE and Bell Atlantic should be prohibited from joining forces because the merger would reduce competition in the market for local service. The merger will, in fact, have no such effect.

1. The Merger Will Not Eliminate One of the Most Significant Potential Competitors in Each Applicant's Territory.

The opponents' first contention -- that the merger will remove one of the most significant potential competitors in each Applicant's territories -- was anticipated and addressed at length in the Applicants' Public Interest Statement. As explained therein, the local service areas of GTE and Bell Atlantic do not overlap, and the two companies do not compete against each other in the market for local service; the only issue, therefore, is one of potential competition, and even

⁶⁹ See SBC/PacTel Order ¶ 42 ("[T]he basic competitive issue in this proceeding is not the market power or potential misconduct of [the Applicants] at present, but the incremental increase in that power or misconduct that will result from the proposed transfer."); Bell Atlantic/NYNEX Order ¶ 118, 120 (same); id. ¶ 2 ("A merger will be pro-competitive if the harms to competition... are outweighed by benefits that enhance competition."); MCI/WorldCom Order ¶ 10 (same).

Declaration of Kenneth J. Arrow (attached as Appendix F) (hereafter Arrow Declaration); Declaration of Robert H. Gertner and John P. Gould (attached as Appendix G) (hereafter Gertner-Gould Declaration); Declaration of Robert W. Crandall and J. Gregory Sidak (attached as Appendix H) (hereafter Crandall-Sidak Declaration); Declaration of Jacques Crémer and Jean-Jacques Laffont (attached as Exhibit I) (hereafter Crémer-Laffont Declaration).

⁷¹ GTE-Bell Atlantic Public Interest Statement at 24-33 (Oct. 2, 1998) (hereafter Public Interest Statement).

that issue is limited to certain areas of Pennsylvania and Virginia where GTE has some franchises located near Bell Atlantic territories.

The relevant question under the potential competition doctrine is whether the merger would result in the elimination of a "most significant market participant" -- i.e., a potential competitor that would (in the absence of the merger) be "likely to have substantial future competitive significance" in the relevant market, and whose competitive role in that market could not be assumed by other present or potential market participants. Given the large number of actual and potential competitors, neither GTE nor Bell Atlantic qualifies as such a potentially significant, let alone irreplaceable, competitor in the other's markets in Pennsylvania and Virginia.

As noted in the Public Interest Statement and in the accompanying Declaration of Jeff Kissell and Scott Zimmerman, GTE has no plans to enter Bell Atlantic's territory to offer local exchange service; likewise, Bell Atlantic has no plans to enter GTE's predominantly rural or suburban territories.⁷³ Unable to point to any actual plans of GTE and Bell Atlantic to make a significant entry into each others' territories, the opponents of the merger instead attempt to establish that, as ILECs operating in adjacent territories, GTE and Bell Atlantic are (on paper) uniquely "well poised" to make such entry -- and so well positioned as to constitute "most

⁷² SBC/SNET Order ¶ 18-19; Bell Atlantic/NYNEX Order ¶ 7; MCI/WorldCom Order ¶ 19-20.

⁷³ Public Interest Statement at 29-33.

significant market participants" in each others' territories.⁷⁴ This attempt fails. The purported advantages of ILECs in general, and adjacent ILECs in particular, are illusory.

As Professors Gertner and Gould explain in their accompanying declaration, the contention that ILECs enjoy significant advantages as potential entrants is contradicted by the available evidence (indeed, ILECs face certain disadvantages). The Big Three point to ILECs supposed "expertise in established complex systems to handle administrative capabilities (billing, order taking, customer care, etc.)" as an advantage not enjoyed by other possible non-ILEC entrants. In reality, however, both of the inputs needed to provide such effective "back office" services are readily available to non-ILECs: The equipment needed for basic CLEC back-office systems can be purchased from a wide variety of well-established and experienced suppliers, and any specialized knowledge needed to run a local exchange business -- i.e., human capital -- is likewise readily available (as individuals with ILEC experience can be, and frequently are, hired by CLECs). Such human capital, of course, may also be acquired by purchasing an ILEC. Moreover, ILEC operations support systems are not readily adaptable for use in an out-of-franchise strategy that places any reliance on resale or unbundled network elements; entirely new platforms must be developed. And because any actual ILEC-specific

⁷⁴ See, e.g., AT&T at 24.

⁷⁵ See Gertner-Gould Declaration ¶¶ 2, 17-43.

⁷⁶ Sprint at 11; see also AT&T at 23.

⁷⁷ See Gertner-Gould Declaration ¶¶ 21-22.

information is available through interconnection negotiations and other regulatory processes.

CLECs have equal access to any data that would aid their competitive efforts.⁷⁸

Market evidence confirms the insight that ILEC experience does not provide a carrier with a per se advantage over other potential local service competitors. As noted above, if ILEC experience provided any great advantages, then purchasing an ILEC would be an appealing strategy for a CLEC bent on entering the local telephone business. However, two of the Big Three -- MCI WorldCom and AT&T -- have announced their intention to enter the local telephone business, yet have spent large sums to acquire CLECs or cable companies with no ILEC experience whatsoever, and at the same time have not purchased any independent ILECs. The opponents' own actions thus belie their claim that ILEC status confers important advantages on potential entrants in the local service market.⁷⁹

The Big Three are equally mistaken in arguing that because GTE and Bell Atlantic are not merely ILECs, but *adjacent* ILECs, in parts of Pennsylvania and Virginia, they enjoy special advantages that make them the most likely entrants into each other's territories. As an initial matter, the two Applicants have widely differing operations and customer bases in those two Commonwealths -- Bell Atlantic's presence is concentrated in urban areas, while GTE serves customers primarily in rural or sparsely populated areas and smaller towns that are well removed from the larger urban centers. AT&T nonetheless claims ILECs have an advantage insofar as they can use remote switching modules and digital loop carriers to serve customers within a 125-

⁷⁸ See id. ¶¶ 24-26.

⁷⁹ See id. ¶ 32.

mile radius of their existing switches. As Gertner and Gould demonstrate, however, this is no unique advantage: A large number of other ILECs and CLECs have facilities situated within 125 miles of GTE and Bell Atlantic customers in Pennsylvania and Virginia. Indeed, fully 100 percent of GTE customers in the two states that reside within 125 miles of a Bell Atlantic switch are also within 125 miles of 10 other firms' switches.⁸⁰ The statistics for Bell Atlantic customers residing within 125 miles of GTE facilities are comparable.⁸¹

In addition to trumpeting the 125-mile radius theory, AT&T claims that Bell Atlantic and GTE have a name-recognition advantage over other potential competitors in Pennsylvania and Virginia. But in Bell Atlantic's states outside of GTE's franchise, GTE has only 15 percent unaided brand recognition among consumers and 17 percent among business executives.⁸² Likewise, in GTE's Pennsylvania and Virginia franchises, Bell Atlantic has only 14 percent unaided recognition among consumers and 15 percent among business executives.⁸³ Other potential entrants like the Big Three have brand names that are far better known.⁸⁴

It bears emphasizing, moreover, that the Commission's *Bell Atlantic/NYNEX Order* in no way established a rule that adjacent ILECs necessarily enjoy special advantages as potential entrants into each other's service areas. For a host of case-specific reasons, the Commission

⁸⁰ Id.

⁸¹ Id

⁸² See Kissell-Zimmerman Declaration ¶ 24.

⁸³ See id. ¶ 24.

⁸⁴ See id. ¶¶ 21-26; Teece Declaration ¶¶ 31-37.

there concluded that the mass market local services offered by Bell Atlantic represented the "second choice' alternative for a significant number of customers" in NYNEX's LATA 132 territory. Significantly, moreover, our opponents do not, and cannot, contend that those special factors are present in Bell Atlantic and GTE's adjacent territories.

As stated in the Public Interest Statement, the number of actual and potential entrants in Bell Atlantic and GTE's territories is large. Because Bell Atlantic and GTE's status as ILECs (even adjacent ILECs) gives them no unique advantages as potential entrants in each other's service territories, neither can properly be considered a potentially significant, and certainly not an irreplaceable, competitor in the other's Pennsylvania or Virginia territories.

2. The Merger Will Not Increase Any Supposed Incentives of Bell Atlantic and GTE To Engage in Anticompetitive Behavior.

In addition to arguing that the merger would eliminate a potential competitor, the Big Three offer two theories as to why the supposed incentives of Bell Atlantic and GTE to engage in discriminatory conduct will increase as a result of the merger. *First*, relying on materials previously submitted by Sprint in opposition to the pending SBC-Ameritech transfer application -- namely, a declaration by Michael L. Katz and Steven C. Salop -- the opponents assert that the merged entity will have a greater incentive to engage in unlawful exclusionary behavior in local service markets than either GTE or Bell Atlantic would alone, because the merged entity's wider footprint would supposedly allow it to "internalize" the "spillover" effect of discriminatory

⁸⁵ Bell Atlantic/NYNEX Order ¶ 108; see also id. ¶¶ 73-77.

behavior that presently goes uncaptured.³⁶ Second, the Big Three contend that allowing this merger to proceed would (especially if the SBC-Ameritech merger were also approved) produce a situation in which the resulting powerful entities would enter into a "non-aggression pact." declining to compete in each others' territories for fear of retaliatory entry.³⁷

Neither of these arguments provides a basis for the Commission to find that the merger is not in the public interest. The accompanying Declarations of Robert W. Crandall and J. Gregory Sidak and of Jacques Crémer and Jean-Jacques Laffont demonstrate that the Katz-Salop theory is devoid of empirical support, ignores the effectiveness of regulatory safeguards, and even on its own terms is deeply flawed as a matter of game theory analysis. It would be economic caprice for the Commission to use such a hypothetical "spillover" model -- one that cannot even produce coherent predictions of exclusionary conduct -- to inform the agency's public interest review of the merger.

The opponents' "non-aggression pact" argument is likewise wholly speculative, theoretically unsound, and belied by reality. First, there is simply no empirical support for the suggestion that ILECs have tacitly agreed not to compete in each others' territories. ILECs nationwide face considerable competition from a host of providers, including CLECs and other

⁸⁶ Declaration of Dr. Michael L. Katz and Dr. Steven C. Salop, Using a Big Footprint to Step On Competition: Exclusionary Behavior and the SBC-Ameritech Merger (Oct. 14, 1998); see also AT&T at 12-14; Sprint at 25-31.

⁸⁷ See AT&T at 8, 33-36; MCI WorldCom at 31-32.

⁸⁸ See Crandall-Sidak Declaration ¶¶ 21-33; Crémer-Laffont Declaration.

⁸⁹ See Arrow Declaration ¶¶ 45-50.

ILECs (or their affiliates). Second, the claim that ILECs have reached, or will reach, such "non-compete" agreements is also flatly inconsistent with our opponents' theory that GTE and Bell Atlantic are likely entrants into each other's territories. Finally, the argument rests on an outdated view of the telecommunications marketplace. In the post-1996 Act world, ILECs face competition in their local markets from a host of CLECs, including large national entities such as MCI WorldCom, Sprint and AT&T. Accordingly, any "non-aggression pact" concluded by ILECs would be quickly rendered useless and dangerously counterproductive, because the colluding ILECs would be overrun by competition from CLECs and would (by virtue of their pact) be unable to respond by seeking new revenue sources in the other colluding ILEC's territory. In short, the Commission's public interest analysis should not be sidetracked by the Big Three's unfounded and theoretically unsound speculation about "spillovers" and "non-aggression pacts."

more as a rhetorical point than a serious one -- that the merger will increase the new company's incentive and ability to engage in anticompetitive behavior because GTE would be able to "teach" Bell Atlantic its approach to negotiation, regulation and litigation (which approach, these opponents assert, is obstructionist). See, e.g., AT&T at 14-16; compare Rebecca Blumenstein & Stephanie N. Mehta, AT&T, Known for Its Gentlemanly Ways, Gets Tough, Wall St. J., Dec. 21, 1998, at B4. As we explain in Part III and Appendices J and K, the opponents' complaints about GTE's practices in this regard are predictable, tired and unfounded. Moreover, the Commission has consistently refused to sanction licensees for engaging in tough negotiations and vigorous advocacy, and any attempt to do so would raise serious constitutional questions. See, e.g., SBC/PacTel Order \$\Pi\$ 36-37.

3. The Merger Will Not Hinder the Ability of This Commission or Other Regulators To Detect and Deter Any Anticompetitive Conduct.

The Big Three contend, finally, that the merger should be blocked because it will reduce by one the number of ILECs and thereby hamper the Commission's ability to regulate through the use of benchmarks. This argument falls short of the mark. Even if a meaningful benchmark were eliminated as a result of the merger -- which will not be the case -- that would provide no sound policy justification for disapproving the Application. Benchmarking may be a useful regulatory tool, but a small loss in the effectiveness of one regulatory tool in certain circumstances cannot justify the great loss of procompetitive benefits that would follow from disapproval of the GTE-Bell Atlantic merger. Moreover, in contending that the merger will eliminate an important benchmark, the opponents exaggerate both (1) the importance of benchmarking in modern telecommunications regulation and (2) the change in the number of relevant benchmarks that would result from a merger of Bell Atlantic and GTE.⁹²

First, the opponents overstate the importance of benchmarking by ignoring important changes that have occurred in the telecommunications industry since the passage of the 1996. Act, the effect of which has been to reduce the importance of the types of benchmarks relied on in the past by the FCC and state regulatory agencies. One significant change, for example, is the imposition upon ILECs of the obligation to allow entry by CLECs through the process of interconnection negotiations and arbitrations: The interconnection obligation has rendered cross-

⁹¹ See, e.g., Sprint at 46-49, MCI WorldCom at 32-36.

⁹² See Arrow Declaration ¶¶ 5-39.

company comparisons considerably less important than they were prior to the 1996 Act. and has effectively expanded the number of relevant benchmarks. Each interconnection agreement must be agreed to by the CLEC, as well as the relevant ILEC and state regulatory agency. Each interconnection agreement includes specific performance standards and a detailed schedule of charges; all such agreements are public. The 1996 Act thus makes each separate state commission a benchmarking authority and each separate operating company, rather than the ultimate regional holding company, the relevant benchmark. In addition, in many instances, the Commission has benchmarked what ILECs do for competitors against what they do for themselves. Thus, the Act has actually created a far greater number of benchmarks than the seven RBOCs created by the MFJ.

Second, even with respect to issues for which cross-company comparisons (instead of ILEC-CLEC comparisons) remain important, the Big Three overstate the significance of the loss of GTE as a benchmark. The Commission itself has concluded on many occasions that there are important differences between GTE and the RBOCs for regulatory purposes. In 1987, for example, the Commission stated that "an analysis of GTE's service areas demonstrates that although in the aggregate GTE is smaller in size to each BOC, unlike the BOCs, its service areas are distributed nationwide in a large number of noncontiguous geographical areas." More

⁹³ See id. ¶ 11-13.

In the Amendment to Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry) and Policy and Rules Concerning Rates for Competitive Common Phase II Carrier Service and Facilities Authorizations Thereof Communications Protocols under Sections 64.702 of the Commission's Rules and Regulations, Report and Order, 2 F.C.C.R. 3072, at ¶ 203 (1987).

recently, Chairman Kennard noted that "GTE always has been treated differently [than the RBOCs] because it is smaller and less geographically focused." Indeed, the Commission just last week reaffirmed its view that the different characteristics of GTE and the BOCs justify different regulatory treatment. Because of these differences between GTE and the RBOCs. GTE's value as a benchmark for RBOCs is limited. And even to the extent that independent LECs such as GTE have relevance as benchmarks for the RBOCs on certain issues, a multitude of independent LECs -- including Sprint's LEC subsidiaries, ALLTEL, Frontier, Cincinnati Bell and others -- will remain after the merger. 97

B. The Merger's Claimed Adverse Vertical Concerns Are Likewise Illusory.

In addition to the claimed horizontal concerns, the Big Three contend that the proposed merger raises vertical concerns -- namely, that Bell Atlantic and GTE would seek unlawfully to leverage their presence in the market for local services to gain unfair advantage in downstream markets. Our opponents' contentions on this score are, for the most part, merely a rehash of the hackneyed arguments that ILECs can discriminate against rivals by engaging in price squeezes (raising local access prices) or non-price discrimination (such as degradation of signal transmission quality). The Commission has repeatedly rejected those arguments as a basis for

⁹⁵ Kennard Says FCC Will Seek Sec. 271 Stay, Then 'Use Every Tool,' Washington Telecom Newswire, Jan. 2, 1998.

⁹⁶ See Brief for the United States and the Federal Communications Commission in Opposition to Certiorari in Nos. 98-652 and 98-653, SBC Communications Inc., et al. v. FCC, et al. (U.S. Dec. 18, 1998) at 18-20.

⁹⁷ See Arrow Declaration ¶¶ 20-21.

blocking proposed mergers, ⁹⁸ and should do so again here. The only new twist on the vertical effects theme is MCI WorldCom's contention that the merged entity will somehow be better able to leverage its local exchange presence into a dominant position in the market for Internet service. This novel iteration of the vertical-discrimination argument is even less persuasive than its traditional form.

1. The Merger Will Not Increase the Merged Entity's Ability To Discriminate, Either By Raising Local Access Prices or By Non-Price Means.

Several opponents, and particularly the Big Three, contend that the Application should be denied because a combined GTE-Bell Atlantic will have the incentive and ability to discriminate against its rivals in downstream markets by charging rivals elevated prices for necessary access services as well as by engaging in non-price discrimination. As in the earlier cases, the opponents' argument is flawed in two fundamental respects. First, there is no evidence that ILECs have actually engaged in discriminatory acts of the price squeeze or non-price variety, much less the sort of empirical support that would be necessary for the Commission to base its decision on this argument. Second, and even more importantly in this context, our opponents are unable to establish that the new company would have any greater incentive or ability to engage in these types of discriminatory conduct as a result of the merger.

⁹⁸ See, e.g., SBC/PacTel Order ¶¶ 52-57; Bell Atlantic/NYNEX Order ¶¶ 117-20; SBC/SNET Order ¶¶ 23-24.

⁹⁹ AT&T at 30-33; MCI WorldCom at 36-52; Sprint at 31-40.

The suggestion that ILECs can succeed in a strategy of price-squeeze discrimination against rivals in downstream markets is fanciful. Numerous regulatory safeguards are in place to guard against the danger of price squeezes: The price of access is regulated, and existing imputation and structural separation rules already prevent price squeezes. The Commission has previously concluded that these safeguards are adequate to protect against the alleged danger of price squeezes, ¹⁰⁰ and the evidence strongly confirms that assessment. ¹⁰¹ For example, GTE presently provides long distance service, yet the opponents are unable to point to any diminution in competition in the long distance market or any other evidence that GTE is engaging in price squeezes. Bell Atlantic, likewise, has been providing interLATA toll service in the corridors from New Jersey to New York and Pennsylvania and intraLATA toll service in competition with the long distance carriers with no evidence that it has engaged in a price squeeze.

Even if these existing safeguards were somehow incapable of detecting all price discrimination, it bears emphasizing just how difficult it would be for an ILEC successfully to execute a price squeeze. As Crandall and Sidak explain, an ILEC pursuing a price squeeze strategy would have to engineer a squeeze that, at a minimum, was sufficiently severe and lengthy (but all the while undetectable) as to drive some current competitors from the market. 102 If the ILEC did not succeed in driving one or more carriers from the market, then the new low-price equilibrium would simply remain in place, to the benefit of consumers. And even driving

See, e.g., SBC/PacTel Order ¶ 53; Bell Atlantic/NYNEX Order ¶ 117.

¹⁰¹ See Crandall-Sidak Declaration ¶ 32-37.

¹⁰² *Id.* ¶ 36.

a competitor from the market would not guarantee success, since the fiber-optic capacity of the ousted carrier would remain -- ready for another carrier to purchase at fire-sale prices and use to undercut the ILEC's noncompetitive prices. The Big Three fail to acknowledge these difficulties, and cannot explain how an ILEC could employ a price squeeze to drive IXCs from the market.

The case for non-price discrimination is equally unconvincing. *First*, as the Commission stated in the *Bell Atlantic/NYNEX Order*, such non-price discrimination would violate several provisions of the Communications Act.¹⁰³ Most of these forms of non-price discrimination would be entirely detectable. Indeed, the theory of non-price discrimination is based on the implicit, and implausible, assumption that an ILEC could engage in some form of technological discrimination that is detectable by customers (who would have no incentive to switch to the discriminating carrier if they could not detect the degradation), but undetectable by rivals (including large, sophisticated firms like the Big Three) and regulators.¹⁰⁴

Second, as with price-squeeze discrimination, the evidence suggests that even if ILECs had an incentive to engage in non-price discrimination, they have been utterly unable to do so in practice. If the Big Three are correct that ILECs have an incentive to engage in non-price discrimination, that incentive would be present in the markets in which ILECs provide access service to other carriers that compete with them in downstream markets. In particular, the theory should apply to cellular service, where for many years an ILEC-owned wireless carrier competed

¹⁰³ Bell Atlantic/NYNEX Order ¶ 120.

¹⁰⁴ See Arrow Declaration ¶ 58.

with a non-wireline carrier that relied on the ILEC for local access. Non-wireline carriers, however, have successfully competed against ILEC-owned cellular providers for many years, and new wireless carriers, such as PCS and EMSR firms, are successfully competing against these same cellular carriers, though they too must rely on the ILEC for local access. The absence of any evidence that non-price discrimination has occurred, or has had any effect on competition, is telling. Such evidence would presumably be plentiful if ILECs indeed engaged in this practice. ¹⁰⁵

As is customary, therefore, the proponents of the price-squeeze and non-price-discrimination arguments are unable to point to any empirical support for the claim that ILECs have the incentive and ability to engage in such behavior. However, even if the opponents were able to show that ILECs possess those incentives and abilities, that would not constitute grounds for the Commission to find that the merger is not in the public interest, because the relevant question in the context of a transfer application is not whether discrimination is theoretically possible, but rather whether the merger would increase the combined company's incentive or ability to engage in such a strategy.¹⁰⁶ The Commission, for example, rejected the price squeeze and non-price discrimination arguments in its SBC/PacTel and Bell Atlantic/NYNEX orders.

¹⁰⁵ See Arrow Declaration ¶¶ 56-60.

See SBC/PacTel Order ¶ 54 ("[T]he pertinent issue in this proceeding is the incremental increase in the scope of the price squeeze that the proposed transfer will make possible for the first time.").

finding that the ILECs' incentive and ability to engage in such forms of downstream discrimination did not increase as a result of the merger.¹⁰⁷

The Big Three have attempted to cobble together a theory of how the merger supposedly aggravates the potential for such discriminatory behavior — the Katz-Salop theory — but that contrived theory does not withstand scrutiny, as discussed above. Moreover, the merger will not increase any incentive to discriminate against long distance carriers because the merger only increases the number of calls that are *terminated* by GTE-Bell Atlantic. The suggestion that a LEC even in theory can induce a customer at the terminating end of a communication to change long distance carriers by degrading interLATA traffic ignores reality. With limited exceptions, the customer at the originating end, not the terminating end, chooses the interLATA carrier; consequently, the terminating-end customer is not likely to respond to perceived poor service quality by switching to a different long distance carrier (indeed, if anything, the terminating-end customer would be likely to blame the LEC for the problem). Congress recognized this reality in section 271 when it prohibited a BOC only from "provid[ing] interLATA services originating in any of its in-region States," 108 and from terminating traffic in-region only for 800 service and similar calls where "the called party . . . determine[s] the interLATA carrier."

Even if there were some added incentive or ability to discriminate in the transmission of interLATA calls when an ILEC both originates and terminates the call, the magnitude of that

¹⁰⁷ Id. ¶¶ 54, 57; Bell Atlantic/NYNEX Order ¶¶ 118, 120.

¹⁰⁸ 47 U.S.C. § 271(b)(1) (emphasis added).

¹⁰⁹ *Id.* § 271(j) (emphasis added).

increase in this case would be insignificant under the Commission's standards. Sprint contends that "the new firm would terminate 43% of the minutes that it controls on the originating end, which compares to a weighted average of 36% for the two companies separately." In the SBC/PacTel Order, however, the Commission found that an increase "of only six to seven percentage points" in the percentage of calls served at both ends by one firm raises no competitive concerns. Similarly, in Bell Atlantic/NYNEX, the Commission was unpersuaded that the merger would have any effect on the incentive or ability to discriminate, even though the merger resulted in a "substantially greater percentage" of calls originated and terminated by the new company. 112

For all of these reasons, the opponents of the GTE-Bell Atlantic merger are no more successful than opponents of mergers past in asserting that this union will enhance the incentives or ability of the combined entity to engage in price squeezes or non-price discrimination against rivals in downstream markets.

¹¹⁰ Sprint at 33.

¹¹¹ SBC/PacTel Order ¶ 46, 53, 57.

¹¹² Bell Atlantic/NYNEX Order ¶¶ 118, 120. To the extent our opponents are concerned with the percentage of long distance traffic that Bell Atlantic both originates and terminates, that percentage will actually decrease as a result of the merger: GTE's footprint is widely dispersed, and a very large percentage of the traffic that originates inside GTE's territory terminates with RBOCs other than Bell Atlantic.

2. The Merger Will Not Reduce Competition in Markets for Internet Services.

In addition to these familiar forecasts that the merged entity will engage in downstream discrimination against IXCs, the Big Three offer a new twist on the same theme, arguing that the combined company will be in a position to harm competition for broadband and Internet services by discriminating against rival ISPs in access to needed inputs like xDSL. This effort by the Big Three to throw stones at the GTE-Bell Atlantic merger is the height of irony, given MCI WorldCom's recent effort to monopolize the Internet backbone market -- an effort that was halted by this Commission and other regulators -- and AT&T's current attempt to secure exclusive control over a true unregulated Internet bottleneck into one-third of American homes. In any event, this argument fails for several reasons.

First, as is the case with respect to interLATA service, any incentive for ILECs to discriminate in the provision of necessary inputs to ISPs is already addressed by FCC regulations and oversight. The Commission addressed these alleged bottleneck concerns long ago in the Computer III proceedings, and competition has thrived under the rules that were set in place at that time.¹¹³

Second, the suggestion that ILECs control a bottleneck facility with respect to Internet traffic is unfounded. MCI WorldCom's own experts concede that any bottleneck concern "is ameliorated if other technologies emerge to provide broadband access for ISPs."¹¹⁴ One such

Amendment of Sections 64.702 of the Commission's Rules and Regulations, Report and Order, 104 F.C.C.2d 958 (1986).

Baseman-Kelley at ¶ 94 n.67.

alternative technology is cable modem access, which is rapidly being deployed today and which is the core of AT&T's high-profile investment strategy through its TCI acquisition. Cable modem access, of course, is not subject to the same regulatory requirements that apply to ILECs. and the AT&T-TCI merger is thus an example of an area where these bottleneck concerns actually are legitimate. Moreover, other high-speed means of accessing the Internet are already available. Larger customers can purchase dedicated connections directly from Internet backbone providers. As long as the backbone market remains competitive, therefore, there is no real threat of Internet monopolization. And, as explained above, this merger will actually help ensure that the backbone market remains competitive.

Finally, MCI-WorldCom's claim that the merged entity would somehow have a greater incentive and ability to engage in discriminatory self-dealing as a result of GTE's ISP presence ignores fundamental and obvious differences between the Internet backbone market and the ISP market. The Internet backbone market was sufficiently concentrated -- with MCI and WorldCom controlling substantial shares of the market -- that the divestiture of MCI's Internet assets was necessary to avoid a significant increase in the incentive to engage in discriminatory conduct. No similar danger exists here. Unlike the Internet backbone market, the ISP market is atomized and fully competitive with thousands of participants (with GTE and Bell Atlantic holding an insignificant position), 115 and the ISP access market does not feature the sort of delicate system of competitive peering between rival unregulated networks that characterizes the

¹¹⁵ See Public Interest Statement at 17.

Internet backbone market. Indeed, the fact that GTE's and Bell Atlantic's ISP affiliates hold such modest market shares is compelling evidence that the alleged discrimination either does not occur or is utterly ineffective.

C. Any Theoretical Concern Is Resoundingly Outweighed by the Merger's Broad Procompetitive Benefits.

For the reasons set forth above, the opponents' warnings that dire anticompetitive consequences will flow from the merger of Bell Atlantic and GTE are groundless. It bears emphasizing, however, that even were the Commission persuaded by some of the opponents' arguments, these concerns would not be sufficient to support a finding that the merger is not in the public interest. The Commission has stated on numerous occasions that it looks at both sides of the ledger in evaluating the competitive impact of a proposed merger -- not only at alleged competitive harms, but also at competitive benefits -- and that, accordingly, "[a] merger will be procompetitive if the harms to competition . . . are outweighed by benefits that enhance competition."

The critical inquiry, therefore, is not whether the merger would result in any theoretical loss of potential competition, no matter how minor or geographically isolated, but instead whether "the transaction on balance serves the public interest, convenience and necessity."

¹¹⁶ See Crémer-Laffont Declaration ¶¶ 61-63.

¹¹⁷ Bell Atlantic/NYNEX Order ¶ 2.

¹¹⁸ *Id.* ¶ 157 (emphasis added).

This merger confirms the wisdom of the Commission's holistic approach to assessing competitive impact: As explained in Part I above, consumers across the country will receive numerous, widespread, and significant benefits as a result of the merger, in markets for local, interLATA. Internet, and bundled services. This contrasts markedly with the Bell Atlantic/NYNEX merger, in which the efficiencies generated by the merger were confined to many fewer product markets and a much smaller geographic area. Our opponents would have to establish that the merger would produce severe and widespread anticompetitive consequences to offset those weighty benefits. And even were one to accept their claims that the merger would cause some incremental effect as a result of the removal of a potential competitor in pockets of Pennsylvania or Virginia, or of a marginal increase in a supposed incentive to discriminate, these slight anticompetitive effects would be emphatically outweighed by the nationwide benefits that will flow from this merger.

III. THE MISCELLANEOUS ALLEGATIONS OF BAD ACTS BY GTE AND BELL ATLANTIC ARE NOT GERMANE TO THIS PROCEEDING, ARE PROPERLY RESOLVED ELSEWHERE, AND ARE MERITLESS.

In what amounts to a tacit acknowledgment of the weakness of their economic arguments against the merger, the Big Three and other commenters attempt to shade the Commission's view of the proposed transaction by filling their pleadings with a litany of unrelated and unsubstantiated allegations against GTE and Bell Atlantic. They argue that Bell Atlantic has failed to honor the conditions imposed by the Commission in approving the Bell

¹¹⁹ Compare id. ¶ 160, 168, 173, 176.

Atlantic/NYNEX merger, and that both companies have committed various other bad acts. These allegations should not detain the Commission. As the Commission repeatedly has recognized, transfer application proceedings are not a forum for airing pre-existing grievances that do not bear on the central question whether this merger is in the public interest. That conclusion has particular force where, as here, all of these grievances -- including those relating to the NYNEX commitments -- are already the subject of ongoing proceedings before the Commission and other regulators. Although Bell Atlantic and GTE are entirely confident that the various complaints will be comprehensively addressed and rejected in those other proceedings, we offer brief responses to these non-germane allegations in the attached Appendices J and K, which show that Bell Atlantic has fulfilled the Bell Atlantic/NYNEX conditions and that the sundry other complaints are without merit.

IV. THE COMMISSION SHOULD REJECT ALL OF THE CONDITIONS PROPOSED BY THE APPLICANTS' COMPETITORS.

In all, the various merger opponents have proposed some three dozen conditions that, in their view, should be imposed on GTE-Bell Atlantic in the event the Commission permits the merger to go forward. All of these proposals should be rejected.

Many of the proposals bear no relation whatsoever to the claimed concerns of the merger, and are instead bald attempts by various parties to exact their "pound of flesh" from the

¹²⁰ See, e.g., SBC/PacTel Order ¶ 38; Bell Atlantic/NYNEX Order ¶ 290; In re Applications of Turner Broadcasting System, Inc., FCC 96-405, 11 F.C.C.R. 19595, at ¶ 33 (Oct. 9, 1996); In re Bell Atlantic Mobile Systems, Inc., 10 F.C.C.R. 13368, at ¶ 37 (May 14, 1995); In re Applications of Craig O. McCaw and AT&T, 9 F.C.C.R. 5836, at ¶ 123 (Sept. 19, 1994), aff'd sub nom SBC Communications. Inc v. FCC, 56 F.3d 1484 (D.C. Cir. 1995).

Applicants. Prominent in this category, for example, are the standardized conditions that the law firm of Swidler Berlin Shereff Friedman proposes on behalf of a group of CLECs. 121 Most, if not all, of these conditions flow from those carriers' interconnection-related grievances; as we have explained in Part III and the corresponding appendices, those complaints are not germane to this proceeding, and in any event lack merit. The content of interconnection agreements, moreover, should not be determined in this license-transfer proceeding, but rather through the system of case-specific negotiation and arbitration established by Congress in the 1996 Act. Complaints about alleged non-fulfillment of any such agreement likewise should be dealt with in the appropriate proceedings.

Those proposals that do purport to relate to the merger also should be rejected. *First*, the Commission should decline to impose its own set of performance conditions on the new company.¹²² Every state public utilities commission comprehensively and diligently monitors service quality performance, and will continue to do so after the merger. There simply is no need for the Commission to devote resources to duplicating that effort.

Second, a forced divestiture of assets, which is proposed in varying forms by some opponents, ¹²³ could only possibly be justified in the case of a horizontal merger between direct

See, e.g., Comments of Freedom Ring Communications, LLC, d/b/a BayRing Communications at 20-31; Comments of CTC Communications Corp. at 28-31; Comments of RCN Telecom Services, Inc. at 21-28.

See, e.g., Comments of CoreComm (hereafter CoreComm) at 31; Comments of KMC at 28; Comments of USXchange at 26.

See, e.g., MCI WorldCom at 56-57 (GTE should be required to divest in-region interLATA operations); Comments of Focal at 21 (same); Comments of Level 3 Communications at 12-15

competitors with significant overlapping operations. As we have shown in the Application and in these Reply Comments, however, this merger presents no issues of direct competition at all. ¹²⁴ And, as discussed, the *potential* competition arguments advanced by our competitors are shallow at best. Accordingly, there is no basis whatsoever for the Commission to condition its approval on a divestiture of either company's assets.

Finally, the Commission should reject the numerous proposals for imposing special market-opening conditions on the new company.¹²⁵ There is no public-policy rationale for imposing new regulatory requirements on GTE-Bell Atlantic that go beyond the legal obligations carefully crafted by Congress in the 1996 Act. As we have shown, the merger will not result in any loss of a significant and irreplaceable source of potential competition, or indeed cause any diminution of competition in a relevant market.¹²⁶ In particular, the special concerns that underlay the Bell Atlantic-NYNEX commitments are manifestly absent here. Indeed, because of the expansion of competition into new markets and the other very real procompetitive benefits

⁽new company should be required to divest "bottleneck facilities" such as loops and wire centers).

We addressed the overlaps of wireless territories in the Application and Public Interest Statement. Apart from the self-serving suggestion of Supra Telecommunications that the Applicants should be directed to sell their overlapping assets to Supra, see Comments of Supra Telecommunications at 30, the overlaps have rightly elicited no statements of concern from our opponents.

¹²⁵ See, e.g., MCI WorldCom at 57 (Commission should impose same conditions imposed in Bell Atlantic/NYNEX Order); CoreComm at 29 (Commission should require new company to develop immediately a new OSS/EDI system).

¹²⁶ See, e.g., Bell Atlantic/NYNEX Order ¶¶ 177-79.

that will flow directly from the combination of GTE and Bell Atlantic, this merger itself represents perhaps the best hope of achieving the market-opening objectives of the 1996 Act.

V. CONCLUSION

For all the foregoing reasons, and the reasons stated in GTE and Bell Atlantic's Public Interest Statement, the Application for Transfer of Control should be approved.

Respectfully submitted,

James R. Young
John Thorne
Michael E. Glover
Robert H. Griffen

BELL ATLANTIC CORPORATION 1095 Avenue of the Americas

New York, New York 10036

William P. Barr

GTE CORPORATION
One Stamford Forum

Stamford, Connecticut 06904

Steven G. Bradbury
Theodore W. Ullyot
John P. Frantz
Kelion N. Kasler
KIRKLAND & ELLIS

655 Fifteenth Street, N.W. Washington, D.C. 20005

R. Michael Senkowski WILEY, REIN & FIELDING 1776 K Street, N.W. Washington, D.C. 20006

Counsel for Bell Atlantic Corporation

Counsel for GTE Corporation

CERTIFICATE OF SERVICE

I hereby certify that on this 23rd day of December, 1998, I caused copies of the foregoing Joint Reply of GTE Corporation and Bell Atlantic Corporation to Petitions to Deny and Comments to be mailed via first-

class postage prepaid mail to the following:

Magalie Roman Salas Secretary Federal Communication Commission 1919 M Street, N.W. Room 222 Washington, D.C. 20554

Regina M. Keeney, Chief International Bureau 2000 M Street, N.W. Room 800 Washington, D.C. 20554

International Transcript Services, Inc. Attn: Duplicating Contractor 1231 20th Street, N.W. Washington, D.C. 20036

Michael Kende
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Jeanine Poltronieri
Wireless Telecommunications Bureau
2025 M Street, N.W.
Washington, D.C. 20554

To-Quyen Truong
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Radhika Karmarke
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Lisa Choi
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Janice Myles
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Bill Dever
Policy Programming Planning Division
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Cecilia Stephens
Policy Programming Planning Division
Common Carrier Bureau
Federal Communication Commission
1919 M Street, N.W., Room 544
Washington, D.C. 20554

Chief Commercial Wireless Division 2100 M Street, N.W., Room 7023 Washington, D.C. 20554

Robert V. Zener Swidler Berlin Shereff Friedman, L.L.P. 3000 K Street, N.W., Suite 300 Washington, D.C. 20007-5116 Counsel for GST Telecom Inc.

Morton J. Posner Swidler Berlin Shereff Friedman, LLP 3000 K Street, N.W., Suite 300 Washington, D.C. 20007-5116 Counsel for WorldPath Internet Services

Tom Krattenmaker
Office of Plans and Policy
Federal Communications Commission
1919 M Street, N.W.
Room 650-K
Washington, D.C. 20554

Lawrence E. Strickling
Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Room 500
Washington, D.C. 20554

Carol Mattey
Chief
Policy Programming Planning Division
Common Carrier Bureau
Federal Communication Commission
1919 M Street, N.W., Room 535-A
Washington, D.C. 20554

Consumers Union
Gene Kimmelman
Co-Director
1666 Connecticut Avenue, N.W.
Suite 310
Washington, D.C. 20009

Dana Frix
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, D.C. 20007-5116
Counsel for Hyperion Telecommunications, Inc.

Dr. Mark Cooper Research Director Consumer Federation of America 1424 16th Street, N.W., Suite 604 Washington, D.C. 20036 Alan Y. Naftalin
Peter M. Connolly
Koteen & Naftalin, L.L.P.
1150 Connecticut Avenue, N.W., Suite 1000
Washington, D.C. 20036
Counsel for United States Cellular Corporation

Russell M. Blau
Robert V. Zener
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, D.C. 20007-5116
Counsel for Focal Communications Corporation,
RCN Telecom Services, Inc.

Anthony C. Epstein
John B. Morris, Jr.
Stuart M. Rennert
Jenner & Block
601 Thirteenth Street, N.W.
Washington, D.C. 20005
Counsel for MCI WorldCom, Inc.

Terence J. Ferguson
Senior Vice President and Special Counsel
Level 3 Communications, Inc.
3555 Farnam Street
Omaha, NE 68131

Philip L. Verveer
Sue D. Blumenfeld
Michael G. Jones
Angie W. Kronenberg
A. Renee Callahan
Jay T. Angelo
Willkie Farr & Gallagher
Three Lafayette Centre
1155 21street, N.W.
Washington, D.C. 20036
Counsel for Sprint Communications Company
L.P.

William L. Fishman Swidler Berlin Shereff Friedman, LLP 3000 K Street, N.W., Suite 300 Washington, D.C. 20007-5116 Counsel for CTC Communications Corp.

Walter Fields
Executive Director
New Jersey Coalition for Local Telephone
Competition
P.O. Box 8127
Trenton, NJ 08650

Patricia A. Stowell
Public Advocate
Division of the Public Advocate
820 N. French Street, 4th Floor
Wilmington, DE 19801

Charles W. Totto
Department of Commerce and Consumer Affairs
State of Hawaii
250 S. King Street, #825
Honolulu, HI 96813

Robert J. Aamoth Melissa M. Smith Kelley Drye & Warren, LLP 1200 19th Street, N.W., Suite 500 Washington, D.C. 20036 Counsel for the Competitive Telecommunications Association

Charles C. Hunter
Catherine M. Hannan
Hunter Communications Law Group
1620 I Street, N.W., Suite 701
Washington, D.C. 20006
Counsel for Telecommunications Resellers
Association

John Cook, Assistant Consumer Counselor Indiana Office of Utility Consumer Counselor 100 North Senate Avenue, Room N501 Indianapolis, IN 46204-2208

Wayne R. Jortner Counsel Maine Public Advocate Office 112 State House Station Augusta, ME 04333-0112

Theresa V. Czarski
Assistant People's Counsel
Maryland People's Counsel
6 St. Paul Street, Suite 2102
Baltimore, MD 21202

Judith D. O'Neill
Nancy J. Eskenazi
Thelen Reid & Priest, LLP
701 Pennsylvania Avenue, Suite 800
Washington, D.C. 20004
Counsel for Tricom USA, Inc.

Martha S. Hogerty
Michael F. Dandino
Office of the Public Counsel
State of Missouri
Harry S. Truman Building, Suite 250
P.O. Box 7800
Jefferson City, MO 65102

Lawanda Gilbert
Assistant Deputy Ratepayer Advocate
New Jersey Division of the Ratepayer Advocate
31 Clifton Street, 11th Floor
P.O. Box 46005
Newark, NJ 07101

Kathleen F. O'Reilly Michigan Consumer Federation 414 "A" Street, S.E. Washington, D.C. 20003

Robert S. Tongren
Ohio Consumers' Counsel
Joseph P. Serio
Terry L. Etter
Assistant Consumers' Counsel
77 South High Street, 15th Floor
Columbus, OH 43266-0550

Ellis Jacobs, Esq.
Dayton Legal Aid Society
333 West 1st Street, Suite 500
Dayton, OH 45402

Robert T. Jenks
Executive Director
Citizens' Utility Board of Oregon
921 Southwest Morrison, Suite 511
Portland, OR 97205-2734

David W. Carpenter
Peter D. Keisler
C. Frederick Beckner III
Sidley & Austin
One First National Plaza
Chicago, IL 60604
Counsel for AT&T Corp.

Michael J. Hunseder Sidley & Austin 1722 Eye St., N.W. Counsel for AT&T Corp.

Elliot F. Elam, Jr., Staff Attorney
Philip S. Porter, Consumer Advocate
Nancy Vaughn Coombs, Deputy Consumer
Advocate
The South Carolina Department of Consumer
Affairs
2801 Devine Street
P.O. Box 5757
Columbia, SC 29250-5757

Thomas K. Crowe
Elizabeth Holowinski
Law Offices of Thomas K. Crowe, P.C.
2300 M Street, N.W.
Suite 800
Washington, D.C. 20037
Counsel for the Commonwealth of the Northern
Mariana Islands

William McCarty
Chairman of the Indiana Utility Regulatory
Commission
302 West Washington Street
Suite E306
Indianapolis, IN 46204

Rick Guzman
Assistant Public Utility Counsel
Texas Office of the Public Utility Counsel
P.O. Box 12397
Austin, TX 78711-2397

Pat Wood, III, Chairman
Judy Walsh, Commissioner
Patricia A. Curran, Commissioner
Public Utility Commission of Texas
1701 N. Congress Avenue
P.O. Box 13326
Austin, TX 78711-3326

Billy Jack Gregg
Gene W. Lafitte, Jr.
Consumer Advocate Division of the Public
Service Commission of West Virginia
700 Union Building
Charleston, WV 25301

Leonard J. Kennedy
David E. Mills
Laura H. Phillips
Dow, Lohnes & Albertson, PLLC
1200 New Hampshire Avenue, N.W.
Suite 800
Washington, D.C. 20036-6802
Counsel for Triton PCS, Inc.

Mark Buechele, Esq.
David Dimlich, Esq.
Supra Telecommunications & Information
Systems, Inc.
2620 S.W. 27th Avenue
Miami, FL 33133

Brad E. Mutschelknaus
Andrea D. Pruitt
Kelley Drye & Warren, LLP
1200 19th Street, N.W.
Suite 500
Washington, D.C. 20036
Counsel for e.spire Communications, Inc.

Eric J. Branfman
Eric N. Einhorn
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, D.C. 20007-5116
Counsel for CoreComm, Ltd., Freedom Ring
Communications, LLC, Paetec
Communications, Inc., State Communications
Inc.

Mary C. Albert Swidler Berlin Shereff Friedman, LLP 3000 K Street, N.W., Suite 300 Washington, D.C. 20007-5116 Counsel for KMC Telecom, Inc.

Cherie R. Kiser
William A. Davis
Gil M. Strobel
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo,
P.C.
701 Pennsylvania Avenue, N.W
Suite 900
Washington, D.C. 20004-2608
Counsel for Cablevision LightPath, Inc.

William A. Davis
Gil M. Strobel
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo,
P.C.
701 Pennsylvania Avenue, N.W.
Suite 900
Washington, D.C. 20004-2608

Maureen Lewis, General Counsel Donald Vial, Policy Committee Chair The Alliance for Public Technology 901 Fifteenth Street, N.W., Suite 230 Washington, D.C. 20005

Scott Blake Harris
Jonathan B. Mirsky
Harris, Wiltshire & Grannis, LLP
1200 Eighteenth St., NW
Washington, D.C. 20036
Counsel for Pilgrim Telephone

Martin O'Riordan EMC Corp. 171 South Street Hopkinton, MA 01748-9103

Todd McCracken, President National Small Business United 1156 15th Street, N.W., Suite 1100 Washington, D.C. 20005-1711

Irvin W. Maloney, Director Occidental Petroleum Corp. 1640 Stonehedge Rd. Palm Springs, CA 92264 Linda F. Golodner, President National Consumers League 1701 K Street, N.W., Suite 1200 Washington, D.C. 20006

Bear, Stearns and Co., Inc. Attn: John Vitale, Managing Director 245 Park Avenue New York, NY 10167

Debbie Goldman Communication Workers of America 501 Third Street, N.W. Washington, D.C. 20001

James L. Gattuso, V.P.
Competitive Enterprise Institute
1001 Connecticut Avenue, N.W.
Suite S.1250
Washington, D.C. 20036

Angela D. Ledford, Executive Director Keep America Connected P.O. Box 27911 Washington, D.C. 20005

Kim D. Wallace, Public Policy Coordinator Alpha One 127 Maine Street South Portland, ME 04106

Sheldon E. Steinbach, Vice President & General Counsel
American Council on Education
One Dupont Circle, N.W.
Washington, D.C. 20036

Florence Rice, President
Harlem Consumer Education Council
Triborough Station
P.O. Box 1165
New York, NY 10035

Ann Gross
National Association of College and University
Business Officers
2501 M Street, N.W., Suite 400
Washington, D.C. 20037

Patricia T. Hendel, President National Association of Commissions for Women 8630 Fenton Street, Suite 934 Silver Spring, MD 20910-3803

Aliceann Wohlbruck, Executive Director National Association of Development Organizations 444 North Capitol Street, N.W., Suite 630 Washington, D.C. 20001

Garry A. Mendez, Jr., Executive Director
The National Trust for the Development of
African American Men
6811 Kenilworth Road
Riverdale, MD 20737

Milton J. Little, Jr., Executive Vice President National Urban League 120 Wall Street New York, NY 10005 Cherly Heppner, Executive Director
Northern Virginia Resource Center for the Deaf
and
Hard of Hearing Persons
10363 Democracy Lane
Fairfax, VA 22030

Jordan Clark, President United Homeowners Association 655 15th Street, N.W., Suite 460 Washington, D.C. 20005

Anne Werner, President & CEO United Seniors Health Cooperative 409 Third Street, S.W. Second Floor Washington, D.C. 20024 Deborah Kaplan, Executive Director World Institute on Disability 510 16th Street Oakland, CA 94612

Thomas A. Hart, Jr.
Shook, Hardy & Bacon
1850 K Street, N.W.
Suite 900
Washington, D.C. 20006-2244
Special Counsel to Rainbow/PUSH Coalition

Christopher A. McLean
Deputy Administrator
United States Department of Agriculture
Rural Development
Washington, D.C. 20250

Stephanie Edwards Williams

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D.C. 20554

In the Matter of)
GTE CORPORATION, Transferor And) CC Docket No. 98-184
BELL ATLANTIC CORPORATION, Transferee)
For Consent to Transfer of Control.))
)
)

Declaration of David J. Teece On behalf of GTE Corporation and Bell Atlantic Corporation

December 18, 1998

TABLE OF CONTENTS

I.	Purpose of Declaration	1
II.	Introduction	4
III.	The Proposed Merger Will Enhance Competition In Local Exchange Services	6
IV.	The Proposed Merger Will Enhance Competition In Long Distance Voice and Data Services	20
V.	The Proposed Merger Will Enhance Competition In Internet Services	24
VI.	Conclusion	26

I. PURPOSE OF DECLARATION

A. Purpose of Declaration

1. In this declaration I show that the merger of Bell Atlantic and GTE will have substantial pro-competitive effects, and is, therefore, in the public interest. Specifically, the merger of GTE and Bell Atlantic will have six specific, pro-competitive benefits. First, this merger allows the applicants to combine their complementary product and skill sets particularly in advanced voice and data services and Internet services - and thus obtain the necessary competencies required to offer a national facilities-based bundled offering. Second. the merger will introduce a strong and effective competitor to local markets across the country. Third, the combined company will have the presence and resources to develop a truly national brand, and thereby enhance competition amongst the top tier of telecommunications providers. Fourth, the merger will produce significant economies of scale and scope, and therefore improve the cost competitiveness of the enterprise, as well as promoting consumer welfare through lower prices. Fifth, the ability to sell GTE's long distance and data capabilities through Bell Atlantic's sales channels will enhance the cost-competitiveness of the GTE data and long-distance network. Sixth, the merger will enhance the competitive standing of GTE's Internet backbone network thereby crimping any possible efforts to dominate this market.¹

A disproportionately large Internet backbone provider, or an oligopoly of backbone providers, could seriously harm competition through a strategy of targeted degradation in its peering connections with other unregulated backbone providers. See Jacques Crémer, Patrick Rey, and Jean Tirole, *The Degradation of Quality and the Domination of the Internet*, prepared for GTE Communications Corporation, April 8, 1998, at p.9. The Crémer-Rey-Laffont paper is cited, inter alia, in the Baseman-Kelley Declaration at 95, p. 54. See also Jean-Jacques Laffont, Patrick Rey, and Jean Tirole, *Network Competition: I. Overview and Non-discriminatory pricing*, RAND Journal of Economics Vol. 29, No. 1, Spring 1998 pp. 1-37, also cited by Baseman and Kelley.

2. The merger does not create anti-competitive effects as Bell Atlantic and GTE are generally not direct or potential competitors,² and the merger is not likely to increase discrimination by the combined ILECs in either vertically or horizontally related services.³ I therefore conclude that the merger of Bell Atlantic and GTE will strongly enhance competition and advance the interests of consumers. Accordingly, the companies' application should be approved.

B. Qualifications

I am Mitsubishi Bank Professor, Haas School of Business, and Director, Institute for Management, Innovation and Organization, University of California at Berkeley and Chairman of the Law & Economics Consulting Group. I have been a full professor at Berkeley since 1982. Prior to that, I was Assistant and then Associate Professor of Business Economics at the Graduate School of Business, Stanford University. I received my Ph.D. in Economics from the University of Pennsylvania in 1975. As an industrial organization economist, I have studied the economics of technological change, competition policy, and business strategy issues for over two decades. At UC Berkeley, I was the Co-founder of the Management of Technology Program, a joint program between the School of Business and College of Engineering, and the Consortium on Competitiveness and Cooperation, a multi-campus research program linking scholars at Berkeley, Stanford, Columbia, Harvard and Wharton who have interests in the long-run performance of the U.S. in the global economy. I am also Chairman of the Consortium for Research on Telecommunications Policy Program, a multi-campus research group with active nodes at UC Berkeley, the University of Michigan, and Northwestern University.

² See accompanying Declaration of Robert H. Gertner and John P. Gould on behalf of Bell Atlantic and GTE, hereinafter referred to as Gertner-Gould Declaration, at ¶ 8.

³ See accompanying Declaration of Robert W. Crandall and J. Gregory Sidak on behalf of Bell Atlantic and GTE, hereinafter referred to as Crandall-Sidak Declaration, and accompanying Declaration of Jacques Crémer and Jean-Jacques Laffont on behalf of Bell Atlantic and GTE, hereinafter referred to as Crémer-Laffont Declaration.

4. My research has been centrally concerned with the relationship between the structure of firms (especially the scope of their activities) and their performance, particularly the capacity to develop and introduce new technologies. I have had a special interest in innovation, organizational structure and antitrust. Relevant books include Economic Performance and the Theory of the Firm (1998), Strategy, Technology and Public Policy (1998), Antitrust, Innovation, and Competitiveness (1992, with T. Jorde) and The Competitive Challenge (1987). Relevant papers include, "Competition and Cooperation: Striking the Right Balance," California Management Review (Spring 1984, with T. Jorde); "Telecommunications in Transition: Unbundling, Reintegration, and Competition," Michigan Telecommunications and Technology Law Review, 4 (1995); and "Competition and Unbundling in Local Telecommunications: Implications for Antitrust Policy" (with Robert G. Harris and Gregory L. Rosston) published in Towards a Competitive Telecommunications Industry; Selected Papers from the 1994 Telecommunications Research Conference, Gerald Brock (ed.) (Lawrence Erlbaum Associates 1995). In previous submissions to the Department of Justice and the FCC, I have devoted considerable attention to studying the competitive dynamics of the telecommunications industry and to developing and implementing a methodology with which to assess the competitive environment. A copy of my curriculum vitae is attached as Attachment 1.

II. INTRODUCTION

- 5. The competitive landscape in telecommunications has changed dramatically in the past two decades. Prices have dropped and the U.S. has gone from effectively one provider (AT&T) with two primary services (local loop and long distance) to multiple technologies and multiple providers for each competing technology. Similarly, the needs of a typical consumer (business and residential) have changed dramatically over the same period: digitalization and the decrease in transmission costs have made it increasingly attractive to use telecommunications and data services, meanwhile service complexity has increased with the explosion of wireless, fax, data and Internet services.
- 6. What once was a very simple purchasing decision for consumers has become tremendously complicated. Consumers now face a plethora of barely understood technologies each touting its presumed superiority over other barely understood technologies: digital TDMA vs. CDMA PCS, "wireless" fiber v. WDMA, xDSL vs. cable modems, IP vs. frame relay or ATM, voice over IP vs. POTS, and so forth. Adding to the complexity is the fact that each of these services is provided by a host of competing companies each of which touts its presumed superiority. Cutting through the clutter of technologies and providing reliable service is going to be essential to winning over customers.

"The 'advantages are not going to be that we have technology that no one else has.' Instead, the market is 'going to be won by better understanding the customer and getting services in the right places."

Quentin Hardy, Bypassing the Bells - A Wireless World, Wall Street Journal, Sep. 21, 1998, Section R, quoting Lawrence K. Vanston, Technology Futures Inc.

- 7. Currently, AT&T, MCI WorldCom and Sprint are all working to offer national-level, bundled service offerings to simplify the purchase decision for the consumer.⁵ The merger of Bell Atlantic and GTE will create an additional competitor with the capability to offer nationally bundled services.
- 8. The combined GTE Bell Atlantic will be able to offer a package of facilities-based local, long distance, and advanced data services to business and residential customers across the nation. Separately, Bell Atlantic and GTE each possess part of a full-service bundled offering and customer base. Bell Atlantic brings strong wireline and wireless businesses and strong relationships with large business customers. Complementing Bell Atlantic's strengths, GTE has a rapidly growing presence in voice-grade and data long distance transmission and Internet backbone services, as well as slightly smaller wireline and wireless businesses. The combination will provide a full suite of services to customers.
- 9. Simply offering a competitive full-service bundle of telecommunications services will not guarantee success. The merged Bell Atlantic and GTE will also need to develop a brand that will stand out and be recognized and valued by potential customers. Separately, neither

⁵ For example, AT&T's stated strategy is "to rapidly increase the company's revenue, especially at its fast-growing networking services unit, AT&T Solutions. 'These strategic agreements are all about growth,' said AT&T Chairman and CEO C. Michael Armstrong. 'Growth in revenue, growth in technology, and - most important growth in what AT&T can do for customers." Company Press Release, AT&T To Acquire IBM's Global Network Business For \$5 Billion, Dec. 8, 1998. The IBM acquisition complements AT&T's portfolio of wireless services, cable-TV partnerships, international partnerships, and voice and data long-distance services. "The AT&T-BT joint venture, announced July 26, is a key element of AT&T's overall growth strategy and represents a critical global complement to agreements struck with TCG and TCI, which expand the company's ability to deliver digital broadband and IP services to customers in the United States." Company Press Release, AT&T launches AT&T Concert Services for Customers in U.S., November 11, 1998; see AT&T, Time Warner May Be Near Deal, Washington Post, Dec. 9, 1998. Other IXCs, such as MCI WorldCom and Sprint, are developing comparable packages of bundled services. Other non-traditional competitors, such as cable operators like Cox and Comcast, are entering the local exchange market by bundling local telephony, high-speed Internet and digital multi-channel TV services. "Cox is aggressively launching digital television, high-speed Internet access, and telephony, evolving the company in to the most aggressive in new product introduction." Thomas Eagan, Cox Communications, Paine Webber Research Note, Nov. 30, 1998, at p.1.

brand has sufficient recognition beyond its current service territories to stand out in a marketplace populated with well-known brands such as AT&T, MCI WorldCom and Sprint. The combined firm will have all the resources to develop a new national brand to attract customers to the new product suite.

10. The merger of Bell Atlantic and GTE will stimulate additional competition in all the markets where the companies are or intend to be active: local exchange, national bundled services, long distance and Internet/data. In the local exchange, the merger will give the combined companies a compelling product offering, strategic beachheads from which to enter other local markets and the potential to create a strong brand – all of which will facilitate the companies' entry into regions outside their existing territories. The combined companies will be able to offer a broad range of products and services to large business customers nationwide. In the long distance and Internet markets, GTE will be able to use Bell Atlantic's existing marketing and sales channels to increase the utilization of GTE's national, high-speed backbone and provide the impetus for expansion of that backbone.

III. THE PROPOSED MERGER WILL ENHANCE COMPETITION IN LOCAL EXCHANGE SERVICES

A. The Combination Will Create an Effective Competitor in the Provision of Local Exchange Services Out-Of-Region

11. The combination of Bell Atlantic and GTE will significantly increase competition in local exchange services by enabling the two companies to compete more effectively out of their traditional local exchange territories. Out-of-region competition requires a different arsenal of branded offerings and organizational capabilities when compared with wireline service provided by incumbent local exchange carriers ("ILECs"). Out-of-region customers must be

won one-by-one, and substantial and risky facilities investments must be made before entry can occur.

12. ILECs need to have both a full and compelling product portfolio, a strong brand identity, and broad national geographic coverage to be able to succeed in the provision of competitive out-of-region local exchange service across numerous dispersed markets. The merger allows Bell Atlantic and GTE to take an important step towards fulfilling these three requirements. The combined entity will have a robust product portfolio, improving the value proposition of its competitive local exchange service by bundling it with long-distance voice/data services (especially Internet Protocol based services), and wireless services. The combined company will have a broad geographic coverage and existing relationships with key multilocation business customers. This can provide a strong base to build a brand with nationwide recognition, the third benefit identified above. While both Bell Atlantic and GTE have strong brand names in their ILEC territories, their brand identity out-of-region is quite weak. The initial step will be through selling GTE's advanced voice and data products into the multi-location customer base already served by Bell Atlantic. Below, I discuss why Bell Atlantic needs to respond to the change in today's competitive marketplace, the increasing demand for broadbased, bundled and branded services. Not only is the merger a strategically appropriate response to these changes in the marketplaces, it also enhances out-of-region local exchange competition by making the combined company a more effective competitor.

B. Consumers Favor Bundled Product Offerings

13. The requirements for competitive success in local services are changing rapidly, at least for the ILECs. In the past, ILECs could succeed by managing operations to achieve a low-cost, high-quality service. Now, they must also compete for customers. This competition is no longer based solely on cost and quality; it is increasingly based on the ability of the LEC to simplify the purchase decision and the management function for the consumer.

- 14. New technological opportunities are propelling an explosion in consumer demand for telecommunications services. However, new options are also adding complexity and confusion. Where consumers could only choose local and long distance voice service, a typical customer may now have access to, and demand for, wireless service, high-speed data and Internet access along with the local and long distance voice. Moreover, the once rigid lines between these services are starting to blur. Dramatic demand increases coupled with competition has brought forth a wide array of both technologies and providers. What was once a very simple decision for the consumer (one provider of local service, three major providers of long distance) has mushroomed into a complex decision involving choices among technologies and providers.
- 15. Adding further difficulty to the consumer's decision is uncertainty about the quality of the service prior to purchase. Telecommunications services are referred to as "experience goods" because there is no way to know, in advance of using or experiencing the service, the quality of the service. For such goods, consumers typically rely heavily on brands and word-of-mouth for their quality perceptions.
- 16. AT&T has clearly decided that bundled national services make business sense and is actively gathering customers:

"The Securities Industry Association (SIA) and New York Clearing House Association (NYCHA) have contracted with AT&T to provide their members a full range of local communications services in locations across the United States. The contract ... expands upon an existing local services contract [with] Teleport Communications Group (TCG), which merged with AT&T in July. AT&T will provide ... a full portfolio of local voice, data and Internet services in New York, Boston and Philadelphia immediately, and in a total of 25 major cities across the U.S. by the first quarter of 1999. AT&T's unified local service offer affords SIA/NYCHA members the advantage of obtaining local service for all their locations from a single provider, instead of negotiating with myriad local phone companies around the country. Additionally, AT&T will offer a single bill

aggregating local service charges from multiple cities and for multiple services, with discounts across all the locations and services." [emphasis added]⁶

- 17. Therefore, Bell Atlantic and GTE must simplify the complexity and uncertainty of purchase for consumers in order to compete successfully for local exchange service out of their historical territories. Specifically, to be successful in their national, out-of-region strategy, Bell Atlantic and GTE must provide:
 - A bundle of services that will meet all the needs of the typical customer (e.g., local voice and data, long distance voice and data, and wireless);
 - A strong brand name or customer presence.
- 18. The combination of Bell Atlantic and GTE will be strongly pro-competitive and enhance consumer welfare by creating a company that can meet the new requirements for success. In meeting these requirements, the combined company will increase customer satisfaction and the level of competition in local markets.

C. The Eroding Position of the Traditional ILEC

19. The current strategic position of ILECs is precarious, as vigorous competition is coming from competitive local exchange carriers (CLECs) for local wireline service is expanding rapidly. Competitors are entering through both wireline technologies, such as AT&T's TCG unit, or MCI WorldCom's MFS-Brooks-MCIMetro unit, and super-broadband wireless technologies, such as Teligent. In addition, ILEC customers are already purchasing advanced telecommunications services (such as data transport and wireless) from other providers. These advanced services are capturing an ever-increasing portion of the customer's spending and are even starting to replace the core local wireline business. This combination of effects is eroding

^{6 &}quot;AT&T Signs 3-Year, \$180-Million Local Services Agreement with Financial Services Firms," PR Newswire, Dec. 9, 1998.

the traditional ILEC revenue and profit base. The historic value proposition of the ILEC is no longer viable.

20. This two-pronged attack on the ILEC's local wireline business has been well recognized by investment analysts, stressing the need for ILECs to broaden both their geographic and product portfolios quickly:

"Again, as we said in the past, if an RBOC acquires assets or capabilities that take them away from being a regional carrier on defense into a more offensive, fully integrated national or even global provider then we would gladly rethink our investment position on that particular RBOC.

. . .

First quarter 1998 was a very significant watershed event because it showed that we are past the point of no return in terms of the Bells' ability to defend their market share."

21. The investment and research community also believes that ILECs need to actively address the data market lest they get pushed into the position of a marginal supplier of commodity services:

"With data rapidly overtaking voice calls as the primary traffic on phone networks worldwide, the big phone companies [ILECs] need to retool their systems, lest rivals lure away their high-spending business and residential customers. . .relegating the Bells to the role of a wholesaler of dumb wires."

22. This shift towards data traffic is being driven primarily by the Internet and its demand for ever-increasing bandwidth. As a response to the increasing demand for high-speed access to the Internet, new technologies are becoming available that make it dramatically cheaper to obtain that access. Previously, high-speed access required T-1 technology at approximately \$1,000 per month -- affordable only for very large businesses. Now high-speed access can be

Jack Grubman, CLECs Surpass Bells in Net Business Line Additions For First Time, Salomon Smith Barney, May 6, 1998, Part II p.1 (hereinafter "Grubman").

Stephanie N. Mehta and John J. Keller, "Sprint Plans to Integrate Voice, Data," Wall Street Journal, June 3, 1998, p. A3.

obtained at T1 equivalent speeds through xDSL and cable modems for hundreds (or even tens) of dollars per month. Consumption of high-bandwidth services is therefore set to explode.

- 23. Bell Atlantic and GTE are under attack from two directions. First, they are under head-on attack from CLECs, which quite rationally are going after the high-volume large business customer base with bundled voice and data products. CLECs have made tremendous inroads, and are attracting the majority of new business lines, indicating very substantial local competition.⁹
- 24. The second attack is coming from substitution of wireless for local wireline service. Technology Futures Inc. predicts 30%-40% wireline market share loss to wireless within 10 years, ¹⁰ a trend confirmed by the CEO of Sprint PCS Corp.:

"[M]any of our customers are beginning to use their Sprint PCS phones for more of their communication needs

. .

In a few cases, customers are actually disconnecting their land-line service and using Sprint PCS to make and receive all their calls at home. With Sprint PCS, consumers have a wireless phone that offers all the features, benefits and voice quality of land-line phone service with the added convenience of mobility."

25. AT&T Wireless is already competing directly with GTE's ILEC operation in Plano, Texas, offering a wireless second line replacement plan that appears price competitive with GTE's wireline service. Prospective share loss to CLECs and wireless providers combines to make the outlook for the traditional wireline voice business particularly unattractive. The

⁹ Grubman, supra note 7.

¹⁰ Technology Futures Inc., Bypassing the Bells, supra note 4.

[&]quot;Sprint PCS Reaches One Million Customers," quoting Andrew Sukawaty, CEO of Sprint PCS, Sprint PCS Press Release, see (www.sprintpcsnews.com/releases/98_02_03.html), February 3, 1998.

¹² AT&T is offering its digital wireless service in Plano (part of the Dallas-Fort Worth metropolitan area) in a package designed to attract customers interested in second lines for their businesses or homes. By offering a \$40 monthly package of unlimited local calling bundled with voicemail, caller ID, call waiting, call forwarding, three-way conferencing, and 10 cents-per-minute long-distance service, AT&T hopes to attract second-line customers to its standard wireless service.

profitable segments are rapidly being eroded while the ILECs are saddled with low-revenue, high-cost consumers as they are the carrier of last resort.

- 26. Successful entry into the new data intensive market segment is an imperative for Bell Atlantic but this move is fraught with difficulties, as existing competitors in the data intensive segment have comparable financial strength. These competitors include:
 - AT&T/TCI/TCG
 - MCI WorldCom
 - Sprint/France Telecom/Deutsche Telekom
- 27. AT&T's proposed acquisition of IBM's Global Network and proposed partnership with Time-Warner will put AT&T out ahead in the race to be the major provider of integrated local and long-distance data services.

"AT&T would pay three-quarters of the cost of upgrading Time Warner's cable systems to handle voice transmissions. AT&T, in turn, would get three-quarters of the revenues from selling the local phone service. A Time Warner Inc. pact would cap an unprecedented deal-making spree by AT&T Corp., including an agreement Tuesday to buy IBM's data-networking business for \$5 billion. This fall, AT&T agreed to buy cable giant Tele-Communications Inc., for \$31.7 billion, but TCI's cable TV lines are able to reach only about one-third of U.S. homes." 13

28. The combination of GTE and Bell Atlantic will bring GTE's strength in data initially to Bell Atlantic's customers and eventually outside of Bell Atlantic's region. The combined company will have the strength to compete successfully both in and out of its region.

D. The Strategic Requirement for Bundling

29. An ILEC (e.g., Bell Atlantic or GTE) entering an out-of-region market needs to differentiate its products from those of the ILEC and pre-existing CLECs in order to sign up

¹³ Associated Press Online - December 9, 1998.

enough customers to make entry profitable. That differentiation is most likely to come through provision of an attractive bundled offering, which would combine competitive local exchange service with voice and data long distance, high-speed data, Internet access and transport, and wireless service. This need to provide bundled services is well understood by AT&T:

"AT&T's national footprint and full range of local services make it a natural match for us," said H. Pim Goodbody Jr., vice president of management services for SIA. 'Many of our members maintain offices in a number of cities, so being able to work with a single company for a nationwide portfolio of local services is a tremendous benefit." 14

30. Bundling is being used quite successfully by CLECs as a point of differentiation with the local ILEC. In addition, CLECs employ bundling in other markets to differentiate their product and attract new customers. In wireless, both Sprint PCS and AT&T (Digital One-RateTM) are using bundling. The very positive response has sent a very strong message that bundling is perceived by the consumer as providing a price value as well as simplified pricing structure. On a national level, a similar trend is occurring as AT&T is successfully working with its newly acquired TCG subsidiary to provide "one stop shopping" for telecommunications services to large national businesses. The success that AT&T in particular has demonstrated with bundled products is likely to be replicated in the local market. Consumers appear to desire strongly simplified price structures and the perception of better value that comes with a bundled offering.

^{14 &}quot;AT&T Signs 3-Year, \$180-Million Local Services Agreement with Financial Services Firms," PR Newswire, Dec. 9, 1998.

E. The Need for a Brand

31. Integrated telecommunications providers will require their brand to provide consumers with assurances of product quality¹⁵ and a greater sense of comfort with their purchase decision.¹⁶ Brands are especially effective when they are recalled at a key time in the purchasing process,¹⁷ and when buyers can use them to reduce evaluation costs.¹⁸ As telecommunications carriers develop an integrated product portfolio bundling voice/data, local/long-distance, and wireline/wireless, buyers will rely on brands, making brands a key strategic asset.¹⁹ Brands are also extremely valuable in the business segment, as well as in the residential segment.²⁰

^{15 &}quot;In the absence of a direct, face-to-face supplier-customer relationship, a brand serves as a means of assuring product authenticity and consistency of quality – it is, in effect, a promise or 'pact' between manufacturer and buyer. The brand name assures us that the features, functions and characteristics of the brand will remain invariable from purchase to purchase. In this way, the brand provides its maker with the means to provide consistently the consumer with intrinsic value or the illusion of such value, or both.

increasingly in industrial and service sectors brands help us find what it is we are looking for in a sea of apparent sameness. No small contribution in, and of, itself. Brands facilitate product or service specification, and allow customers to simplify choice and, ultimately, their selection. This is particularly important where actual tangible product-differences are subtle, almost non-existent or invisible, such as in many areas of high technology, telecommunications, and in the very near future, utilities." See Perrier, *Brand Valuation*, 1997, p. 5.

^{16 &}quot;Brand awareness can provide a host of competitive advantages. First, awareness provides the brand with a sense of familiarity, and people like the familiar." See David Aaker, "Managing Brand Equity," 1991, p. 208.

¹⁷ "[T]he salience of a brand will determine if it is recalled at a key time in the purchasing process. For instance, the initial step in [product selection] is to decide on which brands to consider." *Id.*, p. 208.

[&]quot;Buyer evaluation costs: As buyers face increasing problems in evaluating competing products they seek ways of economizing on evaluation costs. The most common tactic is to free-ride on the presumed analyses of the well informed and buy the market leader." Richard P. Rumelt, "Theory Strategy and Entrepreneurship," The Competitive Challenge, 1987, p. 147.

[&]quot;Brand awareness is often taken for granted but, in fact, it can be a key strategic asset. In some industries where there is product parity, awareness provides a sustainable competitive difference" David Aaker, Strategic Market Management, 1995, p. 208.

Bell Atlantic finds that its brand familiarity, product associations and customer loyalty differs only slightly between the residential and business segments. Customers in either segment generally appear equally willing to try other providers (or stay with Bell Atlantic). See Data Development Corporation, "Bell Atlantic Brand Tracking Study; The Business Market; 2nd Quarter Presentation," and "Bell Atlantic Brand Tracking Study; The Residential Market; 2nd Quarter Presentation", October, 1998.

32. The issue facing all ILECs is that the AT&T, MCI WorldCom and Sprint brands have much higher unaided recall (asking consumers what names come to mind when they think about telecommunications), as shown in the table below.

Table 1: Consumers' Unaided Recall by Telecommunications Brand²¹

Brand	Unaided Recall
AT&T	90%
MCI WorldCom	69%
Sprint	69%
GTE ²²	29%
BOCs ²³	36%

33. As a result of the powerful AT&T brand, the residential population in every single region of the country is more likely to select AT&T as its choice of local and long distance carrier instead of the incumbent local exchange carrier, as shown in the table below. Consequently, AT&T has a good chance of achieving dramatic share gains in every segment of the country – based almost exclusively on its brand name – once the company begins massmarket provision of local service.

²¹ Id.

²² Out-of-region, 68% in-region.

²³ Out-of-region, 49% in-region.

Table 2: Preferred Provider of Residential Long Distance and Local Service^{24,25}
AT&T vs. ILEC, By ILEC Territory

	Proportion of Customers Choosing	
ILEC Territory	AT&T	ILEC
Ameritech	38%	35%
Bell Atlantic North	48%	24%
Bell Atlantic South	45%	23%
BellSouth	38%	30%
GTE	50%	29%
SBC Pacific	39%	26%
SBC (Southwest)	43%	31%
US West	45%	23%

34. In all cases the ILEC's brands are virtually unknown out-of-region. This lack of brand recognition out-of-region is a fundamental obstacle that any ILEC must overcome before a successful move can be made out-of-region. Neither Bell Atlantic nor GTE currently have a brand that is compelling outside of their existing service territory. Bell Atlantic's brand is well regarded but relatively unknown outside its territory, while GTE's brand is better known on a national level, but without strong associations:

"Currently, GTE suffers from a general lack of distinction. We are only associated with passive qualities such as 'established,' 'stable,' and 'friendly.' This lack of a meaningful perceptual ownership exposes GTE to risk in an emerging, dynamic marketplace."²⁶

The Yankee Group, AT&T Press Release "Yankee Group Survey finds consumers opt for AT&T as single provider," 1/20/98, (http://www.att.com/press/0198/980120.cha.html). The Yankee Group survey asked residential customers which company they would choose to be a single provider of local and long-distance telephone service.

Data Development Corporation, "Bell Atlantic Brand Tracking Study, The Residential Market, 3rd Quarter Presentation," October, 1998.

²⁶ GTE, "GTE Brand Equity Analysis," October 22, 1998.

- 35. The merger of Bell Atlantic and GTE is therefore a sound approach to position the combined company's brands for the evolution of telecommunications competition. Regional recognition as a local service provider is not sufficient—to compete successfully outside the existing territories, Bell Atlantic and GTE need to develop a nationally recognized and respected brand.
- 36. While a cursory analysis suggests that either Bell Atlantic or GTE would have the financial resources to build a national telecommunications brand, neither company starts with a brand that is likely to be successful on a national scale, and neither company alone has any strong product claims on which to base a brand. Building a national brand is already very expensive: AT&T spent over \$1 billion on advertising alone in 1996 (not counting the cost of creative development), and major telecommunications companies increased their advertising spend by over 20% between 1996 and 1997.²⁷
- 37. The combination of Bell Atlantic's products with GTE's will provide, for the first time, a competitive nationally bundled offering that will be differentiated in the marketplace. Using this offering, the combined entity can develop a strong brand and national presence that will allow it to enter other local markets successfully.

F. Summary of Pro-competitive Local Exchange Benefits

38. In summary, the merger of Bell Atlantic and GTE will, for the first time, create an ILEC that will have the assets needed for success in the rapidly evolving market for local telecommunications. The companies have an excellent chance of becoming an effective out-of-region local competitor. The merger of Bell Atlantic and GTE is not the merger of two essentially similar ILECs. Rather, it is a merger of companies possessing complementary

Advertising Age estimates that the average yearly advertising spend of a large telecommunications company increased 22% from 1996 to 1997, from \$364 million to \$347 million. Advertising Age, (www.adage.com/dataplace/archives/dp268.html) and (www.adage.com/dataplace/archives/dp267.html).

capabilities and products. These complementary products can be bundled and used by Bell Atlantic and GTE to provide a differentiated local service offering likely to be compelling to customers.

- 39. The combination will create numerous strategic beachheads from which to establish new service areas outside of their existing territories. These beachheads are a combination of the existing GTE territories on the outskirts of major metropolitan areas and Bell Atlantic's large business customers.
- 40. Bell Atlantic brings an established customer base that includes many large companies. These large customers can provide the strategic beachheads for out-of-region entry. The combination of Bell Atlantic's customers with GTE's existing territories will provide the combined entity with multiple points of entry into new regions (e.g., Los Angeles, San Francisco, San Diego, Dallas-Fort Worth, Houston, Chicago, Cleveland, Indianapolis, Detroit, Miami, Orlando, Jacksonville, Seattle, and Portland, OR).
- 41. I find that the combination of Bell Atlantic and GTE significantly enhances the out-of-region entry prospects in twenty-one major markets spread throughout the territories of SBC, Ameritech, BellSouth and US West.²⁸ Specifically, the merger increases the expected profitability of out-of-region entry by increasing the base of "likely prospects" for the competitive local exchange operation, by increasing the prospective "take rate" of each customer, and by expanding the demand for each service when taken.
- 42. First, the combined entity expects that a certain proportion of the companies' preexisting relationships with large business customers in the target out-of-region area can be converted into actual demand for telecommunications services. A simple pooling alone of the

Bell Atlantic and GTE plan to enter 21 out-of-region metropolitan areas within 18 months of the merger's completion. See Presentation by Charles R. Lee, Chairman and CEO, GTE Corporation, FCC Meeting on Mergers, October 22, 1998.

pre-existing relationships would already increase the expected out-of-region customer base. Second, by enhancing the product portfolio and brand positioning, each new customer is more likely to subscribe to each of the services in the enlarged portfolio, thereby increasing each service's "take" rate. Third, customers are likely to consume more units of the services "taken" from the combined company, as the local services will be integrated with voice and data long-distance services provided over owned facilities (instead of resold facilities, as per Bell Atlantic's current out-of-region plans), and therefore of effectively higher quality. Fourth, the increased "take rate" and consumption reduces the minimum number of customer required for successful entry.

43. Bell Atlantic and GTE's plans to enter out-of-region in 21 metropolitan areas reflects these strategic merger synergies. The companies' strategic analysis finds that, without the merger, competitive entry is unprofitable in the vast majority of these target areas. Neither company is expected to recoup its capital and marketing investments on its own within a reasonable period of time. GTE has a relatively small base of "likely prospects," and therefore does not expect to sign up enough customers to make entry profitable. The expected profitability of Bell Atlantic's standalone entry, on the other hand, is hampered by its incomplete product portfolio. This deficiency translates to a low take rate and low demand for services that (without GTE) Bell Atlantic would only provide over resold facilities, such as out-of-region dedicated high-speed transport. Entry by the merged entity, however, is expected to be profitable in all of these target areas, as the merger favorably impacts the base of high-probability marketing prospects, and the enhanced product portfolio increases both the expected take rate and expected per customer usage of each service. The expected higher take and per customer usage rates actually reduce the number of customers required to break even on the entry. The larger base of prospects increases even further the probability that this lower break even point will be reached, to the point that entry is expected to be profitable by the combined company in all of the 21

target markets. The merger will therefore be procompetitive, sparking significant additional local competition and competitive responses, all to the benefit of consumers.

IV. THE PROPOSED MERGER WILL ENHANCE COMPETITION IN LONG DISTANCE VOICE AND DATA SERVICES

- 44. The transaction will also be strongly pro-competitive in the provision of long distance voice and data services. I will focus my analysis on long distance data services, as the benefits on the voice side of combining a newly created facilities-based network (GTE) with a reseller (as Bell Atlantic will be out-of-region when it obtains Sec. 271 authority) are generally well understood. On the other hand, the provision of data services is much more dominated by AT&T, MCI WorldCom, and Sprint than are voice services, as evidenced by the fact that AT&T and MCI WorldCom have repeatedly boosted data service prices over the last twelve months.²⁹ Nor have the newer networks delivered on their promise to increase competition for example, industry observers dismiss the much touted upstart carrier Qwest Communications as "the epitome of hype."³⁰
- 45. The transaction will increase competition in long distance data provision by speeding up deployment of a new national long distance data network that can effectively compete with the Big Three facilities-based providers. The MCI WorldCom transaction has

For evidence of repeated price hikes by AT&T and MCI Worldcom for data services: David Rohde, "AT&T hikes prices of popular frame relay speeds," Network World, November 9, 1998, "Right out of the gate, an MCI price hike," Network World, November 17, 1997, "AT&T hikes prices across the board," Network World, November 5, 1997, "AT&T raises private-line rates, lowers frame-relay charges," Network World, November 4, 1996. The Big Three incumbents in a concentrated data market have taken advantage of soaring demand to raise prices: "If you think the Internet is backed up, wait until you go out and try to buy a T-3 circuit. You're likely to find that high-speed pipes are suddenly hard to come by, installation intervals are lengthening, and prices continue to increase." David Rohde, "The Great T-3 Shortage," Network World, March 31, 1997.

David Rohde, "Qwest Throws Down Pricing Gauntlet," Network World, Dec. 14, 1998. The author also notes that "[Qwest currently has] little more to offer than voice-over-IP in a handful of cities . . . Qwest's IP network is still a work in progress, and that it does not plan dial-up access or an IP virtual private network until sometime next year," and that it "it is currently [delivering] enterprise services using a second non-pure IP network" obtained from its takeover of LCI.

removed an important fourth competitor, MCI, and opened up a substantial gap between the three leading firms and the competitive fringe. As has been shown in the MCI WorldCom merger proceeding, there is a dearth of networks that are truly national in reach.³¹ While some newer carriers such as Qwest are putting fiber in the ground, their network construction is not proceeding as quickly as originally planned.³² Most importantly, these new networks do not have a geographical reach (in terms of points-of-presence) and service breadth (in terms of product platforms) comparable to that of the Big Three.³³ For example, only the Big Three currently possess a service platform for delivering voice-based Virtual Private Network capability or a nationwide Asynchronous Transport Mode ("ATM") or Frame Relay ("FR") data transport offering.

46. Construction of a national long distance network providing ubiquitous service to all markets, not just to the top urban centers, requires large volumes of traffic to achieve necessary economies. Although GTE is making substantial gains in long distance (voice and data), selling long distance to its own dispersed customer base will not generate sufficient traffic to deploy a full-fledged network. While GTE's "Global Network Infrastructure," or GNI, fiber will soon be in place, building a full network is far from complete. Carriers need to deploy switches and cross-connect systems, establish points-of-presence ("POPs"), develop service platforms, and implement billing and operations support systems. It is this set of post-fiber

Long Distance Affidavits of Robert G. Harris on behalf of GTE Corp., in WorldCom Inc. and MCI Communications Corp. Proposed Transfer of Control CC Docket No. 97-211, filed March 13, 1998 (First Long Distance Affidavit) at ¶¶52-60, and May 7, 1998 (Second Long Distance Affidavit), at ¶¶52-72.

[&]quot;Qwest has grudgingly acknowledged the impact to their customers of its build-out delays,' said Joseph P. Nacchio, president and CEO of Qwest. 'It is unfortunate that Frontier believes Qwest is impacting their earnings in any way. We value all our customers, like Frontier, and we will continue to work hard to provide them with the most advanced, secure fiber optic network in the world.' "Analyst Briefing, Qwest Communications, July 23, 1998. In that briefing Qwest acknowledged that Frontier's purchase of fiber in the Southeast U.S. from Williams was understandable, as Qwest was not reportedly "not interested" in pursuing that business opportunity with Frontier. The delays in the build-out in Qwest's network have been amply documented before this Commission in the Harris Second Long-Distance Affidavit, at \$\infty 66-69.

³³ Harris First Long Distance Affidavit at ¶127-135.

investments that determines a network's functionality. Moreover, a company's expected traffic volumes critically determine whether these investments are made. Combining Bell Atlantic's existing and projected voice and data traffic onto the customer base will provide the scale necessary to meet its break-even point for specific deployment in many more markets.

- I have calculated that, as a result of the combination of the two companies' 47. projected data traffic streams, the new company would likely be able to expand by over 15% the number of cities where it could profitably offer data services in 2001. I have reviewed GTE's data traffic revenue projections for 94 major metropolitan areas, which indicate that GTE would find it profitable to provide data services as a stand-alone entity in only 70 of these areas by 2001. The decision to establish data service in a particular city is straightforward - can the company attract enough traffic, both originating and terminating in that city, to recover the startup investment required for the initial terminal equipment facilities. I have also reviewed Bell Atlantic's traffic projections for data services, comprising FR and ATM services as well as private line ("PL") services. These internal projections were predicated on construction of owned facilities in-region (subject to Sec. 271 authorization) and use of resold facilities out-ofregion. I then projected the combined company's data revenues in 2001 by combining the estimated revenues from Bell Atlantic's projected data traffic to the GNI's existing data traffic revenue projections. Cities where the combined companies' revenue stream would likely exceed the break-even threshold were then identified as possible new markets where expansion would be justified.
- 48. As a result of the additional traffic that would be contributed by Bell Atlantic, I estimate that the combined company would have sufficient traffic by 2001 to support the provision of data services in at least eleven additional metropolitan areas: West Palm Beach (FL), Tucson (AZ), Tallahassee (FL), Omaha (NE), Macon (GA), Greensboro (NC), Eugene (OR), Des Moines (IA), Anaheim (CA), Springfield (MA), and Portsmouth (VA). In other words, when combined, the companies' projected revenue stream in these cities exceeds the

break-even threshold. It is important to stress that these would be net additions to the cities where data services would have been provided over owned facilities by GTE or Bell Atlantic independently. In the case of the additional cities in Bell Atlantic's ILEC region (Springfield, MA and Portsmouth, VA), Bell Atlantic does not expect its standalone traffic to justify construction of facilities. Once this traffic is added to GTE's own projected sales, and the existence of the GNI taken into account, however, construction of the additional facilities to provide data services in these cities would become economical. Additionally, the bundling opportunities offered by long distance data services in these cities would also reinforce the combined entity's competitiveness in local service provision, and advance GNI's network deployment schedule by one to two years.

49. Placing Bell Atlantic's traffic on the GNI would significantly enhance the company's competitive position in data services. In addition to traffic projections, I have also reviewed GTE's projections for the installed data capacity on the GNI – that is, the quantity of DS-3 equivalent data connections that would be provided by the data switches and cross-connect capacity that GTE plans to install in the future. These projections also included the average annual cost per unit of installed data capacity, which is expected to decline sharply as capacity increases. Based on the review of Bell Atlantic's projected data traffic as a standalone entity described above, I find that adding this traffic to the GNI would involve an expansion in the GNI's installed data capacity of approximately 25% by 2001. Using the declining average capacity cost from GTE's projections, I further estimate that adding Bell Atlantic's PL-FR-ATM traffic to the GNI would reduce the GNI's unit capacity cost by at least 10%. In other words, the incremental traffic requires a relatively inexpensive incremental capacity addition. Not only would the combined company's average production cost be lower, but a significant financial benefit would be realized by replacing Bell Atlantic's small scale network in region and resold service (purchased at wholesale rates) out-of-region with the more scale-efficient facilities of the

- GNI. In addition, the merged company could expect additional significant savings by similarly combining Bell Atlantic's and GTE's voice and Internet Protocol (IP) traffic on the GNI.
- 50. Thus, the merger of Bell Atlantic and GTE will add a fourth competitor able to challenge the three leading firms in the provision of integrated voice/data services on both a national and local level. Neither alone has all the assets required to attack credibly this market in the near term, but the combined company will be able to reduce significantly the time needed to meet competition in the marketplace.
- 51. The merged company will be able to offer national bundled services more effectively than either would be able to alone. While both companies have the potential to offer this service sometime in the future, GTE brings immediate customer credibility in IP and long distance, while Bell Atlantic brings credibility and extensive relationships with large customers. GTE has had only partial success pursuing this strategy due to the lack of pre-existing customer relations, which are critical in a service contract-driven business.³⁴ Absent Bell Atlantic's scale and customer base, GTE is unlikely to catch the three leading data/voice national carriers, and will remain at best a distant fourth. GTE's dispersed customer base limits its ability to support new Internet services that require substantial up-front investments, and makes for higher customer acquisition costs than those of its competitors.

V. THE PROPOSED MERGER WILL ENHANCE COMPETITION IN INTERNET SERVICES

52. The increase in the size of GTE's Internet operation will confer a significant procompetitive benefit by augmenting competition amongst backbone providers. This will ensure that no single provider dominates the Internet. Despite the internetMCI divestiture, the competition between backbone providers remains an issue. MCI WorldCom and Sprint operate

the leading Internet backbones. In addition, MCI WorldCom owns the leading business ISP, UUNet, and Sprint has a substantial stake in Earthlink, one of the largest national ISPs, and is reportedly moving to acquire full control.³⁵ AT&T's completed TCG acquisition and its proposed transactions with TCI, IBM, and Time-Warner may lead to the creation of a dominant, unregulated provider of high-speed two-way broadband consumer access.³⁶

53. In the MCI WorldCom proceeding, it became apparent that asymmetry amongst backbone providers on the Internet (where interconnection is appropriately unregulated) provides opportunities for a dominant firm—or an oligopoly of large firms—to degrade the quality of peering connections with competing backbone providers. Since the value of each backbone's network increases as the number of customers on that network increases, unilateral growth of any one of the three largest backbones will push more and more customers to that network, creating the potential for a "tipping" effect.³⁷ Major Internet backbones currently exchange traffic through peering arrangements, exchanging traffic without charge.³⁸ These arrangements only work where the backbones handle roughly comparable traffic volumes – if one of the backbones were to grow significantly larger than the others, its competitors would become dependent on the larger backbone, and it could refuse to continue the existing peering arrangements.³⁹

³⁴ See Declaration of Jeffery C. Kissell and Scott M. Zimmerman Declaration, at ¶15.

³⁵ Crandall-Sidak Declaration, ¶ 48.

³⁶ Id

Internet Affidavits of Robert G. Harris on behalf of GTE Corp., in WorldCom Inc. and MCI Communications Corp. Proposed Transfer of Control CC Docket No. 97-211, filed March 13, 1998 (First Internet Affidavit) at ¶69-75, and June 8, 1998 (Second Internet Affidavit), at ¶55.

³⁸ *Id*.

³⁹ Id.

54. Against the backdrop of increasing asymmetry between the Big Three and the rest of the pack, the Bell Atlantic-GTE merger will have a strong pro-competitive benefit by sustaining GTE's traffic volumes and accelerating its growth rate. This growth would undermine the ability of a dominant firm (or a group of firms coordinating their behavior) to drive competitors from the market of top-tier backbone providers. Because backbone service is a necessary input to almost all Internet services—including business and ISP customers, web hosting, and dial-up access—such anti-competitive behavior, were it to occur, would have severe consequences for all types of Internet consumers.

VI. CONCLUSION

55. The combination of Bell Atlantic and GTE will be highly pro-competitive. In local service provision, the combined companies' competitiveness will be enhanced by the ability to offer a highly competitive bundle of local, data, wireless and long-distance services, and to sell these bundled products through the Bell Atlantic base of large business customers. This bundled offering can be the product platform from which the combined entity can develop a national brand and initiate out-of-region ILEC vs. ILEC competition. The incremental traffic onto GTE's GNI will result in substantial cash savings and an enhanced competitive position in long-distance voice and data services. The additional traffic will improve the merged company's competitive position through lower unit costs, replacement of resold wholesale service with self-supplied service over owned facilities, and increase in the number of metropolitan areas where the minimum traffic requirements for offering terminating data services are met. Finally, the additional traffic onto GTE's ISP and backbone networks will safeguard the competitiveness of

the Internet and enhance competition between unregulated backbone networks. The combination of GTE and Bell Atlantic will create a company with the skills and resources necessary to compete effectively with the established companies in each segment.

56. I therefore conclude that the merger of Bell Atlantic and GTE will only enhance competition and consumer welfare in telecommunications – in both the immediate term and in the future – and that the application for transfer of control should be approved.

I hereby swear, under penalty of perjury, that the foregoing is true and correct.

David J. Teece

Executed on this 18th day of December, 1998.

Attachment 1



DAVID J. TEECE

LECG, INC. 2000 Powell Street, Suite 600 Emeryville, CA 94608 Tel. (510) 653-9800 Fax (510) 653-9898

E-Mail: david_teece@LECG, INC..com

Institute of Management, Innovation & Organization (IMIO)
F402 Haas School of Business #1930
University of California
Berkeley, CA 94720-1930
Tel. (510) 642-1075
Fax (510) 642-2826

E-Mail: teece@haas.berkeley.edu

EDUCATION

Ph.D., Economics, UNIVERSITY OF PENNSYLVANIA, 1975.

M.A., UNIVERSITY OF PENNSYLVANIA, 1973.

M.Comm. (Honors I), UNIVERSITY OF CANTERBURY, 1971.

B.A., UNIVERSITY OF CANTERBURY, 1970.

PRESENT POSITION

LECG, INC.

Principal

WALTER A. HAAS SCHOOL OF BUSINESS, UNIVERSITY OF CALIFORNIA, Berkeley, CA, 1982 - present.

Professor of Business Administration

UNIVERSITY OF CALIFORNIA, Berkeley, CA, 1989 - present.

Holder, Mitsubishi Bank Chair

INSTITUTE OF MANAGEMENT, INNOVATION AND ORGANIZATION (IMIO), UNIVERSITY OF CALIFORNIA, Berkeley, CA, 1994 - present.

Director

CENTER FOR RESEARCH IN MANAGEMENT (CRM), UNIVERSITY OF CALIFORNIA, Berkeley, CA, 1983 - 1994.

Director



PROFESSIONAL EXPERIENCE

ST. CATHERINE'S COLLEGE, Oxford University, and Oxford Institute for Energy Studies, Spring 1989.

Visiting Fellow

STANFORD UNIVERSITY, Graduate School of Business, 1975 - 1982.

Associate Professor of Business Economics, 1978 - 1982. Assistant Professor of Business Economics, 1975 - 1978.

UNIVERSITY OF PENNSYLVANIA, Department of Economics, 1978 - 1979.

Visiting Associate Professor of Economics

UNIVERSITY OF CANTERBURY, 1971.

Assistant Lecturer in Economics

EXTERNAL GRANTS AND PROFESSIONAL AWARDS

1973-1974	Penfield Traveling Fellowship in Diplomacy, International Affairs, and Belles-Lettres
1978	Mellon Foundation Junior Faculty Fellowship
1978-1981	National Science Foundation Grant
June 1982	Esmee Fairbairn Senior Research Fellow, University of Reading, England
1984-1987	National Science Foundation Grant
1986-1992	Lynde and Harry Bradley Foundation Grant
1987-1988	Sloan Foundation Grants
1987-1988	Japan-U.S. Friendship Commission Grant
1988-1991	Pew Foundation Grant
1989	Enterprise Oil Fellowship in Energy Economics, St. Catherine's College, Oxford University
1989-1991	Smith Richardson Foundation Grant
1989-1992	Sasakawa Peace Foundation Grant
1990-1995	Sloan Foundation Grant
1992	Distinguished Visitor, Policy Studies Group, Tokyo
1992-	U.SJapan Industry Technology Management Training Program
	Grant, U.S. Department of Defense/Air Force Office of Scientific Research (DOD/AFOSR)
1994-	Ameritech Foundation Grant – Consortium for Research on Telecommunications Policy
1994-	United States Information Agency Grant
1994-	Eurasia Foundation Grant



1997	Distinguished Speaker, Academy of Management Technology and Innovation Management Division, Boston
1998	Christensen Fellow, St. Catherine College, Oxford University
1998	Clarendon Lectures in Management Studies, Oxford University.

AFFILIATIONS

Prior

Editorial Board, California Management Review.

Editorial Board, Strategic Management Journal.

Editorial Board, Human Relations.

Co-director, Management of Technology Program, University of California at Berkeley.

Co-director, Nomura School of Advanced Management, Nomura-Berkeley Strategic Management of Innovation Program.

Member, Royal Economic Society.

Present

Co-editor and co-founder, Industrial and Corporate Change (Oxford University Press).

Member, American Economic Association.

Member, American Bar Association.

Member, Licensing Executives Society.

Member. Council on Foreign Relations.

Member, Pacific Council on International Policy.

Member, International Joseph A. Schumpeter Society.

Chairman, Consortium on Competitiveness and Cooperation.

Director, Consortium for Research on Telecommunications Policy.

Member, The Benjamin Franklin Society.

Faculty, Energy and Resources Group, University of California, Berkeley.

Member, International Advisory Board, R & D Enterprise.

Member, International Academy of Management.

BUSINESS AFFILIATIONS

Chairman, Board of Directors, LECG, INC., INC., 1988-.

Member, Board of Directors, The Atlas Funds, 1989- .

Member, Board of Trustees, Atlas Insurance Trust, 1997-.

PUBLICATIONS

Articles

1) "The Determination of Residential Section Prices in Some South Island Centres" (with R. E. Falvey), New Zealand Economic Papers, 1972.



- 2) "Time-Cost Tradeoffs: Elasticity Estimates and Determinants for International Technology Transfer Projects," Management Science, 23:8 (April 1977), 830-837.
- "Technology Transfer by Multinational Firms: The Resource Cost of Transferring Technological Know-How," <u>The Economic Journal</u>, 87 (June 1977), 242-261. Reprinted in E. Mansfield and E. Mansfield (eds.), <u>The Economics of Technical Change</u> (London: Edward Elgar, 1993). Reprinted in M. Casson (ed.), <u>Multinational Corporations</u>, The International Library of Critical Writings in Economics 1 (England: Edward Elgar Publishing, 1990), 185-204.
- 4) "Organizational Structure and Economic Performance: A Test of the Multidivisional Hypothesis" (with Henry Armour), The Bell Journal of Economics, 9:1 (Spring 1978), 106-122. Reprinted in J. Barney and W. Ouchi (eds.), Organizational Economics: Toward a New Paradigm for Studying and Understanding Organizations (San Francisco: Jossey-Bass, 1986).
- 5) "Overseas Research and Development by U.S.-Based Firms" (with E. Mansfield and A. Romeo), Economica, 46 (May 1979), 187-196. Reprinted in Wortzel and Wortzel (eds.), Strategic Management of Multinational Corporations (New York: John Wiley, 1985).
- 6) "The Diffusion of an Administrative Innovation," Management Science, 26:5 (May 1980), 464-470.
- 7) "Vertical Integration and Technological Innovation" (with Henry Armour), <u>The Review of Economics and Statistics</u>, 62:3 (August 1980), 470-474.
- 8) "Economies of Scope and the Scope of the Enterprise," <u>Journal of Economic Behavior and Organization</u>, 1:3 (1980), 223-247. Republished as "La Diversificazione Strategica: Condizioni di Efficienza," a cura de Raoul C. D. Nacamulli e Andrea Rugiadini, <u>Organizzazione e Mercato</u> (Bologna, Italy: Mulino, 1985), 447-476. Exerpted in <u>Resources</u>, Firms and Strategies, Nicolai Foss (ed.), Oxford University Press, 1997.
- 9) "The Multinational Enterprise: Market Failure and Market Power Considerations," Sloan Management Review, 22:3 (Spring 1981), 3-17. Republished as "Riflessioni Sull'impresa Multinazionale: Potere de Mercato o Crisi del Mercato," a cura de Raoul C. D. Nacamulli e Andrea Rugiandini, Organizzazione e Mercato (Bologna, Italy: Mulino, 1985), 477-498.
- 10) "The Market for Know-How and the Efficient International Transfer of Technology," <u>The Annals of the Academy of Political and Social Science</u>, (November 1981), 81-96.
- "Internal Organization and Economic Performance: An Empirical Analysis of the Profitability of Principal Firms," Journal of Industrial Economics, 30:2 (December 1981), 173-199.
- 12) "A Tariff on Imported Oil" (with James Griffin), <u>Journal of Contemporary Studies</u> (Winter 1982), 89-92.
- 13) "An Exchange on Oil Tariffs" (with Milton Friedman and James Griffin), <u>Journal of Contemporary Studies</u> (Summer 1982), 55-60.
- 14) "Supplier Switching Costs and Vertical Integration in the Automobile Industry" (with Kirk Monteverde), <u>The Bell Journal of Economics</u>, 13:1 (Spring 1982), 206-213. Reprinted in Steven G. Medema (ed.), <u>The Legacy of Ronald Coase in Economic Analysis</u> (London:



Edward Elgar Publishing, 1995); in Oliver E. Williamson and S. E. Masten (eds.), <u>Transaction Cost Economics</u>, Volume II: Policy and Applications (Aldershot, England: Edward Elgar Publishing, 1995), 66-73. Also reprinted in S.E. Masten (ed.), <u>Case Studies in Contracting and Organization</u> (New York: Oxford University Press, 1996). Reprinted in <u>Transaction Cost Economics</u>, Oliver E. Williamson and S. E. Masten (eds.), for <u>The International Library of Critical Writings in Economics</u>, Mark Blaug (ed.) (Cheltenham, United Kingdom: Edward Elgar Publishing Ltd., 1995).

- 15) "Appropriable Rents and Quasi-Vertical Integration" (with Kirk Monteverde), The Journal of Law and Economics, Vol. XXV (October 1982), 321-328.
- 16) "A Behavioral Analysis of OPEC: An Economic and Political Synthesis," <u>Journal of Business Administration</u>, 13 (1982), 127-159.
- "Towards an Economic Theory of the Multiproduct Firm," Journal of Economic Behavior and Organization, 3 (1982), 39-63. Reprinted in Louis Putterman and R.S. Kroszner (eds.), The Economic Nature of the Firm: A Reader (Cambridge: Cambridge University Press, 1986).
 Reprinted in Oliver E. Williamson and Scott E. Masten (eds.), Transaction Cost Economics, Vol. 1: Theory and Concepts (London: Edward Elgar Publishing, 1995), 153-177.
- 18) "Assessing OPEC's Pricing Policies," California Management Review, 26:1 (Fall 1983), 69-87.
- 19) "The Limits of Neoclassical Theory in Management Education" (with Sidney G. Winter), American Economic Review, 74:2 (May 1984), 116-121.
- 20) "Economic Analysis and Strategic Management," <u>California Management Review</u>, 26:3 (Spring 1984), 87-110; reprinted in J. Pennings (ed.), <u>Organizational Strategy and Change</u> (San Francisco: Jossey-Bass, 1985); and in D. Vogel and G. Carroll (eds.), <u>Strategy and Organization</u>: A West Coast Perspective (New York: Pitman, 1984).
- 21) "Multinational Enterprise, Internal Governance, and Industrial Organization," American Economic Review, 75:2 (May 1985), 233-238.
- 22) "Transactions Cost Economics and the Multinational Enterprise: An Assessment," <u>Journal of Economic Behavior and Organization</u>, 7 (1986), 21-45.
- 23) "Assessing the Competition Faced by Oil Pipelines," <u>Contemporary Policy Issues</u>, IV, 4 (October 1986), 65-78.
- "Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy," Research Policy, 15:6 (1986), 285-305. (Selected by the editors as one of the best papers published by Research Policy over the period 1971-1991.)

 Republished in Ricerche Economiche, 4 (October/December 1986), 607-643, and as "Innovazione Technologica e Successo Imprenditoriale," L'Industria, 7:4 (October/December 1986), 605-643; translated into Russian and published at St. Petersburg University. Abstracted in The Journal of Product Innovation Management, 5:1 (March 1988). Reprinted in C. Freeman (ed.), The Economics of Innovation (U.K.: Edward Elgar Publishing), 1990 hardback; 1998 paperback.
- 25) "Vertical Integration and Risk Reduction" (with C. Helfat), <u>Journal of Law, Economics, and Organization</u>, 3:1 (Spring 1987), 47-67.



- 26) "Acceptable Cooperation among Competitors in the Face of Growing International Competition" (with Thomas M. Jorde), <u>Antitrust Law Journal</u>, 58:2, (37th Annual Meeting, Honolulu, Hawaii, August 1989), 529-556.
- "Capturing Value from Technological Innovation: Integration, Strategic Partnering, and Licensing Decisions," Interfaces, 18:3 (May/June 1988), 46-61. Reprinted in Bruce R. Guile and H. Brooks (eds.), Technology and Global Industry (Washington, DC: National Academy Press, 1987), 65-95; and in F. Arcangeli, P.A. David, and G. Dosi (eds.), Modern Patterns in Introducing and Adopting Innovations (Oxford: Oxford University Press, 1989); and in E. Rhodes and D. Wield (eds.), Implementing New Technologies: Innovation and the Management of Technology (Oxford and Cambridge, MA: Basil Blackwell, 1994), 129-140; and in Michael L. Tushman and Philip Anderson, Managing Strategic Innovation and Change: A Collection of Readings (New York and Oxford: Oxford University Press, 1997), 287-306.
- 28) "Competing Through Innovation: Implications for Market Definition" (with Thomas M. Jorde), Chicago-Kent Law Review, 64:3 (1989), 741-744. (Symposium on Antitrust Law and the Internationalization of Markets).
- 29) "Competition and Cooperation: Striking the Right Balance" (with Thomas M. Jorde), California Management Review, 31:3 (Spring 1989), 25-37. Reprinted as "Concorrenza e Cooperazione Nelle Strategie di Sviluppo Technologico," Economia e Politica Industriale, n. 64 (1989), 17-45.
- 30) "Competition and Cooperation in Technology Strategy," <u>Business Review</u>, 36:4 (March 1989) (Tokyo: The Institute of Business Research, Hitotsubashi University).
- 31) "Innovation, Cooperation, and Antitrust: Balancing Competition and Cooperation" (with Thomas M. Jorde), High Technology Law Journal, 4:1 (Spring 1989), 1-113.
- 32) "Inter-organizational Requirements of the Innovation Process," <u>Managerial and Decision</u> Economics, Special Issue, 1989, pp. 35-42.
- 33) "Struktur und Organisation der Deutschen und der US-Gaswirtschaft im Vergleich: Folgerungen für den Status der Gasversorgungsunternehmen" (with Manfred J. Dirrheimer), Zeitschrift für Energiewirtschaft, 1 (1989), 36-50.
- 34) "Structure and Organization of the Natural Gas Industry: Differences between the United States and the Federal Republic of Germany and Implications for the Carrier Status of Pipelines," The Energy Journal, 11:3 (1990), 1-35.
- "Strategies for Capturing Value from Technological Innovation," <u>Thai-American Business</u>, May-June 1990, 30-38. Reprinted as "Capturing Value from Innovation," <u>Les Nouvelles</u>, 26:1 (March 1991), 21-26.
- 36) "Les Frontières des Entreprises: Vers une Théorie de la Cohérence de la Grande Entreprise" (with G. Dosi and S. Winter), Revue d'Économie Industrielle, 51, 1^{er} trimestre 1990, 238-254.
- 37) "Innovation and Cooperation: Implications for Competition and Antitrust" (with Thomas M. Jorde), Journal of Economic Perspectives, 4:3 (Summer 1990), 75-96.



- 38) "Innovation, Dynamic Competition, and Antitrust Policy" (with Thomas M. Jorde), Regulation, 13:3 (Fall 1990), 35-44.
- 39) "Product Emulation Strategies in the Presence of Reputation Effects and Network Externalities: Some Evidence from the Minicomputer Industry" (with Raymond S. Hartman), <u>Economics of Innovation and New Technology</u>, 1 (1990), 157-182.
- 40) "Antitrust Policy and Innovation: Taking Account of Performance Competition and Competitor Cooperation" (with Thomas M. Jorde), <u>Journal of Institutional and Theoretical</u> Economics, 147 (1991), 118-144.
- 41) "Capturing and Retaining Value from Innovation," Technology Strategies (August 1991), 8-10.
- 42) "Innovation, Trade, and Economic Welfare: Contrasts between Petrochemicals and Semiconductors," North American Review of Economics & Finance, 2(2) (1991), 143-155.
- "Strategic Management and Economics" (with Richard P. Rumelt and Dan Schendel), <u>Strategic Management Journal</u>, 12 (1991), 5-29.
- 44) "Foreign Investment and Technological Development in Silicon Valley," <u>California</u> <u>Management Review</u>, 34:2 (Winter 1992), 88-106. Translated into Russian and published at St. Petersburg University.
- "Competition, Cooperation, and Innovation: Organizational Arrangements for Regimes of Rapid Technological Progress," <u>Journal of Economic Behaviour and Organization</u>, 18, (1992),
 1-25. Reprinted in <u>Industrial Policy and Competitive Advantage</u>, David B. Audretsch (ed.), for <u>The International Library of Critical Writings in Economics</u>, Mark Blaug (ed.) (Cheltenham, United Kingdom: Edward Elgar Publishing Limited, forthcoming).
- "The Dynamics of Industrial Capitalism: Perspectives on Alfred Chandler's <u>Scale and Scope</u> (1990)," <u>Journal of Economic Literature</u>, 31 (March 1993), 199-225. Reprinted in Patrick O'Brien (ed.), Critical Perspectives on the World Economy (London: Routledge, 1997/1998).
- 47) "Rule of Reason Analysis of Horizontal Arrangements: Agreements Designed to Advance Innovation and Commercialize Technology" (with Thomas M. Jorde), Antitrust Law Journal, 61:2 (1993), 576-619.
- 48) "Trans-Pacific Competitive Challenges for Innovation and Renewal," <u>Technology Rivalries</u> and Synergies between North America and Japan, Symposium III, Licensing Executives Society (March 28-30, 1993), 7-22.
- 49) "Assessing Market Power in Regimes of Rapid Technological Change" (with Raymond S. Hartman, Will Mitchell and Thomas M. Jorde), <u>Industrial and Corporate Change</u>, 2:3 (1993), 317-350.
- 50) "Understanding Corporate Coherence: Theory and Evidence" (with R. Rumelt, G. Dosi and S. Winter), <u>Journal of Economic Behavior and Organization</u>, 23:1 (1994), 1-30. Reprinted in Theory of the Firm, Mark Casson (ed.), (London: Edward Elgar, 1997).



- 51) "Information Sharing, Innovation, and Antitrust," Antitrust Law Journal, 62:2 (Winter 1994), 465-481. Reprinted in Horst Albach, Jim Y. Jin, and Christoph Schenk (eds.), Collusion through Information Sharing? New Trends in Competition Policy (Berlin: Edition Sigma, 1996), 51-68.
- 52) "Systems Competition and Aftermarkets: An Economic Analysis of Kodak" (with Carl Shapiro), The Antitrust Bulletin, 39:1 (Spring 1994), 135-162.
- 53) "The Dynamic Capabilities of Firms: An Introduction" (with Gary Pisano), <u>Industrial and</u> Corporate Change, 3:3 (1994), 537-556.
- 54) "Telecommunications in Transition: Unbundling, Reintegration, and Competition," <u>Michigan</u> Telecommunications and Technology Law Review, 4 (1995).
- 55) "Competition and 'Local' Communications, Innovation, Entry and Integration" (with Gregory L. Rosston), Industrial and Corporate Change, 4:4 (1995), 787-814. Reprinted in E.M. Noam and A.J. Wolfson (eds.), Globalism and Localism in Telecommunications (North Holland: Elsevier Science B. V., 1997), 1-25.
- 56) "Estimating the Benefits from Collaboration: The Case of SEMATECH" (with Albert N. Link and William F. Finan), Review of Industrial Organization, (1996), 737-751.
- 57) "When is Virtual Virtuous? Organizing for Innovation" (with Henry W. Chesbrough), Harvard Business Review (January-February 1996), 65-73. Also in John Seely Brown (ed.), Seeing Things Differently: Insights on Innovation (Boston, MA: Harvard Business School Publishing, 1997), 105-119.
- 58) "Licensing and Cross-Licensing in Electronics: Managing Intellectual Capital for Design Freedom and Wealth Creation," (with Peter C. Grindley), California Management Review, 39:2, (Fall 1996), 1-34.
- 59) "Firm Organization, Industrial Structure, and Technological Innovation," <u>Journal of Economic Behavior & Organization</u>, 31 (1996), 193-224.
- 60) "Economic Reform in New Zealand 1984-95: The Pursuit of Efficiency" (with Lewis Evans, Arthur Grimes and Bryce Wilkinson) <u>Journal of Economic Literature</u>, Vol. XXXIV (December 1996), 1856-1902.
- "Mitigating Procurement Hazards in the Context of Innovation" (with John M. de Figueiredo),
 Industrial and Corporate Change, 5:2 (1996), 537-559. Reprinted in Glenn Carroll, Pablo
 Spiller and David Teece (eds.), Firms, Markets, and Hierarchy: Perspectives on the
 Transactions Cost Economics (Oxford: Oxford University Press, forthcoming, 1998).
- 62) "Dynamic Capabilities and Strategic Management" (with Gary Pisano and Amy Shuen), Strategic Management Journal, 18:7 (1997), 509-533. Excerpted in Nicolai Foss (ed.), Resources, Firms and Strategies, Oxford University Press, 1997.
- 63) "The Merger Guidelines in the United States, Australia and New Zealand: An Economic Perspective," (with Mary Coleman and Christopher Pleatsikas), <u>Trade Practices Law Journal</u>, forthcoming, 1998.



- "Licensing and the Market for Know-How," <u>R&D Enterprise Asia Pacific</u>, vol. 1, no. 2-3 (1998), 3-5.
- 65) "Capturing Value from Knowledge Assets: The New Economy, Markets for Know-How, and Intangible Assets," California Management Review, 40:3, Spring 1998.
- 66) "Research Directions for Knowledge Management," <u>California Management Review</u>, 40:3 (Spring 1998), 289-292.

Monographs

- 1) Vertical Integration and Vertical Divestiture in the U.S. Oil Industry (Stanford: Stanford University Institute for Energy Studies, 1976).
- 2) The Multinational Corporation and the Resource Cost of International Technology Transfer (Cambridge, MA: Ballinger, 1976).
- 3) R&D in Energy: Implications of Petroleum Industry Reorganization (ed.) (Stanford: Stanford University Institute for Energy Studies, 1977).
- 4) Technology Transfer, Productivity and Economic Policy (with E. Mansfield, et al.) (New York: W. W. Norton, 1982).
- 5) OPEC Behavior and World Oil Prices (with James Griffin) (London: Allen & Unwin, 1982).
- 6) The Competitive Challenge: Strategies for Industrial Innovation and Renewal (ed.) (New York: Harper & Row, Ballinger Division, 1987). Translations into Japanese and Italian.
- 7) Antitrust, Innovation, and Competitiveness, Thomas M. Jorde and David J. Teece (eds.) (New York: Oxford University Press, 1992).
- 8) Fundamental Issues in Strategy: A Research Agenda, Richard P. Rumelt, Dan E. Schendel and David J. Teece (eds.) (Boston: Harvard Business School Press, 1994). Translation into Portuguese (Lisbon: Bertrand Editora, Ltda.), forthcoming, 1996. Translation into Indonesian (Jakarta: Binarupa Aksara, forthcoming, 1997).
- 9) Economic Performance and the Theory of the Firm: The Selected Papers of David Teece, Volume 1 (London: Edward Elgar Publishing, forthcoming, 1998).
- 10) Strategy, Technology and Public Policy: The Selected Papers of David Teece, Volume 2 (London: Edward Elgar Publishing, forthcoming, 1998).
- 11) Technology, Organization, and Competitiveness: Perspectives on Industrial and Corporate Change, Giovanni Dosi, David Teece and Josef Chytry (eds.) (Oxford: Oxford University Press, 1998).
- 12) Privatization, Deregulation and the Transition to Markets, with Pablo Spiller and Leonard Waverman (eds.), (London: Edward Elgar Publishing, forthcoming).



Firms, Markets, and Hierarchy: Perspective on the Transactions Cost Economics, Glenn Carroll, Pablo Spiller, and David Teece (eds.) (Oxford: Oxford University Press, forthcoming, 1998).

Contributions

- 1) "Vertical Integration in the U.S. Oil Industry," in E. Mitchell (ed.), <u>Vertical Integration in the</u> Oil Industry (Washington, DC: American Enterprise Institute, 1978), 105-189.
- 2) "Innovation and Divestiture in the U.S. Oil Industry" (with Henry Ogden Armour), in David J. Teece, R&D in Energy: Implications of Petroleum Industry Reorganization (Stanford: Stanford University Institute for Energy Studies, August 1977), 7-93.
- 3) "Horizontal Integration in Energy: Organizational and Technological Considerations," in E. Mitchell (ed.), <u>Horizontal Divestiture in the Oil Industry</u> (Washington, DC: American Enterprise Institute, 1978), 57-72.
- 4) "Energy Company Financial Reporting: Conceptual Framework for an Energy Information System" (with Paul A. Griffin) in William W. Hogan (ed.), Energy Information: Description, Diagnosis, and Design, Chapter 10 (Stanford, CA: Stanford University Institute for Energy Studies, December 1978), 235-289.
- 5) "Integration and Innovation in the Energy Markets," in R. Pindyck (ed.), <u>Advances in the</u> Economics of Energy and Resources, Vol. 1 (Greenwich, CT: JAI Press, 1979), 163-212.
- 6) "The New Social Regulation: Implications and Alternatives," in M. Boskin (ed.), The Economy in the 1980s: A Program for Growth and Stability (San Francisco: Institute for Contemporary Studies, 1980), 119-158.
- 7) "Technology Transfer and R&D Activities of Multinational Firms: Some Theory and Evidence" in R. Hawkins (ed.), <u>Technology Transfer and Economic Development</u> Vol. 2 (Greenwich, CT: JAI Press, 1981), 39-74.
- 8) "Technological and Organisational Factors in the Theory of the Multinational Enterprise," in Mark Casson (ed.), The Growth of International Business (London: Allen & Unwin, 1983), 51-62.
- 9) "Competitiveness" (with S. Cohen, L. Tyson and J. Zysman), in Global Competition: The New Reality, Vol. III (Washington, DC: President's Commission on Industrial Competitiveness, 1985).
- "La diversificazione strategica: condizioni di efficienza," in Raoul C.D. Nacamulli and Andrea Rugiadini (eds.), Organizzazione & Mercato (Bologna: Il Mulino, 1985), 447-476.
- 11) "Firm Boundaries, Technological Innovation, and Strategic Management," in Lacy G. Thomas (ed.), Economics of Strategic Planning (Lexington, MA: Lexington Books, 1986), 187-199.
- 12) "Joint Ventures and Collaborative Arrangements in the Telecommunications Equipment Industry" (with G. Pisano and M. Russo) in David Mowery (ed.), International Collaborative Ventures in U.S. Manufacturing (Cambridge, MA: Ballinger, 1988), 23-70.



- 13) "Joint Ventures and Collaboration in the Biotechnology Industry" (with G. Pisano and W. Shan) in David Mowery (ed.), <u>International Collaborative Ventures in U.S. Manufacturing</u> (Cambridge, MA: Ballinger, 1988), 183-222.
- "Technological Change and the Nature of the Firm," in G. Dosi, C. Freeman, R. Nelson, G. Silverberg, and L. Soete (eds.), <u>Technical Change and Economic Theory</u> (London: Pinter, 1988), 256-281.
- 15) "The Research Agenda on Competitiveness" (with Peter Jones) in A. Furino (ed.), Cooperation and Competition in the Global Economy: Issues and Strategies (Cambridge, MA: Ballinger, 1988), 101-114.
- 16) "What We Know and What We Don't Know About Competitiveness" (with Peter Jones) in A. Furino (ed.), Cooperation and Competition in the Global Economy (Cambridge, MA: Ballinger, 1988), appendix, 265-330.
- 17) "Reconceptualizing the Corporation and Competition: Preliminary Remarks," in Khemani, Shapiro, and Stanbury (eds.), Mergers, Corporate Concentration and Power in Canada, Chapter 4 (Montreal, Canada: The Institute for Research on Public Policy, 1988), 91-106; republished in Faulhaber and Tamburini (eds.), European Economic Integration: The Role of Technology (Norwell, MA: Kluwer Academic Publishers, 1991), 177-200.
- "Collaborative Arrangements and Global Technology Strategy: Some Evidence from the Telecommunications Equipment Industry" (with G. Pisano) in Robert A. Burgelman and Richard S. Rosenbloom (eds.), Research on Technological Innovation, Management and Policy, Vol. 4 (Greenwich, CT: JAI Press, 1989), 227-256.
- 19) "Contributions and Impediments of Economic Analysis to the Study of Strategic Management," in James W. Fredrickson (ed.), <u>Perspectives on Strategic Management</u> (Toronto and SF: Harper Business, 1990), 39-80.
- 20) "Capturing Value Through Corporate Technology Strategies," in John de la Mothe and Louis M. Ducharme (eds.), <u>Science, Technology and Free Trade</u> (London and NY: Pinter Publishers, 1990), 69-84.
- "Natural Gas Distribution in California: Regulation, Strategy, and Market Structure," (with Michael V. Russo) in R. Gilbert (ed.), Regulatory Choices: A Perspective on Developments in Energy Policy (Berkeley: University of California Press, 1991), 120-186. Abstracted in C. Michael Lederer (ed.), California Energy Policy: The Regulated Sector, Proceedings of the California Energy Policy Seminar, September 18-19, 1986 (Berkeley: University Energy Research Group), 33-43.
- 22) "Foreign Investment and Technological Development in Silicon Valley," in D. McFetridge (ed.), Foreign Investment, Technology and Economic Growth (Calgary: The University of Calgary Press, 1991), 215-238.
- 23) "Technological Development and the Organisation of Industry," in <u>Technology and</u>
 Productivity: The Challenge for Economic Policy (Paris: Organisation for Economic Cooperation and Development, 1991), 409-418.



- "Support Policies for Strategic Industries: Impact on Home Economies," <u>Strategic Industries in a Global Economy</u>: Policy Issues for the 1990s (Paris, OECD, 1991), 35-50.
- 25) "Analisi Economica e Strategic Management," in Luca Zan (ed.), Strategic Management: Materiali critici (Torino, Italy: UTET Libreria, 1992), 164-186. Economia d'Impresa, Management e Organizzazione del Lavoro, v. 3.
- 26) "Toward a Theory of Corporate Coherence: Preliminary Remarks" (with Giovanni Dosi and Sidney Winter), in Giovanni Dosi, Renato Giannetti, and Pier Angelo Toninelli (eds.), Technology and Enterprise in a Historical Perspective (Oxford: Clarendon Press, 1992), 186-211.
- 27) "The Changing Place of Japan in the Global Scientific and Technological Enterprise" (with David C. Mowery), in Thomas S. Arrison, C. Fred Bergsten, Edward M. Graham, and Martha Caldwell Harris (eds.), Japan's Growing Technological Capability: Implications for the U.S. Economy (Washington, D.C.: National Academy Press, 1992), 106-135.
- 28) "Multinational Enterprise, Internal Governance, and Industrial Organization," in B. Gomes-Casseres and D. B. Yoffie (eds.), The International Political Economy of Direct Foreign Investment (U.K.: Edward Elgar Publishing, 1993), 196-201.
- 29) "Natural Resource Cartels," (with David Sunding and Elaine Mosakowski), in A.V. Kneese and J.L. Sweeney (eds.), <u>Handbook of Natural Resource and Energy Economics</u>, Vol. III, Chapter 24 (Elsevier Science Publishers B.V., 1993).
- "Competition in Local Telecommunications: Implications of Unbundling for Antitrust Policy," with Robert G. Harris and Gregory L. Rosston, in Gerald W. Brock (ed.), <u>Toward a Competitive Telecommunications Industry</u>: Selected Papers from the 1994
 Telecommunications Policy Research Conference, (Matwah, New Jersey: Lawrence Erlbaum Associates, 1995).
- 31) "Strategic Alliances and Industrial Research" (with David C. Mowery), in Richard S. Rosenbloom and William J. Spencer (eds.), Engines of Innovation: U.S. Industrial Research at the End of an Era Ch. 3, (Cambridge, MA: Harvard Business School Press, 1996), 111-129.
- 32) "Firm Capabilities and Managerial Decision-Making: A Theory of Innovation Biases" (with Janet E. L. Bercovitz and John M. de Figueiredo), in Raghu Garud, Praveen Nayyar and Zur Shapira (eds.), <u>Technological Innovation: Oversights & Foresights</u> (Cambridge: Cambridge University Press, 1997).
- "Dynamic Capabilities of Firms: A Theoretical Framework," in Christoph F. Buechtemann and Dana J. Soloff (eds.), <u>Human Capital and the Economy</u>, presented to the 1993 Conference on Human Capital and Economic Performance (New York, NY: Russell Sage Foundation, forthcoming).
- 34) "Innovation, Market Structure, and Antitrust: Harmonizing Competition Policy in Regimes of Rapid Technological Change" (with Thomas M. Jorde), in Leonard Waverman, William S. Comanor and Akira Goto (eds.), Competition Policy In The Global Economy: Modalities For Cooperation (London: Routledge, 1997), 289-303.



- 35) "The Uneasy Case for Mandatory Contract Carriage in the Natural Gas Industry," in Jerry Ellig and Joseph P. Kalt (eds), New Horizons in Natural Gas Deregulation (Westport, CT & London: Praeger, 1996), 43-73.
- "Design Issues for Innovative Firms: Bureaucracy, Incentives, and Industrial Structure," in <u>The Dynamic Firm</u>, Alfred Chandler, Peter Hagström, and Orjan Sowell (eds.), Oxford University Press, 1998.
- 37) "Transaction Cost Economics: Its Influence on Organization Theory, Strategic Management, and Political Economy" (with Glenn Carroll and Pablo Spiller), Firms, Markets, and Hierarchy: Perspectives on the Transactions Cost Economics (Oxford: Oxford University Press, forthcoming, 1998).

CONGRESSIONAL TESTIMONY

"The Energy Antimonopoly Act of 1979," in Hearings before the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary, United States Senate, June 21, 1979 (Washington, DC: U.S. Government Printing Office, 1980).

"Statement on U.S. Economic Growth and the Third World Debt," in <u>Hearings before the Subcommittee on International Economic Policy, Oceans, and Environment of the Committee on Foreign Relations, United States Senate, October 9-10, 1985 (Washington, DC: U.S. Government Printing Office, 1986).</u>

"Oil Prices and Debt Crisis" (with Constance Helfat), in Hearings before the Subcommittee on International Economic Policy, Oceans, and Environment of the Committee on Foreign Relations, United States Senate, October 9-10, 1985 (Washington, DC: U.S. Government Printing Office, October 1986).

"Legislative Proposals to Modify the U.S. Antitrust Laws to Facilitate Cooperative Arrangements to Commercialize Innovation" (with Thomas M. Jorde), in <u>Hearings before the Subcommittee on Economics and Commercial Law</u>, House Judiciary Committee, July 26, 1989.

"Cooperation and Competition" (with Thomas M. Jorde) in Hearings Before the Subcommittee on Science, Research, and Technology of the Committee on Science, Space, and Technology, U.S. House of Representatives, on The Government Role in Joint Production Ventures, September 19, 1989.

"Extending the NCRA" (with Thomas M. Jorde) in <u>Hearings before the Subcommittee on Antitrust</u>, Monopolies and Business Rights of the Committee on the Judiciary, U.S. Senate, July 17, 1990.

PUBLISHED REVIEWS

- 1) "Divestiture and R&D in the U.S. Oil Industry," Reprints: Proceedings of the American Chemical Society, 22:1 (February 1977).
- 2) Review of Crude Oil Prices as Determined by OPEC and Market Fundamentals (by Paul MacAvoy), in Journal of Economic Literature, June 1983, 587-589.



- Review of Vertical Integration and Joint Ventures in the Aluminum Industry (by John Stuckey), in Journal of Economic Literature, 22 (Sept. 1984), 1151-1153.
- 4) Review of <u>Politics</u>, <u>Prices</u>, and <u>Petroleum</u>: The <u>Political Economy of Energy</u> (by David Glasner), in <u>Journal of Economic Literature</u>, 24:2 (June 1986), 722-723.
- 5) Review of International Technology Transfer: Concepts, Measures, and Comparisons (by N. Rosenberg and C. Frischtak, eds.), in Journal of Economic Literature, 25 (March 1987), 160-161.
- 6) Review of <u>Investment Choices in Industry</u> (by C. Helfat), in <u>Journal of Economic Behavior and Organization</u> (1989).

COMMENTS AND OPINIONS

- 1) "Alternatives to Government Regulation," Stanford GSB (Winter 1980-81), 2-7.
- 2) "Comment" in E. Mitchell (ed.), Oil Pipelines and Public Policy (Washington, DC: American Enterprise Institute, 1979).
- 3) "Die Hand am Puls," Industrie Magazin, 9 (September 1987).
- 4) Letters to the Editor, "Antitrust Law's Drag on Innovation" (with Thomas M. Jorde), The Wall Street Journal, January 18, 1989.
- 5) "Commentary: The Road to Bangladesh," <u>Strategic Issues</u> (May 1988) (San Jose, CA: Dataquest, 1988).
- 6) "To Keep U.S. in Chips, Modify the Antitrust Laws" (with Thomas M. Jorde), <u>The Los</u> Angeles Times, July 24, 1989, p 5.
- 7) "Harnessing Complementary Assets" in Keeping the U.S. Computer Industry Competitive: Defining the Agenda (Washington, DC: National Academy of Engineering, 1989).
- 8) Letters to the Editor, Harvard Business Review, 90:3 (May-June 1990), 215.
- 9) "Prefazione," in Patrizia Zagnoli, <u>I Rapporti Tra Imprese Nei Settori ad Alta Tecnologia il Caso</u> della Silicon Valley (Torino, Italy: G. Giappichelli, 1991) VII-IX.
- 10) "Foreword," in George Richardson, <u>Information and Investment</u> (Oxford University Press, 1991).
- 11) "Commentary for the Complex Case of Management Education," <u>Harvard Business Review</u>, September-October 1992.
- 12) "Innovation and Competitive Policy," Trade Practices Law Journal, 5:1 (March 1997), 73-77.
- 13) "Recent Developments in Merger Analysis: Unilateral Competitive Effects," <u>Trade Practices</u> Law Journal, 5:4 (December 1997), 270-271.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
GTE Corporation,)	
Transferor,)	
and)	CC Docket No. 98-184
Bell Atlantic Corporation,)	
Transferee,)	
For Consent to Transfer of Control.)	

JOINT DECLARATION OF JEFFREY C. KISSELL AND SCOTT M. ZIMMERMAN

- 1. My name is Jeffrey C. Kissell. I am the Vice President of National Marketing for GTE Business Development & Integration (GTE BD&I), a unit of GTE Service Corporation. As part of GTE BD&I, I am responsible for developing marketing programs and evaluating product performance for GTE. I was also part of the original team that, in late 1996, developed GTE's CLEC strategy -- which led to the formation of GTE Communications Corporation (GTECC).
- 2. My name is Scott M. Zimmerman. I am the Assistant Vice President of Operational Performance for GTECC. I am responsible for developing GTECC's strategic and tactical operating plans, including out-of-franchise strategies, and for developing and implementing performance measurement systems. I also oversee the implementation of all new initiatives within GTECC through the Program Management function.

3. We have been asked to address the following topics related to the GTE-Bell Atlantic merger: (1) the emerging national market for bundled telecommunication services; (2) the merger's impact upon GTE-Bell Atlantic's ability to offer out-of-franchise local exchange service; (3) the relative ability of the merged company to build a national brand; and (4) the likelihood of any injury to competition in the local exchange market as a result of the merger. The topics will be discussed in that order.

The National Market for Bundled Services:

- 4. GTE's merger with Bell Atlantic will create the first challenger to AT&T, MCI WorldCom, and Sprint in the national market for bundled services. Currently, the Big Three control the market for national telecommunications services by virtue of their dominance in the long distance and data markets. GTE-Bell Atlantic's combined ability to provide advanced voice and data services (like Frame Relay, ATM, and Virtual Private Networks (VPNs)) along with its ability to provide facilities-based long distance, IP, and local services to large business customers across the country, will create a much-needed fourth player among the national, full-service telecommunications providers.
- 5. The emerging national market for bundled services is the key telecommunications market of the future. Because businesses are increasingly looking for integrated solutions to their telecommunications needs, demand for a full bundle of nationally provided services is high, particularly among large business customers that represent key anchor tenants in out-of-franchise markets. GTE market research indicates that 86 percent of businesses that spend over \$60,000 per year on traditional telephone service are interested in purchasing multiple voice and data

communication services from a single company. With integrated bundled offerings, large businesses benefit by receiving deeper volume discounts and by eliminating the cost and complexity of managing multiple service providers. But only a small percentage of large business customers currently purchase a full bundle of telecommunication services from one provider.

6. Among all telecommunications services, long distance, local, data communications, and Internet services have the highest demand among large businesses interested in bundling. GTE market research indicates that those businesses interested in purchasing multiple services from a single provider want to receive the following services:

Long Distance	67%
Local	62%
Data Communication Services	48%
Internet Services	43%
Wireless	29%
Paging	21%
Network Management	18%
Web Hosting	14%
Systems Consulting	10%

Moreover, it is increasingly important to offer these multiple services without geographical limitation. GTE research shows that 68 percent of large firms consider it important to be able to standardize communication providers across geographic locations.

7. Advanced voice and data services, as well as Internet services, are critical components of a national bundled offering, as they are increasingly demanded by large businesses to address their complex communications needs. GTE market research indicates that 76 percent of large businesses buy or plan to buy Frame Relay within the next twelve months.

ATM demand is also growing, with 24 percent of large businesses currently using it or planning to buy it in the next year. Similarly, demand is rising for VPNs among large businesses: International Data Corporation research indicates that 25 percent of businesses with over 5,000 employees already have or plan to get VPNs within the next 12 months. Finally, among Fortune 500 companies, demand for Internet services approaches 100 percent.

Competition in the Local Exchange Market:

- 8. In addition to allowing the new GTE-Bell Atlantic to compete effectively with AT&T, MCI WorldCom, and Sprint in providing advanced voice and data services on a national scale, the merger will also enhance competition in local exchange markets across the country. The merger will achieve this substantial pro-competitive benefit by marrying the two company's complementary assets and capabilities -- without which neither company alone could mount such a rapid, broad, and effective out-of-franchise offering. These enhanced capabilities will allow GTE-Bell Atlantic to seek to enter 21 markets with local service offerings within 18 months of the merger's closing.
- 9. On its own, GTE's out-of-franchise local service activities have been quite limited. GTE's strategy is to offer services out-of-franchise primarily through its subsidiary GTECC. GTECC's business plan, which was developed in late-1996 and resulted in the formation of GTECC in May 1997, focused primarily on providing bundled services -- including local, long distance, wireless, and Internet -- to customers *inside* of GTE's franchise territories. It thus targeted consumers and small business customers (3-50 employees) in GTE's franchise areas, but only small businesses out-of-franchise, and then only in areas contiguous to GTE's

franchise ("near out-of-franchise") and in GTE's wireless markets. Consumers were not targeted out-of-franchise because acquisition costs were too high. Likewise, large businesses were not targeted because GTE has a limited presence in that market segment. GTECC's plan, moreover, was resale-based. Local service was provided in-franchise by reselling from GTE Network Service (GTENS), GTE's ILEC, and was offered out-of-franchise to small businesses by reselling from other ILECs. But even this modest out-of-franchise strategy was less successful than anticipated.

10. Since its first launch into California in September 1997, GTECC has learned that the assumptions upon which it built its business plan were simply too optimistic. In addition to encountering higher than expected costs of service delivery -- *i.e.*, order entry, provisioning, billing, and customer care -- GTECC has learned that customer acquisition costs, especially for out-of-franchise small business customers, are higher than expected. For example, in February 1998, GTE BD&I estimated the following average small business acquisition costs:

	In-Franchise	Near Out-of-Franchise
3-9 Employees	\$900	\$1,600
9-50 Employees	\$1,300	\$2,300

GTECC's September 1998 year-to-date acquisition cost, however, was much higher than any of these estimates -- \$3,309 per small business customer. And since this figure includes infranchise acquisitions -- which traditionally cost less -- GTECC's out-of-franchise small business acquisition cost is actually higher. Indeed, due to GTE's low out-of-franchise brand awareness, GTECC's experience has shown that the further small businesses are located from GTE's franchise territory, the higher acquisition costs rise.

- 11. Moreover, revenue and gross margin indicators also demonstrate the stark difference between GTECC's predictions in its business plan and its actual results. As to revenues, the business plan assumed \$658 in revenue per customer per month for the small business bundle of services. GTECC's actual September 1998 year-to-date financials, however, show only \$168 in revenue per small business customer per month. Gross margin actuals are just as disparate. Depending on the product type, the business plan assumed between 17 and 53 percent gross margin for the small business bundle. GTECC's actual September 1998 year-to-date gross margin is *negative* 73.92 percent. In light of these lower than anticipated revenues and higher than anticipated costs, GTECC has suspended marketing to small business customers -- both in- and out-of-franchise -- until acquisition costs can be reduced. GTECC is therefore only marketing to in-franchise consumers at this time, and is in the process of developing a new facilities-based strategy.
- 12. GTE's minimal out-of-franchise presence does not justify investment in new facilities on a broad scale. Due to capital fund limitations for GTE as a whole and the resulting prioritization of opportunities, GTECC only plans to expand out-of-franchise with local services in one market in 1999. To prioritize target markets, GTECC focused on cities where GTE already had an existing presence. Looking at four factors -- Metropolitan Statistical Areas (MSAs) with (1) large data revenue opportunities for new business; (2) existing GTE facilities (*i.e.*, switching facilities and access to the GNI); (3) a business customer base to which GTECC can upsell additional services; and (4) existing GTE brand awareness -- San Francisco was selected.

- facilities-based strategy: GTECC will upgrade a GTE Wireless (GTEW) switch to provide wireline services. Also, to the extent possible, GTECC will rely upon GTEW's brand awareness to help reduce acquisition costs and increase win rates. By the third quarter of 1999, GTECC hopes to begin selling to medium-sized business customers to whom it currently sells CPE (*i.e.*, PBX, key systems, and internal network monitoring and maintenance). The total plan in 1999, according to GTECC's projections, would likely generate no more than about \$1 million in local exchange revenue and the sale of additional services to about 60 new accounts. Overall, GTECC's San Francisco trial is a fairly modest plan that uses GTE's limited resources in the most effective way possible.
- 14. In contrast, the GTE-Bell Atlantic merger will provide the new company the capabilities to mount a broader, more rapid out-of-franchise local service launch than either company could undertake on its own. While GTE currently only plans to expand out-of-franchise with a local service offering in one city in 1999, the new company plans to enter on an economic basis 21 cities within 18 months of the merger's closing. It will seek to do so by marrying several complementary capabilities: Bell Atlantic's large business customer base will provide the scale to justify the investments in facilities that are required for a broad out-of-franchise strategy. GTE's GNI will allow the combined company immediately to offer the full suite of facilities-based services -- including advanced voice and data, Internet, and long distance -- necessary to attract high-volume customers. GTE also brings experience in marketing and provisioning bundled services. And the new company's combined scale will provide the

resources and business justification to build a national brand rivaling that of AT&T, MCI WorldCom, and Sprint -- a component necessary to compete on a nationwide basis with the top-tier providers.

- 15. Building the facilities required to implement this plan, however, will require upfront capital costs that must be justified by serving a high volume of traffic. GTE, however, does not have a significant large business customer base to offset the required up-front costs of broad facilities-based out-of-franchise expansion. Bell Atlantic, on the other hand, has the relationships with large business customers that GTE lacks. For example, Bell Atlantic serves the headquarters of 175 of the Fortune 500 companies in its wireline territory. GTE serves only 20. In terms of business accounts that purchase over \$60,000 annually in traditional telephone service, Bell Atlantic manages approximately 14,500 accounts that bring in approximately \$3.7 billion in annual revenue; GTE only serves approximately 2,700 such accounts, bringing in about \$1 billion.
- 16. These large business customers are critical anchor tenants. GTE conducted an actual analysis of the economics of entry into two of the markets that GTE Chairman Charles R. Lee identified to Congress: one in which the combined company will have some facilities and existing brand recognition; and another in which the merged company will have neither facilities nor brand recognition. The results of this analysis indicated that, by drawing on both companies' customer relationships, entries that would be profitable for neither company alone should (absent unexpected developments) be profitable for the merged company. It also indicated that, when looking at the number of customer relationships GTE, Bell Atlantic, and the merged company

will have in the 21 target cities, the merged company had enough customers to enter into all 21 markets -- something neither GTE nor Bell Atlantic could accomplish alone.

17. Moreover, the merger will allow GTE and Bell Atlantic to recover their initial investment, and earn a positive return, in a much shorter time frame than either company could alone. For example, a facilities-based entry employing a wireless switch would generate the following returns in a medium-sized market:

	GTE Alone	Bell Atlantic Alone	Combined
Net Present Value Over 5 Years	(\$5.2M)	(\$3.3M)	\$0.7M
Discounted Payback Period	>5 years	>5 years	4.6 years

18. Likewise, a facilities-based entry into a large market, relying on the placement of a new switch, would generate the following returns:

	GTE Alone	Bell Atlantic Alone	Combined
Net Present Value Over 5 Years	(\$0.2M)	(\$2.8M)	\$13.5M
Discounted Payback Period	>5 years	>5 years	3.1 years

19. GTE Internetworking (GTEI) customers were included in these two examples, demonstrating that they do not provide the required relationships to justify GTE's entry alone. Even apart from this, however, it is unreasonable to assume that GTEI customers provide GTE access to the large business market. Of GTEI's \$740 million 1998 total revenue outlook, business applications -- *i.e.*, Internet access and Web hosting and security -- sold to businesses of all sizes will only generate \$152 million in revenue. While these applications are an integral

part of a bundle, GTEI's share represents an insignificant amount of purchasing decisions compared against the \$86 billion 1998 voice and data revenue opportunity in the Fortune 1000 market segment. Moreover, many of GTEI's business application relationships are with purchasers of Web hosting, who are typically not the same telecommunications and IT managers who make the larger telecommunications purchasing decisions for large businesses.

20. GTE also believes that the new company's out-of-franchise capability will be enhanced by GTECC's experience developing platforms for the delivery of bundled services from multiple vendors. Bell Atlantic has no such experience. Given that GTE will have spent over two years developing its platforms and service delivery processes, GTE believes its experience should prove useful in putting Bell Atlantic ahead of its current capabilities and saving the up-front costs of purchasing or developing its own platforms.

Building a National Brand:

21. Brand awareness is likewise a necessary component to compete in the national market for bundled services. The Big Three have powerful national brands and the RBOCs have strong regional brands. Therefore, national awareness is necessary to compete effectively against all of them. Neither company, however, has the plans or the resources to create a national brand on its own. The GTE-Bell Atlantic merger will give the combined company the needed resources to develop the brand awareness and image to compete on a broad scale, and will also allow it to take advantage of efficiencies from national advertising buys and higher volume purchases.

- 22. A strong brand image translates generally into shareholder value and profit for a company by attracting resources (such as customers, investors, and employees), securing customer retention and loyalty, offering a competitive advantage, and increasing sales and income. More fundamentally, a brand represents a promise from the company to deliver a product or service at a certain level of quality and performance. In this regard, however, GTE's brand imagery has suffered from a lack of consistency over time and thus fails to convey the image of a technologically sophisticated national provider of services. Indeed, GTE research indicates that, regardless of target group, GTE is still seen principally as a "local telco" and not a national leading-edge telecommunications provider.
- with AT&T, MCI WorldCom, and Sprint on a national scale. For a sale to occur, the customer -no matter how small or large -- must be convinced that the seller is a credible provider of the
 offered service. Thus, to sell to large business customers, GTE must convince those who make
 purchasing decisions for those businesses that it is an effective and reliable provider of every part
 of the service bundle. Brands convey messages that impact upon this process. All customers -including individuals in charge of purchasing decisions for large businesses -- are susceptible
 to the cachet of a well-developed brand. Conversely, to the extent that GTE's brand conveys
 images of a local telco, rather than a leading-edge national provider, it will have a substantial
 negative impact upon those individuals' purchasing decisions. In this regard, a national brand
 that is built to convey the proper image is important to be able to compete with the Big Three
 for customers in all market segments.

- 24. GTE is also hampered by its lack of brand awareness generally. GTE research indicates that, as of the second quarter of 1998, the Big Three long distance companies have substantially higher brand awareness than GTE. For example, unaided brand awareness is especially strong for AT&T, at 90 percent among consumers and 88 percent among businesses. MCI also demonstrates strong unaided brand recognition among consumers at 69 percent, and businesses at 80 percent. Sprint's awareness is comparable to MCI's. GTE's unaided brand awareness, on the other hand, is significantly lower than AT&T's -- even inside of GTE's franchise territories -- and is substantially lower than all of the IXCs outside of its franchise. Infranchise, GTE's unaided awareness is 68 percent among businesses and 64 percent among consumers, while out-of-franchise, unaided recognition is a low 31 percent for businesses and 29 percent for consumers. These out-of-franchise results are confirmed by a second GTE study in November 1998, which shows GTE's out-of-franchise unaided awareness (excluding Bell Atlantic states) to be 26 percent among consumers and 29 percent among business executives. In Bell Atlantic states, GTE's unaided out-of-franchise brand awareness is even lower: 15 and 17 percent for consumers and business executives, respectively. The same study puts Bell Atlantic's unaided awareness in GTE's franchise in Bell Atlantic states at 14 percent for consumers and 15 percent among business executives.
- 25. And with increasing competition in the telecommunications marketplace, brand preference will significantly drive customer choice of bundled telecommunications providers.

 GTE, with a nationally indistinct and often misunderstood brand, will be at a severe disadvantage relative to the Big Three and the RBOCs within their regions. Advertising is one of the most

effective means of enhancing brand imagery, but GTE's advertising spending -- which is affected by budget pressures within the corporation -- lags significantly behind the competition. As a percent of total sales (a commonly accepted measure of advertising/brand commitment), GTE ranks last among the 9 major IXCs and RBOCs as shown below:

Sprint	1.9%
MCI WorldCom	1.9%
AT&T	1.0%
U S West	0.9%
SBC	0.7%
Bell Atlantic	0.7%
BellSouth	0.6%
Ameritech	0.5%
GTE	0.5%

- 26. To become a serious player on a national level, advertising spending capable of generating meaningful levels of national awareness -- relative to the Big Three -- is critical. For reference, MCI WorldCom, AT&T, and Sprint are spending at annual levels of approximately \$548, \$538, and \$318 million, respectively. By contrast, GTE's only truly nationwide advertising effort this year -- its "People Moving Ideas" campaign -- was supported by about \$15 million, and was aired predominantly over a five week period in the first and second quarter. Moreover, that national campaign was directed, first, at the financial community, then at policymakers and GTE employees, and, only fourth, at customers.
- 27. After the merger, GTE-Bell Atlantic's scale will allow it to build -- on a national basis -- a brand to be competitive with the Big Three. This is illustrated by looking at the total

¹ Amounts are January-September 1998; Sprint and BellSouth are January-June 1998.

advertising expenditures for the major telecommunications companies from October 1997 to September 1998:

Spending	Share of Spending
\$548,325,700	24.1%
\$538,462,800	23.6%
\$318,397,200	14.0%
\$214,180,600	9.4%
\$194,187,200	8.5%
\$145,292,600	6.4%
\$115,193,800	5.1%
\$105,700,700	4.6%
\$97,444,800	4.3%
	\$548,325,700 \$538,462,800 \$318,397,200 \$214,180,600 \$194,187,200 \$145,292,600 \$115,193,800 \$105,700,700

As separate companies, Bell Atlantic and GTE are fourth and seventh in terms of spending, and well behind the Big Three. After the merger, the combined company's advertising spending would place it among the Big Three with a 14.5 percent share of spending.

28. In addition, GTE-Bell Atlantic's larger combined geographic footprint creates advertising efficiencies that will enhance its ability to build a national brand. As separate entities, both GTE and Bell Atlantic have predominantly been local advertisers in their respective footprints. But as the combined entity's footprint grows larger, it will become more cost effective to purchase advertising nationally, rather than on a spot or local basis. Indeed, GTE-Bell Atlantic's preliminary calculations indicate that the company may be able to take advantage of this efficiency with national print and network and cable television advertising. An additional advantage presented by advertising on network television, as opposed to purchasing spot advertising, is that ads appear "in program" -- i.e., at fifteen or forty-five minutes past the hour -- when viewers are less likely to change channels or tune out.

29. Neither company on its own, however, has the resources or the footprint required to create a national brand. For example, to advertise on par with MCI WorldCom's \$548 million in annual spending, GTE would have to more than quadruple its current expenditure of \$115 million by spending an additional \$433 million. Bell Atlantic would likewise have to spend an additional \$334 million -- more than double its current \$214 million. Furthermore, as separate companies, there would be little payback for GTE or Bell Atlantic to invest substantial resources in attempting to develop a national brand. Without a national presence in the bundled service market, there would be nothing in the marketplace to reinforce the brand image, and therefore the investment in brand would not be cost-justified. The merger, however, will allow GTE-Bell Atlantic to build the brand to compete with AT&T, MCI WorldCom, and Sprint, while at the same time providing the complementary capabilities to support a national bundled offering.

The Merger Will Not Injure Competition in the Local Exchange Market:

30. The merger will achieve these substantial pro-competitive benefits without risking any injury to competition in the market for local exchange service. GTE's current strategy is to use GTECC as its vehicle for out-of-franchise expansion. But from GTECC's perspective, in light of its prior launch experiences and its current facilities-based strategy, Pennsylvania and Virginia do not present a decent business case for out-of-franchise expansion. As already mentioned, GTECC has never targeted out-of-franchise consumers and has currently stopped marketing to small businesses both in- and out-of-franchise. And, because of capital constraints, GTECC only plans to expand into one city -- San Francisco -- with an out-of-franchise local exchange offering in 1999. While predictions are difficult because GTECC lives year-to-year

with regard to expansion plans, if GTECC's assumptions about customer acquisitions and product penetration prove out and the San Francisco wireless switch upgrade is ultimately successful, GTECC would -- at most -- consider applying this wireless-upgrade strategy to three or four additional cities in 2000.

31. Based on the criteria GTECC considers in evaluating target cities -- MSAs with (1) large data revenue opportunities for new business; (2) existing GTE facilities (*i.e.*, switching facilities and access to the GNI); (3) a business customer base to which GTECC can upsell additional services; and (4) existing GTE brand awareness -- GTECC would not target Bell Atlantic states for its facilities-based strategy. No markets in these states meet GTECC's criteria; they are either too small or too remote to give GTE any strategic presence.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 21, 1998.

Jeffrey C. Kissell

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 21, 1998.

Scott M. Zimmerman

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
GTE Corporation,)	
)	
Transferor,)	
)	
and)	CC Docket No. 98-184
)	
Bell Atlantic Corporation,)	
)	
Transferee,)	
)	
For Consent to Transfer of Control.)	

SECOND DECLARATION OF DEBRA R. COVEY

1. I am the Vice President of Market Solutions for GTE Communications Corporation (GTECC). I am currently on special assignment to review GTE's strategic and tactical plans for the effective deployment, management, and operation of the Global Network Infrastructure (GNI) -- GTE's national voice, data, and IP network. Prior to this assignment, I was responsible for all product development, customer billing, operations support systems, business process design, vendor management, contract negotiations, and network requirements development for GTECC. I was also the leader of the original team that, in late-1996, developed the operations and system strategy for GTECC. In addition, I was on the team that launched GTE's long distance business in 1996. Prior to joining GTE, I was employed by Sprint for eleven years, and before that I worked at Southwestern Bell for five years. The majority of my

twenty years in the telecommunications industry has been in network operations and management, systems management, access optimization, and service provisioning. In connection with the GTE-Bell Atlantic merger, I have been asked to discuss the combined GTE-Bell Atlantic company's capabilities as a provider of advanced voice and data services.

- 2. Customers use advanced voice and data services to communicate between and among multiple remote locations; therefore, providers with national capabilities have an advantage over those with geographic limitations. GTE's network will be a national fiber backbone, supporting ATM, Frame Relay, Virtual Private Network (VPN), Internet backbone and long distance services. The GNI will have points of presence (POPs) in many cities across the United States, but because GTE lacks significant customer relationships in the Northeast, it will have a limited number of POPs in that region.
- 3. I understand that the network that Bell Atlantic would likely build, on the other hand, would only be regional. When operational, it would provide ATM, Frame Relay, and long distance services to customers located in the Bell Atlantic region. Because of its network's geographic limitations, Bell Atlantic would have to resell from another provider -- or possibly from several different providers -- to offer advanced voice and data services nationally. By having to rely on resale to achieve broad geographic coverage, Bell Atlantic would be disadvantaged relative to competitors with national network capabilities -- especially when attempting to serve large businesses with locations spread throughout the country that demand broad facilities-based coverage to ensure compatible services for all branch or affiliate locations.

Based on GTE's resale experience -- for example, as a reseller of long distance service from MCI WorldCom and Frame Relay from Sprint -- GTE has concluded that national facilities-based coverage is necessary to competitively offer advanced voice and data services.

- 4. For several reasons, facilities-based providers have a distinct advantage over resellers. *First*, facilities-based providers enjoy lower unit costs than resellers. This disparity is driven, in large part, by the fact that facilities-based providers have the ability to aggregate larger amounts of traffic onto a single network, thereby lowering their unit costs. Unit costs are also more controllable for the facilities-based provider, because such a provider can determine for itself when to grow bandwidth, expand switching capabilities, develop software versions for new functionalities, and increase security and fraud control. Given its lower costs, a facilities-based provider will almost always be able to offer its services at a more competitive price than a reseller.
- 5. Second, a facilities-based provider controls its own destiny by determining its market strategy -- including which new services and functionalities to invest in and when to roll them out -- as opposed to being submissive to a supplier's strategy that may be more generic and not offer as much unique product functionality. Some services in high demand by large business customers -- and particularly by Fortune 500 companies with multiple locations -- are not competitively available for resale. VPN services, for example, are not available for resale on terms or with functionality that can compete with the Big Three's retail offerings. Because large business customers want customized solutions to their telecommunications needs, the absence

of a single product is enough to create a competitive disadvantage relative to carriers offering a full suite of services. When competing for Fortune 500 companies, GTE's experience has shown that national VPN coverage is essential.

- 6. Third, it is extremely difficult for a reseller to cobble together a full suite of services from a single supplier, and using multiple suppliers creates further difficulties. A reseller's already high unit cost is further increased when it purchases services from multiple suppliers, because the reseller loses out on volume discounts and, with more suppliers, additional back office investments are necessary for service delivery.
- 7. Fourth, those services that can actually be competitively purchased for resale are not available in as many locations as can be reached by a facilities-based provider. To serve markets not near a supplier's POP, Bell Atlantic -- as a reseller -- would either have to purchase from a second reseller (a prospect that creates prohibitive back-office complications and expenses) or backhaul traffic to one of the supplier's POPs. But this would likely make the price of Bell Atlantic's offering uncompetitive.
- 8. Fifth, resellers are also handicapped because they are typically unable to offer service guarantees comparable to those offered by facilities-based providers. Large business customers generally demand a service guarantee program. Resale contracts, however, typically do not hold the supplier liable for performance failures, leaving the reseller unable to make the service guarantees that large businesses will not do without. Facilities-based providers, on the other hand, can engineer and invest in their networks to provide whatever level of security their

customers require. Moreover, large business customers recognize that because resellers are at least one step removed from the network, they are reliant on the provider for technical support and repair. Because they have hands-on control over their own network, facilities-based providers are not only able to give performance guarantees, but they also are able to offer an added level of assurance to customers because they can react quickly and directly if a network outage actually occurs.

- 9. Given all of the disadvantages associated with reselling advanced voice and data services and Bell Atlantic's lack of facilities coverage outside of the Northeast, GTE's experience suggests that Bell Atlantic would be a weak provider of these services to customers with a significant presence outside of its region. GTE, in fact, has had similar difficulties penetrating the large business market. In addition to having only resale capabilities and therefore suffering the handicap of high unit costs and reduced functionality, GTE lacks a significant large business customer base -- especially within the Northeast. GTE's experience has been that without established relationships and facilities, it is very difficult to acquire these customers. The GTE-Bell Atlantic merger will allow GTE access to Bell Atlantic's marketing channels within the large business segment, while providing Bell Atlantic a national, facilities-based footprint. The combined company will therefore be able to acquire and effectively serve those large businesses with branch and affiliate locations throughout the United States.
- 10. The merger will also bring substantial benefits to consumers of advanced voice and data services. The GNI has an extraordinary amount of capacity and GTE needs more traffic

than it will control alone to operate this network most efficiently. The merger will allow the combined company to migrate Bell Atlantic's long distance traffic -- both originating and terminating in the Northeast -- as well as its regional advanced voice and data traffic to the GNI. This will not only reduce the unit cost of long distance service, but also the cost of all products provisioned over the network. Moreover, without the merger, the GNI will only provide access in those cities where GTE alone has the prospect of serving enough customers to recoup its investment in a point of presence. By coupling Bell Atlantic's large business customer relationships with the GNI, the combined company will be able to market and provide advanced voice and data services in many new markets.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 21, 1998.

Debra R. Covey

Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)
GTE CORPORATION,)
Transferor,) File No. CC Docket No. 98-184
and)
BELL ATLANTIC CORPORATION,)
Transferee.)
For Consent to Transfer of Control)

REPLY DECLARATION BY THOMAS W. HAZLETT

INTRODUCTION

- 1) My name is Thomas W. Hazlett, and I am an economist specializing in telecommunications policy. I currently serve as Professor of Agricultural and Resource Economics at the University of California, Davis, where I am Director of the Program in Telecommunications Policy. I am also, during the 1998-99 academic year, a Resident Scholar at the American Enterprise Institute in Washington, D.C. I have written many papers for academic and popular publications on the topic of telecommunications regulation, and have previously served as Chief Economist of the Federal Communications Commission (1991-92). At the request of Bell Atlantic, I submitted a Declaration analyzing the competitive implications of the proposed merger under examination. This Reply Declaration responds to comments in this proceeding regarding the economic analysis developed in my previous filing.
- 2) In my previous declaration I examined various aspects of the Bell Atlantic-GTE merger that could differentiate pro-efficiency consequences from anti-competitive effects. I also presented key evidence supporting the pro-efficiency view of the merger in the form of an "event study." That analysis focused on investor reaction to the announcement of the merger. The central results of that analysis are seen in Table 1, which summarizes the announcement-date returns to stockholders of the major telecommunications service firms most likely to feel a competitive impact from the Bell Atlantic-GTE combination. Every major competitor to the newly merged firm AT&T, SBC, MCI/WorldCom, and Sprint saw negative returns in investor's equity (relative to

the market) over the 1-day and 3-day trading windows surrounding the announcement of the merger on July 28, 1998.

			r Announcemer Four Major Co		
	MCI/WorldCom	AT&T	SBC	Sprint	S&P 500
Window		Abs	olute Returns		
1 day	-5.1%	-1.6%	-1.8%	-2.8%	-1.5%
3 day	-4.8%	-1.8%	-1.6%	-3.9%	-1.4%
	A	bnormal Retur	ns (Adjusted by	S&P 500)	
1 day	-3.6%	-0.1%	-0.3%	-1.3%	
3 day	-3.4%	-0.4%	-0.3%	-2.6%	

Announcement Date: July 28, 1998

3) The importance of this financial market evidence is that it provides an unbiased crosscheck on the various theories advanced to predict the likely effects of the proposed merger. Since the requirements for constructing a theory are fairly simply met — one need only devise a plausible story as to how the market works — testing the theory against the reactions of actual investors adds a reality check. While the market does not fully explain why prices move as they do, the observed pattern of security price movements will tend to fit certain explanations more convincingly than others. That is why financial event studies are accepted analytical tools in the economics literature.

THE CRITIQUE OF EVENT STUDIES

4) While acknowledging event studies as a standard technique used by economists, the Baseman & Kelley paper concludes with the disclaimer: "Skeptics who may doubt the wisdom of inferring anything from stock price movements are of course free to throw out event studies in their entirety." Yet, while all methods of economic analysis have their limitations, much can be discerned from careful examination of the stock market reaction to the Bell Atlantic/GTE merger announcement. This is especially true in light of the

² B-K, at 66.

[&]quot;In general, event studies are used in antitrust to assess the perception of investors in financial markets concerning the likely effects of a merger." Declaration of Kenneth C. Baseman and A. Daniel Kelley, filed with Comments submitted by MCI/WorldCom in this proceeding, Nov. 23, 1998 ["B-K"], at 60.

arguments made in the papers by Baseman & Kelley and Besen, Srinagesh, & Woodbury.³

- 5) Baseman & Kelley write: "First, the [event study] method assumes that investors are fairly well informed, and in a good position to judge quickly the effects of such a merger. Critics of event studies point out that many mergers to which investors reacted favorably turned out later to be disasters for the shareholders." While the assumption of "fairly well informed" investors is uncontroversial (and easily met), the latter comment has no bearing on the analysis. Surprises obtain in the financial marketplace with some regularity witness the degree to which securities prices change. But the validity of event studies does not rest on investors perfectly forecasting the future. It merely relies on investors making unbiased forecasts of future values. Because generous financial returns await those investors who find even momentarily unseen opportunities to make better forecasts, economists logically see the market setting securities prices which constitute unbiased predictions of future values.
- 6) Baseman & Kelley also point out that there is no theoretically unambiguous window to focus on in analyzing market events. While true, this is addressed by focusing on short windows surrounding unambiguous event dates to obtain an unbiased estimate of the *direction* of change. That is, while shorter windows often provide incomplete estimates of the aggregate change in value associated with a given event, they provide sharper predictions as to whether such an event tends to raise or lower security value. For that reason, I confine my empirical investigation to 1-day and 3-day returns.

the longer window (such as AT&T's proposed acquisition of TCI, which was announced on June 24, 1998). If effects are difficult to discern in the short window, they are likely to be even more difficult to filter out over the longer period. Choosing amongst the various possible time periods can also provoke suspicions of "window shopping."

³ Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury, "An Economic Analysis of the Proposed Bell Atlantic/GTE Merger," paper filed with Comments submitted by AT&T in this proceeding, Nov. 23, 1998.

⁴ B-K, at 60.

⁵ B-K, at 61.

The important issue concerns whether or not the "event" is accompanied by new information. If something important happens but has already been widely anticipated, one would not expect stock prices to move in reaction to the event. There are cross-checks on whether information contains at least some element of "news," however, including the reaction of stock prices themselves. One will also note that event studies do not typically examine windows around merger *dates* but around merger *announcements*.

In a footnote (B-K, at 66), Baseman & Kelley argue that expanding the window to a period including the 30 days prior to merger announcement date is useful. The problem with this, of course, is that many other 'contaminating' events inevitably intercede over

INTERPRETING THE MARKET RETURNS

- 7) Neither the analysis by Baseman & Kelley nor that of Besen, Srinagesh & Woodbury dispute the empirical finding that negative returns for interexchange carriers are associated with the Bell Atlantic/GTE merger. Instead, they argue that such an effect is caused not by the anticipation of enhanced competitiveness in national and international telecommunications markets, but by increased opportunities for Bell Atlantic and GTE to limit local telephone competition. The empirical problem with this interpretation, however, is that the shares of both SBC and Ameritech which would stand to gain from this presumed reduction of competition also experience abnormal negative returns during the merger announcement window. Likewise, the combined BA/GTE entity, allegedly in the process of enhancing its monopoly power via merger, sees no increase in aggregate value.
- 8) Baseman & Kelley then rearrange the industry by eliminating the IXCs and pulling in two smaller LECs, BellSouth and USWest. They calculate abnormal returns for this new sample of firms around the Bell Atlantic/GTE merger announcement, as seen in Table 2.

			Table 2			
	Baser	man & Kelley	's Abnormal	Returns Estin	mates	
	3-day \	Windows Aro	und Merger	Announceme	nt Date	
SBC	Ameritech	BellSouth	USWest	Bell Atlantic	GTE	BA+GTE
-0.3%	-2.16%	2.2%	3.29%	2.32%	-4.36%	-0.65%

9) Baseman & Kelley conclude that these results are inconsistent with the proefficiency view of the Bell Atlantic/GTE merger. They argue that the positive returns realized by shareholders of BellSouth and USWest indicate that investors do not anticipate greater competition in local telephone markets. But the inclusion of the two smaller BOCs is problematic due to a well known phenomenon on Wall Street, the takeover effect. Where a merger announcement is likely to excite interest in the purchase of similar firms in the industry, capital values often increase to reflect the premium typically associated with merger targets. This windfall can easily swamp whatever other such effects (efficiency or monopoly) are anticipated.

Of course, many market analysts believe that these two firms are likely takeover targets (Sprint and foreign telecommunications firms are widely mentioned as possible buyers), or that they may merge with each other. The prices of either firm are thought to contain at least a partial premium for this "take-over play."

- 10) Baseman & Kelley go on to argue that the shareholders of SBC and Ameritech. witnessing negative returns, are hurt because of the "piling on" effect - the announcement of yet another large telecom/RBOC merger lowers the probability that an existing merger proposal will be approved by regulatory authorities. This explanation contradicts another part of the Baseman & Kelley analysis, however: if the BA/GTE announcement were to lower the probability that SBC/Ameritech were to be approved, then long distance stocks - under their foreclosure-enhancement theory of the merger should react favorably to the merger news. They do not. The "piling on" explanation is clearly uncompelling.9
- 11) Alternatively, there are strong reasons for looking at the top five US telecommunications providers (AT&T, MCI/WorldCom, Sprint, SBC/Ameritech, BA/GTE) as long-run competitors. In this light, the pattern of returns tells an internally consistent story, one of intense rivalry for market share between integrated competitors of national scope. This is surely the way industry analysts on Wall Street routinely characterize the relevant market for financial investment purposes, and how many informed observers view the dynamic for consolidation now developing.
- 12) Thus defined, observed stock price movements point to an efficiency explanation of the Bell Atlantic/GTE merger. While BellSouth and USWest see positive returns associated with the increased possibility of a take-over yielding stock price premia, all four of the major telecommunications competitors - including SBC/Ameritech which presumably stands to gain from the alleged foreclosure of long-distance carriers and CLECs - display negative returns around the time of the Bell Atlantic/GTE merger Investor expectations of increased competition in the overall telecommunications marketplace is the explanation that most comfortably fits such a pattern.
- 13) A final piece of the puzzle remains: The negative returns to the combined BA/GTE Baseman & Kelley assert that "if Bell Atlantic and GTE believe that the entity. Commission should be guided by the implications of event studies, then they should withdraw their merger application. The market is telling them that the merger is not in the interests of their shareholders." While the managers of private firms are most assuredly held to account for the role they play in creating shareholder value, this advice is aimed in the wrong direction. Negative returns for the merging parties may reflect a number of different investor expectations, including that of enhanced competition triggered by the merger. But it is plainly inconsistent with the expectation that the merger will create higher profitability through enhanced market power. And that is the relevant information for purposes of the FCC's "public interest" review.

5

⁹ The directional impact of any "piling on" effect, moreover, is far from obvious. At least two other large mergers were already pending in the telecom marketplace (WorldCom/MCI and AT&T/TCI) when the Bell Atlantic/GTE announcement was made in July 1998. The new merger could well have been seen to reflect an underlying industry dynamic driven by economies of scale and scope. If so, the probability of regulatory approval would have increased rather than fallen. ¹⁰ B-K, at 66.

CONCLUSION

- 14) In sum, the original analysis still stands: Market investors, voting with their dollars, do not see the proposed merger of Bell Atlantic and GTE as foreclosing competition, but expanding it.
- 15) I, Thomas. W. Hazlett, do hereby declare under penalty of perjury that the forgoing is true and correct.

Thomas W. Hazlett

22 December, 1998

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
GTE Corp.,)	
)	
Transferor,)	
)	
and)	CC Docket No. 98-184
)	
Bell Atlantic Corp.,)	
)	
Transferee,)	
)	
For Consent to Transfer of Control.)	

REPLY DECLARATION OF DOREEN TOBEN

- 1. I am providing this declaration in response to comments filed in this proceeding concerning the financial synergies that will be created by Bell Atlantic's merger with GTE.
- 2. The comments and the testimony at the Commission's en banc hearing last week confirm my initial declaration. For example, the Communications Workers of America filed comments supporting the merger because the increased output of the combined company will support the growth of good jobs. CWA Comments at 8.
- 3. Similarly, subsequent to my initial declaration, market analysts have issued reports crediting the merger's financial efficiencies, in part based on Bell Atlantic's success in achieving synergies in the NYNEX merger. Montgomery Securities, for example, issued a "buy" recommendation on Bell Atlantic's stock, explaining that Bell Atlantic has cut costs and improved revenues "in merging with NYNEX. Expenses [in the third quarter of 1998] grew at

2.6% -- a little more than half the rate of revenue growth (5%) during the past year and the projected synergies are only half implemented. We expect Bell Atlantic to do the same following its pending merger with GTE." R. Mitchell, Montgomery Securities (Nov. 25, 1998). See also Guy Woodlief, Prudential Securities (Oct. 21, 1998) ("We believe that Bell Atlantic is slightly ahead of schedule with regard to the achievement of [NYNEX] merger-related cost synergies."); Jack Grubman, Salomon Smith Barney (Oct. 21, 1998) ("The company has been able [to] improve consolidated revenue growth [and] trim down expenses."); Bruce Roberts, Desdner Kleinwort Benson (Sept. 29, 1998) ("In equipment procurement, the BEL-NYNEX merger has far exceeded cost savings projections. Equipment reductions have been as high as 30%, and BEL executives expect similar reductions once the GTE merger is completed."); Kevin Moore, BT Alex. Brown Inc. (Nov. 10, 1998) ("The [Bell Atlantic-GTE] merger is expected to produce cost synergies totalling \$2 billion within three years of completion, principally related to economies of scale and operating efficiencies. The combination is expected to generate an additional \$2 billion in revenue synergies.); id. ("The merger integration between Bell Atlantic and Nynex continues to progress on track, with a targeted \$300 million in capital expenditure savings almost all realized in 1998. These savings should come primarily from procurement efficiencies. Other expense savings are targeted at \$450 million in 1998, ramping up to \$750 million and \$1.1 billion by the year 2000.").

4. Several of the comments asked for additional detail concerning the cost savings and revenue improvements. In arriving at specific figures, initially we used the Bell Atlantic-NYNEX experience to create a template for quantifying GTE-Bell Atlantic synergies. Since the

merger announcement, we have continued to refine the numbers as the senior managers of the two companies have begun joint planning for the post-merger organizations. The \$2 billion annual expense savings we will be achieving within three years of the closing is broken down into the following components:

- General and administrative expenses -- \$500 million (this is primarily achieved by eliminating duplicative functions in areas such as finance, treasury, human resources, regulatory, and planning)
- Information systems -- \$300 million
- Procurement expense -- \$200 million
- Network and customer service -- \$140 million
- Product management and advertising -- \$110 million
- Consumer and business -- \$135 million
- Research and development -- \$50 million
- Wholesale -- \$15 million
- Long distance -- \$300 million
- Wireless -- \$200 million
- Directory -- \$100 million
- Internet/data services -- \$200 million

(The sum of the individual components exceeds \$2 billion, and ensures that we meet the \$2 billion expense reduction even if there is slippage in any individual component.)

5. These expense savings figures, plus the additional \$0.5 billion annual capital savings that we will achieve within three years of the merger close, are not based on fuzzy

concepts of "best practices" that might be achieved without the merger but instead are based on reducing overheads, sharing fixed costs over a broader base, and enabling our suppliers to achieve greater efficiencies in serving a combined company.

- 6. Similarly, within three years of the closing of the merger, additional annual sales of \$2 billion will come from the following areas:
 - Vertical services -- \$300 million
 - Long distance acceleration -- \$200 million
 - Large business -- \$500 million
 - Data and web hosting -- \$1 billion

These amounts reflect additional sales, not additional profits.

7. Of all the commenters, only Sprint and MCI WorldCom questioned the amount of financial synergies that the combined Bell Atlantic-GTE will achieve. Sprint claims that the synergies are not sufficiently established because (quoting from my initial declaration) the synergies are reflected in "'real budget commitments that department heads must meet or exceed' and . . . the compensation of officers responsible for the lines of business would be based on their ability to meet these commitments." Sprint Comments at 46. Sprint seems to be confusing the quantification of efficiencies with their enforcement. The financial synergies were quantified by comparison to the synergies achieved in the Bell Atlantic-NYNEX merger, and by sizing the costs and opportunities of the components of the business. The synergies will be enforced by putting them into the budgets of the individual organizations (subtractions from allowed expenditures and additions to required revenues).

- 8. MCI WorldCom states simply that "GTE and Bell Atlantic are already very large carriers and have likely exhausted all available scale economies." Comments of MCI WorldCom, Inc., Declaration of Kenneth C. Baseman and A. Daniel Kelley at 8. MCI WorldCom has no support for its assertion; by contrast, the efficiencies described above are fully supported by our experience in the comparable Bell Atlantic-NYNEX merger. MCI WorldCom's own prior merger experience may not offer the same perspective. According to CWA President Morton Bahr, the result of the MCI-WorldCom merger was "MCI has 'zeroed out' all local network development, in addition to announcing cuts of as many as 3,500 jobs, despite assurances to the FCC and other regulators that jobs would not be eliminated." Press Release, CWA Tells FCC: Bell Atlantic-GTE, SBC-Ameritech Mergers Will Boost Competition and Benefit All Consumers, http://www.cwa-union.org/pressreleases (Dec. 14, 1998).
- 9. AT&T's house economist, Mr. Levinson, suggests that the efficiencies of this transaction might be achieveable without the merger because (in a familiar AT&T refrain) the companies' costs are too high. AT&T Comments, Aff. of Stephen B. Levinson at 7-8. Mr. Levinson in no way disagrees with the size of the efficiencies, but he asserts "it is reasonable to question whether" Bell Atlantic and GTE are operating "as efficiently as possible" on a stand-alone basis. However, all of the efficiencies described above are merger specific and will come in addition to any other efficiencies the companies might achieve on their own. As one analyst has noted, "Although Bell Atlantic is a fine company in its own right -- we believe the merger with GTE is essential to lift BEL to a much higher performance level." Bruce Roberts, Desdner Kleinwort Benson (Sept. 29, 1998).

10. I said in my initial declaration that the financial efficiencies will allow the new company to meet its commitments to improve service quality, accelerate new services, and build new businesses that compete with Sprint, MCI WorldCom, and AT&T. These consumer benefits also occurred in the Bell Atlantic-NYNEX merger. Tim Carey, Chairman and Executive Director of the New York State Consumer Protection Board, testified in the December 14, 1998 en banc hearing that "consumer advocates are skeptical" about mergers, but in the Bell Atlantic-NYNEX merger New York consumers "were well served" because the merger parties invested \$1 billion in infrastructure and hired 700 employees to improve service quality in New York, and succeeded in meeting stricter quality standards. Mr. Carey further testified that the companies used the merger synergies to fund market opening measures and to lower intrastate access charges. He concluded that "the average New Yorker is better off today than if the merger had not occurred." In response to questions from Chairman Kennard, Mr. Carey testified that the "bottom line" was, "the company did what they said they would do."

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 23, 1998.

Doreen Toben

DECLARATION OF KENNETH J. ARROW

December 22, 1998

TABLE OF CONTENTS

			<u>Pa</u>	<u>ge</u>
1.	Introdu	uction		1
	Α.	Qualifi	cations	1
	В.	Overvi	iew of Conclusions	1
11.	Respo Regula	ndents ators to	Exaggerate the Impact of the Proposed Merger on the Ability of Establish Benchmarks for Evaluating ILEC Performance.	3
	Α.	Respo Produc	ondents Fail To Recognize that Changes in the Industry Have ced Large and Growing Numbers of Benchmarks.	4
		1.	Regulators can now focus on whether ILECs provide service to rivals that is equal in quality to that provided to itself. These benchmarks are unaffected by the proposed transaction.	4
		2.	The widespread deployment of facilities and services by CLECs creates alternative benchmarks regulators can use in evaluating ILEC performance.	7
	В.	Respo Will Re	endents Overstate the Extent to Which the Proposed Merger educe the Amount of Information Available to Regulators.	.10
	C.	The Ai Unsup	nalysis of Sprint's Experts Farrell and Mitchell Is Based on ported Assumptions and Other Flaws.	.12
		1.	Farrell and Mitchell's analysis of the effect of the merger on average practice benchmarking is flawed.	13
		2.	Farrell and Mitchell's analysis assumes that regulators are passive recipients of information.	14
		3.	Farrell and Mitchell's analysis overstates the effect of the merger on best practice benchmarking.	15
III.	and E	xchange	'Claims That Combining Two Large Providers of Local Exchange e Access Services Will Substantially Reduce Competition Are	16
	Α.	There Propo	is No Economic Basis for Respondents' Claim that the sed Merger Will Harm Competition By Creating A Large Firm.	17
	B.	"Coord	ondents' Claim that the Proposed Merger Increase the Likelihood of dinated Interaction" Ignores that the Transaction Will Result in its appropriate the Competition for Respondents	18

	C.	Firm's	Ability and Incentive To Engage in a "Price Squeeze" by Raising Charged to Rivals for Local Access Is Without Merit.	21	
	D.	Merge	endents' Claim that the Proposed Merger Will Increase the deform's Ability and Incentive To Discriminate Against Rivals n-Price Means Also Is Without Merit.	22	
		1.	Respondents' discrimination theory is based on contradictory assumptions.	22	
		2.	Evidence in wireless telecommunications and other markets indicates that ILECs do not have the ability and/or incentive to discriminate in providing local access to rivals.	23	
		3.	The widespread deployment of CLEC facilities now occurring is inconsistent with respondents' discrimination concerns.	24	
		4.	Respondents greatly overstate the extent to which the proposed transaction would increase incentives for ILECs to discriminate against rivals.	25	
IV.	Summ	ary of C	Conclusions	28	
Appendix 1 Appendix 2		Biographical Sketch and Publications Technical Explanation of Why Farrell and Mitchell's "Average Practice" Analysis is Misleading			
Appendix 3		Effect of Mergers on Incentives to Degrade Service to Competing Local Exchange Carriers			

I. INTRODUCTION

A. Qualifications

1. I, Kenneth J. Arrow, am the Joan Kenney Professor of Economics Emeritus at Stanford University. I received my B.S. in Social Science from The City College of New York in 1940, my M.A. in Mathematics from Columbia University in 1941 and my Ph.D. in Economics from Columbia in 1951. I have taught economics at the University of Chicago, Harvard University and Stanford University, and I have written more than 200 books and articles in economics and operations research. I am the recipient of numerous awards and honorary degrees, including the Nobel Memorial Prize in Economics (1972). A significant part of my writing and research has been in the areas of economic theory, industrial organization and welfare economics. My curriculum vitae is attached as Appendix 1.

B. Overview of Conclusions

- 2. I have been asked by counsel for Bell Atlantic Corporation ("Bell Atlantic") and GTE Corporation ("GTE") to address claims in two broad areas that have been raised by various parties ("respondents") that have filed comments with the Federal Communications Commission ("the Commission") in opposition to the proposed Bell Atlantic/GTE merger. Specifically, I have been asked to review respondents' claims that:
 - The proposed merger will substantially reduce the ability of regulators to monitor the performance of the merged firm and other incumbent local exchange carriers (ILECs) by reducing the number of available "benchmarks"; and
 - The proposed merger will harm competition because it combines two large providers
 of local exchange and exchange access services, increasing opportunities for
 "coordinated interaction" and increasing Bell Atlantic/GTE's incentive to discriminate
 against rivals.

- 3. As I discuss in this declaration, respondents greatly exaggerate the risk that the proposed transaction will harm competition. Respondents' analysis of the proposed merger's effect on regulators' ability to use benchmarks to monitor ILECs' behavior contains numerous flaws.
 - First, respondents fail to recognize that changes in the telecommunications industry
 during the last several years in particular, the enactment and implementation of the
 Telecommunications Act of 1996 ("the 1996 Act") have produced substantial
 numbers of new benchmarks for regulators to analyze in evaluating ILECs'
 performance.
 - Second, respondents overstate the extent to which the proposed merger will reduce
 the amount of information available to regulators. In particular, the merger would not
 reduce regulators' ability to compare the quality of service that an ILEC provides to
 competitive local exchange carriers ("CLECs") with the service that the ILEC
 provides to itself.
 - Third, the analysis submitted by Sprint's experts contains numerous shortcomings including, for example, the unsupported assumption that regulators are passive recipients of information. (My discussion here focuses on Sprint's experts because they present the most complete discussion among respondents' benchmarking analyses.¹)
- 4. Respondents' various claims that the proposed merger will reduce competition by combining two large providers of local exchange and exchange access services also exaggerate the risk of harm to competition.
 - First, respondents' claim that the size of a merged Bell Atlantic/GTE will by itself
 reduce competition is without economic basis. Respondents, in effect, claim that "big

In particular, my comments focus on: Declaration of Joseph Farrell and Bridger M. Mitchell, "Benchmarking and the Effects of ILEC Mergers," October 14, 1998, included as Attachment C to Sprint Comments (hereafter, Farrell and Mitchell).

- is bad." This simple-minded antitrust theory was rejected long ago by economists and courts.
- Second, there is no merit to respondents' claim that a merger of Bell Atlantic and GTE increases the potential for "coordinated interaction" among providers of local telephone service, with the effect of reducing the likelihood of ILECs' entry into each others' territories. This claim ignores the fact that the proposed merger of Bell Atlantic and GTE has been accompanied by announcement of a major out-of-region entry strategy -- precisely the opposite of what would be expected under the mutual forbearance theories raised by respondents.
- Third, respondents' claim that the proposed merger will increase the merged firm's
 ability and incentive to discriminate against rivals by raising local access prices
 charged to long distance carriers is based on flawed economic reasoning that the
 FCC has rejected on several past occasions.
- Finally, respondents' claim that the proposed merger will increase the merged firm's
 ability and incentive to discriminate against rivals through non-price means is based
 on flawed economic logic and is inconsistent with market evidence.
 - II. RESPONDENTS EXAGGERATE THE IMPACT OF THE PROPOSED MERGER ON THE ABILITY OF REGULATORS TO ESTABLISH BENCHMARKS FOR EVALUATING ILEC PERFORMANCE.
- 5. Several respondents argue that the proposed merger should be blocked because it will reduce the ability of the Commission and other regulators to monitor the behavior of incumbent local exchange carriers. In particular, these respondents argue that the proposed merger will reduce the number (by one) of firms that can serve as "benchmarks" to assess the

performance of other regulated ILECs, thereby reducing substantially the ability of the Commission and other regulators effectively to monitor and regulate all such providers.²

- A. Respondents Fail to Recognize that Changes in the Industry Have Produced Large and Growing Numbers of Benchmarks.
- 1. Regulators can now focus on whether ILECs provide service to rivals that is equal in quality to that provided to themselves. These benchmarks are unaffected by the proposed transaction.
- 6. Respondents' claims ignore the fundamental changes that have taken place in the telecommunications industry during the last several years. These changes, including the enactment and implementation of the 1996 Act and the widespread deployment of facilities and services by CLECs, have reduced the importance of the traditional types of benchmarks relied on in the past by the Commission and other regulatory bodies. Indeed, these changes are intended ultimately to reduce the importance and need for substantial regulation of all telecommunications providers, including ILECs.
- 7. Following the divestiture of the Bell Operating Companies (BOCs) from AT&T in 1984, regulators focused on the BOCs' provision of local access to interexchange carriers ("IXCs"). Because BOCs were prohibited from providing long-distance services, regulators could not compare how a BOC treated IXCs with how the BOC "treated itself" (e.g., how the BOC treated its own long-distance affiliate). The BOCs had a purely "vertical" relation to IXCs. That is, the BOCs supplied an input to, but did not compete with, IXCs. For this reason, how a particular BOC treated an IXC sometimes was compared to, or "benchmarked" against, how one or more other BOCs treated the same IXC. For example, federal and state regulators have used BOC-BOC benchmarks to detect discriminatory pricing, to evaluate equal access

See, for example, Petition to Deny of Sprint Communications Company L.P. ("Sprint Comments"), p. 46; Comments of MCI Worldcom, Inc. ("MCI Worldcom Comments"), p. 33; and Petition of AT&T Corp. to Deny Application ("AT&T Comments"), p.20.

requirements, and to ensure compliance with installation and maintenance requirements for various purposes.3

- 8. The importance of such BOC-BOC comparisons has decreased considerably. however, as the regulatory focus has shifted to how BOCs treat competitors in markets in which the BOCs themselves also compete. In such markets, the key inquiry is not whether the BOC is treating competitors as well as another BOC, but whether the BOC is treating competitors as well as it treats itself.
- 9. This was, for example, the main regulatory focus in the Computer III Inquiry in which the FCC adopted nonstructural safeguards to govern BOC participation in the Enhanced Services market. Here the Commission noted that it was adopting regulatory requirements to ensure that the BOCs "provide these competitors with access to basic services that is comparable in efficiency to the access they provide their own enhanced services." The BOCs were required to provide "equal access" to competing enhanced services providers (i.e., comparably efficient interconnection ("CEI")), but, unlike in the long-distance context, the relevant regulatory inquiry with this form of equal access is whether the BOC is treating competitors comparably to itself. The Commission said: "In general. . . we require the basic service functions utilized by a carrier-provided enhanced service to be available to others on an unbundled basis, with technical specifications, functional capabilities, and other quality and operational characteristics, such as installation and maintenance times, equal to those provided to the carrier's enhanced services." A BOC's CEI offering must be generally available with minimal transport costs, and fully operational and available prior to the date that the BOC offers its corresponding enhanced service to the public.⁶ The BOCs were ordered to file quarterly

See United States v. Western Elec. Co., 993 F.2d 1572, 1580-81 (D.C. Cir. 1993).

Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry), Report and Order, 104 FCC2d 958, 1027 131 (1986) ("Third Computer Inquiry").

ld. at 1041-1042 163-165.

Third Computer Inquiry, 104 FCC2d at 1036, 147. BOCs accordingly were required to provide interface functionality, unbundling of basic services, resale, technical characteristics, installation, maintenance and repair, and end-user access on a basis equivalent to its own enhanced services. Id. at 1039-1041, 157-162.

reports comparing the level of service they provide to their enhanced service affiliates with the service they provide to their enhanced services competitors.⁷

- 10. Since the passage of the 1996 Act, the focus of regulatory efforts by the Commission and other regulators has shifted to issues of access by firms that provide local telephone service in competition with incumbent local exchange carriers ("ILECs"). That is, regulatory efforts are focused on how ILECs treat firms with which they have a "horizontal" relationship -- firms that buy inputs from, and compete with, ILECs.
- 11. The 1996 Act established a regulatory process under which CLECs can gain access to the local exchange facilities of the ILEC by signing an "interconnection agreement" with the incumbent carrier. The large number of interconnection agreements that ILECs have signed with CLECs has resulted in the creation of new benchmarks and considerable new information that regulators can use in evaluating an ILEC's performance. Between November 1997 and November 1998, the number of such agreements grew from roughly 1,700 to more than 5,400.8 Bell Atlantic alone participated in 300 agreements in 1997 and an additional 450 in 1998.9 The interconnection agreements are public and, as a result, their utility as benchmarks is enhanced. The criteria for evaluating an ILEC's performance in these agreements can be monitored not only by regulators, but also by the CLECs themselves.
- 12. These interconnection agreements facilitate benchmarking as they often establish specific performance standards and a detailed schedule of charges if ILECs fail to meet their commitments. Each interconnection agreement requires approval by the relevant CLEC, ILEC, and state regulatory agency. Specifically, in its <u>Local Competition Order</u>, the Commission interpreted the Act's requirement that ILECs provide CLECs "nondiscriminatory" treatment as a requirement that the ILEC provide competitors with access to its facilities on the

ld., 104 FCC2d at 1055-1056 192.

<u>lbid</u>.

⁸ USTA Competition Report, November 3, 1997 and information in USTA's December 9, 1998 letter to The Honorable Thomas Bliley, Chairman of the House Committee on Commerce. The letter states that "local telephone companies have successfully negotiated more than 5,400 interconnection agreements with competitors, doubling the amount of such agreements from just a year ago."

same terms and conditions as it provides for itself.^{10,11} As a result, an ILEC's performance in providing access to a CLEC with which it has signed an interconnection agreement can be compared with the ILEC's performance with respect to its own local customers. Since there is no reason to expect that the proposed merger between Bell Atlantic and GTE would lead an ILEC to provide poorer service to itself, the proposed merger would not be expected to reduce the usefulness of this internal benchmark.

- 13. Finally, it is worth noting that the FCC and the Department of Justice ("DOJ") in evaluating BOC applications to provide long-distance service under Section 271 of the 1996 Act compare ILEC-CLEC benchmarks, not ILEC-ILEC benchmarks. In evaluating BellSouth's Section 271 application in Louisiana, for example, both the DOJ and FCC compared the service provided by BellSouth to CLECs with the service BellSouth provided itself for a number of services, including pre-ordering, ordering, and maintenance and repair functions.¹²
- 2. The widespread deployment of facilities and services by CLECs creates alternative benchmarks regulators can use in evaluating ILEC performance.
- 14. The entry of numerous CLECs into local markets (a situation that is now occurring throughout the country) correspondingly creates a variety of alternative benchmarks for evaluating an ILEC's performance, since the service that the ILEC provides to one CLEC can be used to evaluate its performance against others. For example, the share of LATAs in which one or more local service competitors hold numbering codes has increased from 11

FCC, Notice of Proposed Rulemaking in the matter of Performance Measurement and Reporting Requirements for Operating Support Systems, Interconnection and Operator Services and Directory Assistance. CC Docket 98-72, at 6.

Pursuant to such agreements, CLECs, for example, may obtain access to the same "OSS functions" that ILECs rely on to provide retail services to their own customers. CLECs are entitled to access customer data needed in order to sign up local exchange customers; place orders for services or facilities; receive relevant billing information from the ILEC; and so on.

Evaluation of the U.S. Department of Justice in the Matter of the Second Application by BellSouth Corporation, Bell South Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of InterLATA Services in Louisiana, pp. 28-35; and, FCC Memorandum Opinion and Order in the Matter of the Second Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of InterLATA Services in Louisiana, pp. 61, 71, 92-93.

percent in the third quarter 1995, to 34 percent in the third quarter of 1996, to 64 percent in the third quarter of 1997 to 84 percent in the third quarter of 1998.¹³

- 15. The CLECs entering into these agreements include each of the major respondents or their subsidiaries. For example, as of November 1997, AT&T and its subsidiary TCG had entered to interconnection agreements in 36 states and were involved in arbitrations in another five states. Similarly, MCI Worldcom (including its MFS and Brooks Fiber subsidiaries) had entered into interconnection agreements in 40 states; Sprint CLEC subsidiaries have signed interconnection agreements in 22 states. These firms have the incentive and expertise to monitor their interconnection agreements and to evaluate the performance of the various ILECs with which they have signed interconnection agreements.
- 16. The proposed transaction can also be expected to create significant new regulatory benchmarks. Out-of-region CLEC subsidiaries created by ILECs appear to be especially well-placed to monitor the performance of in-region ILECs. Sprint, for example, acknowledges that "[a]nother large incumbent is far better able to assess and contest claims by an ILEC that one form of interconnection is not feasible, or too costly, and thus the product of these negotiations can be expected to produce more efficient arrangements for competitive entry."¹⁴
- 17. In sum, the increasing number of CLECs and individual interconnection agreements with the CLECs create many benchmarks for regulators to use in evaluating the performance of ILECs in serving CLECs.
- 18. Furthermore, because all interconnection agreements are made public, agreements signed in one state can also influence the terms of agreements signed in other

FCC, Industry Analysis Division, Common Carrier Bureau, <u>Local Competition</u>, December 1998, Table 4.2. Assignment of a number code indicates that a CLEC is licensed to provide service in an area but does not necessarily indicate that the carrier yet provides service. If a reserved code is not activated with 18 months, the codes will be released from reservation. (Id., p. 41).

Sprint Comments, p. 12.

states. That is, regulators in one state can, and do, monitor interconnection agreements signed in other states. For example:

- As a result of negotiations with MCI, Bell Atlantic agreed that performance
 measurements included in MCI's interconnection agreement with Bell Atlantic in
 Pennsylvania would be included in MCI's interconnection agreement with Bell
 Atlantic in Virginia. Bell Atlantic also agreed that these performance measurements
 would be included in MCI's interconnection agreements in each (pre-NYNEX merger)
 Bell Atlantic state.¹⁵
- In a proceeding concerning performance standards for Bell Atlantic relating to
 interconnection agreements, the Pennsylvania Public Utilities Commission, at the
 urging of NextLink, considered the arrangements set by the Massachusetts Public
 Service Commission. The Pennsylvania PUC noted that "[c]ertain of the
 observations of the Massachusetts Public Service Commission are well-taken."16
- In a proceeding concerning whether Bell Atlantic should be required to provide directory assistance (DA) database access to competitors, MCI filed a petition urging the New Jersey Board of Public Utilities to follow the rulings of the Virginia, Maryland, and Delaware Commissions. The New Jersey Board granted MCI's petition and ordered Bell Atlantic to provide "the same DA database transfer that is now being provided in Virginia and other jurisdictions, or one which is substantially the same."
- Rhode Island adopted a Stipulated IntraLATA Presubscription Plan (ILP) that,
 according to the Rhode Island PUC, is "essentially a verbatim borrowing from the

Brief of Bell Atlantic pp. 17-18; MCI Telecommunications Corp. v. Bell Atlantic Corp., File No. E-98-32 (FCC filed October 2, 1998).

See PA PUC April 10, 1997, Application of MFS Intelenet of Pennsylvania, Inc.; Application of TCG Pittsburgh; Application of MCI Metro Access Transmission Services, Inc.; Application of Eastern Telelogic Corp.

See New Jersey Board of Public Utilities May 15, 1998, RE Investigation Regarding Local Exchange Competition for Telecommunications Services.

New Hampshire Public Utilities Commission's order on ILP, initiating presubscription in that state on June 2, 1997."¹⁸

- In a similar proceeding, the Vermont Public Service Board adopted a Stipulated ILP that "is based on the Stipulated ILP Plans approved in Rhode Island and Maine, and also the plan that was initially filed by NYNEX in New Hampshire." 19
- 19. The benchmarking process today is enhanced further still because under the terms of the 1996 Act, each ILEC must offer the equivalent of "most favored nation" protection to all CLECs in the same state.²⁰ That is, the ability of one CLEC to successfully negotiate and implement interconnection agreements benefits all other CLECs.
 - B. Respondents Overstate the Extent to Which the Proposed Merger Will Reduce the Amount of Information Available to Regulators.
- 20. Even for issues for which ILEC-ILEC comparisons (instead of ILEC-CLEC comparisons) may be relevant, respondents overstate the percentage reduction in the number of benchmarks resulting from the proposed merger because they ignore non-BOC ILECs. In particular, independent LECs, including Sprint's LEC subsidiaries, AllTel, Frontier, Cincinnati Bell and others, can provide benchmarks for regulators.
- 21. Sprint's experts Joseph Farrell and Bridger M. Mitchell ("Farrell and Mitchell"), in their discussion of the role of benchmarking, indeed cite a Commission evaluation of collocation charges that relied on information from 14 LECs, including "Cincinnati Bell Telephone Companies, Lincoln Telephone and Telegraph Company, Rochester Telephone Corporation, and Central Telephone Companies." Similarly, the Commission's <u>Statistics of Communication</u>

 Common Carriers ("SOCC") reflect data not just from the five major BOCs, but from a large

See Rhode Island PUC April 18, 1997, RE IntraLATA Presubscription Plan.

See Vermont PSB August 20, 1997, re: New England Telephone and Telegraph Company.

²⁰ 47 USC §252(i)

²¹ Farrell and Mitchell, p. 23.

- 11 -

number of "Tier 1" carriers, LECs that collect more than \$100 million in annual operating revenues ²²

- 22. Sprint's comments express concern that its new ION technology will face discrimination by ILECs, but fail to mention that its own local exchange operations can be used to provide a benchmark for evaluating the success of ION's implementation in other regions. Sprint operates more than 7 million access lines including ILECs in Las Vegas, NV and Raleigh, NC.
- the amount of information available to regulators since many measures of firm performance are specific to states and/or operating companies, not simply to the parent or holding company. Regulators often rely on state-level data, as opposed to holding company-level information, in evaluating an ILEC's performance. Since Bell Atlantic and GTE both have operations in only a limited number of states, the proposed merger is unlikely to have a significant effect on these types of data and companisons. Interconnection agreements, for example, are typically negotiated on a state-by state basis, and ILEC adherence to these agreements is generally evaluated on state-by-state basis. Similarly, the performance monitoring reports that Bell Atlantic provides to CLECs pursuant to the Bell Atlantic/NYNEX order may not cover an area larger than a single state.²³ In addition, much of the data in the SOCC are reported for each LEC on a state-by-state basis.
- 24. Similarly, regulators also often rely on information reported at the operating company level (as opposed to simply relying on data at the holding company level). Thus, some information collected by the Commission on Bell Atlantic's performance aggregates information for several states but still does not aggregate these data with information from the service areas formerly served by NYNEX. For example, the Commission in a recent case relied on

Non-BOC Tier 1 ILECs include Alliant Telecommunications, AllTel, Cincinnati Bell, Frontier and Sprint.

-

²³ See FCC Memorandum Opinion and Order in <u>Bell Atlantic/NYNEX</u>, Appendix C(1)(i).

information from 15 operating companies including SBC's SouthWestern Bell Telephone Co. (which provides service in Texas, Oklahoma, Arkansas, Missouri and Kansas), SBC's Pacific Bell and Nevada Bell units, Bell Atlantic North (formerly NYNEX), Bell Atlantic South (the original Bell Atlantic states), as well as various non-RBOCs.²⁴

- Similarly, Farrell and Mitchell cite various FCC decisions that rely on operating 25. company-level information. In addition to the Commission evaluation of collocation charges discussed above (which relied on information from Pacific Bell and Nevada Bell, among others). Farrell and Mitchell discuss regulators' use of operating company-level data for benchmarking charges for collocation-related services and for shared transport issues.²⁵
- The Automated Reporting Management Information System ("ARMIS") reports. 26. which regulators often use to compare ILECs, also are based on state or operating company data. The ten ARMIS reports, filed by BOCs and non-BOCs, contain financial and operating information for each reporting ILEC.²⁶ Because these data are reported at the state-specific level or on an operating company basis, these data would not be affected by the proposed transaction.
 - The Analysis of Sprint's Experts Farrell and Mitchell Is Based on C. **Unsupported Assumptions and Other Flaws.**
- 27. Sprint's experts, Farrell and Mitchell, claim that "[t]he loss of one of a relative handful of large ILECs would substantially damage efficient regulation, including the interconnection regulation necessary for the growth of competition in local exchange and

In re 1998 Annual Access Tariff Filings: Southwestern Bell Telephone Company Revisions to Tariff F.C.C. No. 73, footnote 2.

See Farrell and Mitchell, at p. 16, fn. 23, and p. 18.
These data include cost information for both regulated and nonregulated activities; as well as operating data on the installation and repair intervals achieved for service to IXCs, business customers and residential customers; trunk blockage; switch downtime; outages greater than two minutes; the results of customer satisfaction surveys; quantities of local switches according to type and by capability; interoffice facilities; the quantity of all access lines in service; the growth of access lines in service; the time it takes to deliver calls to an IXC using various types of switching and signaling systems; statistical schedules of switched access lines by customer and by technology; and telephone calls and minutes of use.

exchange access markets."²⁷ This conclusion is based on unsupported assumptions and other flaws. First, Farrell and Mitchell's analysis of average-practice benchmarking is based on the unwarranted assumption that each ILEC is an "independent observation." Second, Farrell and Mitchell assume that regulators are, in effect, passive recipients of information and cannot respond to changes in the type or amount of information as a result of industry mergers. Third, Farrell and Mitchell's analysis of "best practices" benchmarks fails to recognize that a merger affects the information available to regulators only under very specific circumstances.

- 1. Farrell and Mitchell's analysis of the effect of the merger on average practice benchmarking is flawed.
- 28. Farrell and Mitchell's analysis of average-practice benchmarking is based on the assumption that, in a statistical sense, each ILEC provides an "independent observation." That is, they assume that information from one ILEC provides no information about other ILECs. Farrell and Mitchell provide no basis for this assumption. Indeed, there are several reasons why the information available from different firms will not be independent observations, but instead will be statistically correlated. Farrell and Mitchell acknowledge that "different ILECs" capabilities for productivity improvement are highly correlated, because many of the same technological opportunities, new products, and demographic trends apply to all." But Farrell and Mitchell do not incorporate this observation into their analysis. That is, they fail to note that when information from different ILECs is highly correlated, the loss of one observation results in little loss in the total amount of information available to regulators.
- 29. Furthermore, even accepting Farrell and Mitchell's assumption of "independent observations," the analysis is misleading for a variety of technical reasons. I discuss these additional shortcomings of their analysis in Appendix 2.

Farrell and Mitchell, p. 48.

²⁸ Farrell and Mitchell, p. 10.

- 2. Farrell and Mitchell's analysis assumes that regulators are passive recipients of information.
- 30. Farrell and Mitchell give examples of some of the consequences of mergers for various types of benchmarking. Each of these examples, however, implicitly assumes that regulators will not respond to whatever changes in the amount and quality of information result from industry mergers. However, regulators can alter their methods in response to any information loss; such actions by regulators will reduce the impact of any lost information. Thus, Farrell and Mitchell's examples define a worst-case scenario in which regulators continue all benchmarking practices unchanged despite a change in the environment in which the regulators operate.
- For example, Farrell and Mitchell argue that merger decreases the incentive for a 31. merged firm to improve efficiency.²⁹ If the X-factor (reflecting the rate of efficiency improvements in price cap regulation) is calculated by averaging the performance of all firms. efficient behavior by one firm will, in effect, penalize itself as well as other firms. They suggest that the merger will reduce the merged firms' incentive to act efficiently since the calculated Xfactor will depend more heavily on its own performance.
- 32. This analysis, however, fails to take into account the likely response by regulators to this circumstance. If regulators conclude that the disincentives toward efficient behavior are too large, they could choose to base the X-factor only on information from rivals, or instead could incorporate an adjustment to the X-factor to respond to possible changes in firms' incentives. In other words, Farrell and Mitchell's conclusion that consumers will be harmed presumes that regulators passively react to information they receive and do not adjust their interpretation in response to changed circumstances.
- 33. Likewise, Farrell and Mitchell claim that the proposed merger will adversely affect consumers by making regulators' "rules of thumb" less effective mechanisms for protecting a consumer's interest. Farrell and Mitchell, for example, discuss a "mean plus one standard

Farrell and Mitchell, p. 39.

deviation rule" whereby regulators might set a regulated price somewhat (e.g., one standard deviation) above the average, recognizing that "some LECs may reasonably provide service less efficiently than other LECs." Farrell and Mitchell claim that the Commission used such an approach in regulating prices that ILECs can charge to CLECs for collocating equipment at the ILEC's central office. Farrell and Mitchell point out that a reduction in the number of firms increases the standard deviation even if the mean is unaffected, increasing this threshold relative to the mean (e.g., resulting in a higher regulated price).³⁰

- 34. However, there is again no reason to believe that a regulator would passively maintain a "mean plus one standard deviation" rule as circumstances change (e.g., as the number of observations on which estimates are based decreases). Instead of using a "conservative" rule based on the "mean plus one standard deviation," the regulator in such circumstances could respond by using a more aggressive rule based on the mean alone, or perhaps "mean plus one-half a standard deviation."
- 35. More generally, Farrell and Mitchell's example highlights why a regulator would make adjustments to respond to a reduction in available information as opposed to remaining passive and maintaining its existing procedures. Given regulators' ability to adjust their rules, it is by no means certain that a reduction in the number of ILECs will result in weaker regulatory performance standards that substantially harm consumers.
- 3. Farrell and Mitchell's analysis overstates the effect of the merger on best practice benchmarking.
- 36. Farrell and Mitchell claim that the proposed merger will adversely affect the ability of regulators to utilize "best practice" benchmarking, whereby regulators "use a 'best' practice offered by one ILEC to learn what is possible for all and require all ILECs to implement it."³¹

-

Farrell and Mitchell, p. 35.

³¹ Farrell and Mitchell, p. 14.

Farrell and Mitchell's discussion of this practice focuses on local number portability and other factors that facilitate the entry of CLECs.

- 37. In many instances, however, a merger will have no effect on a "best practice" benchmark. In order for a merger to result in a less beneficial "best practice," three criteria must all be satisfied:
 - One of the parties to the merger must be the firm with the "best practice."
 - No party outside the merger has the "best practice" available.
 - Given that one of the merging parties has the best practice, the merged firm must adopt a different practice.
- 38. If the firm has a strong incentive to adopt the best practice, then a merger may not result in the adoption of a less beneficial "best practice." Bell Atlantic, for example, faces strong incentives to adopt best practices that facilitate CLEC entry since such actions are necessary to win and keep authority to provide long-distance service under Section 271 of the 1996 Act. Farrell and Mitchell have presented no evidence supporting their assumption that the merging parties would choose not to adopt a best practice that facilitates CLEC entry. If one or both of the merging firms is using a best practice, then moving away from this practice would be readily recognized by regulators.
- 39. Moreover, as suggested above, a merger would not affect identification of a best practice in a variety of cases in which the merging parties did not posses such a practice or shared this practice with another firm.
 - III. RESPONDENTS' CLAIMS THAT COMBINING TWO LARGE PROVIDERS OF LOCAL EXCHANGE AND EXCHANGE ACCESS SERVICES WILL SUBSTANTIALLY REDUCE COMPETITION ARE WITHOUT MERIT.
- 40. Several respondents argue that the proposed merger should be blocked because a merger of two large providers of local exchange and exchange access services will

- 17 -

substantially reduce competition. Respondents claim that the merger will lead to a reduction of competition for several reasons.

- First, several respondents appear to believe that the large size of a merged Bell Atlantic/GTE will by itself reduce competition.
- Second, respondents argue that the proposed merger increases the potential for "coordinated interaction" among major ILECs.
- Third, respondents claim that the proposed merger will increase the merged firm's ability and incentive to discriminate against rivals by raising local access prices.
- Finally, respondents claim that the proposed merger also will increase the merged firm's ability and incentive to discriminate against rivals through non-price means.

This section shows that these claims are without merit.

There is No Economic Basis for Respondents' Claim that the A. Proposed Merger Will Harm Competition By Creating a Large Firm.

- 41. Respondents appear to believe that a merger of Bell Atlantic and GTE will reduce competition simply by creating a large firm. For example, MCI Worldcom argues that "[t]he sheer size and reach of a mega-BOC like Bell Atlantic-GTE would give the combined entity enormous power to block competition for local exchange carriers."32 Similarly, AT&T claims that "[t]hese latest mergers, by giving the combined entities even greater pools of access and other monopoly profits from which to entrench their bottleneck monopolies ... and by establishing a market structure in which the nation's access lines may be largely divided between, in effect, a Bell East and a Bell West, would strengthen [the] barriers [to competition] even more."33
- 42. There is no economic basis for these claims. Respondents' statements reflect little more than an unsubstantiated suggestion that "big is bad." This simple-minded antitrust theory was rejected long ago by economists and courts.

MCI Worldcom Comments, p. 13.

AT&T Comments, p. 2. See also, for example, e.Spire Comments, p. 3; Focal Communications Comments, p. i.

- 43. Even if Bell Atlantic and GTE were monopolists in their own territories (and, as I have discussed, each faces a variety of new competitors and has signed a large number of interconnection agreements with CLECs, and this competition is growing), simply combining two local monopolies serving distinct areas would not increase market power in either territory.³⁴
- 44. Second, to the extent that respondents claim that Bell Atlantic/GTE's larger size alone will increase the ability of the merged firm to "block competition," they do not explain why this would have an <u>incremental</u> effect on Bell Atlantic and GTE's ability to prevent entry by CLECs. That is, they provide no explanation regarding how an increase in the size of these firms resulting from a horizontal combination of Bell Atlantic and GTE's ILECs will increase the merged firm's purported ability to "block competition" in its service areas. Indeed, there is no theory or facts to support such an assumption.
 - B. Respondents' Claim that the Proposed Merger Increases the Likelihood of "Coordinated Interaction" Ignores that the Transaction Will Result in Significant Out-of-Region Entry and New Competition for Respondents.
- 45. Respondents argue that the proposed merger will reduce competition by increasing the likelihood of "coordinated interaction" (i.e., collusion) among major ILECs in telecommunications markets. For example, according to MCI Worldcom, "[t]he proposed Bell Atlantic-GTE merger alone would significantly increase the likelihood of coordinated interaction. It will make it much easier and more likely for the few remaining major ILECs to continue the non-aggression pact under which they do not compete in each other's regions."
- 46. Respondents ignore that the Bell Atlantic/GTE merger is motivated by the firms' desire to compete to provide bundled services on a national basis, including by providing service outside their existing service territories. This will directly result in increased competition

The extent to which Bell Atlantic and GTE are "potential competitors" in each other's territories is addressed in the Reply Declaration of Robert H. Gertner and John P. Gould.

_

MCI Worldcom, at 30. A similar point is made by smaller CLECs including, for example, Focal Communications, p. 4; State Communications, p. 13, and KMC Telecom Inc., p. 9.

between Bell Atlantic/GTE and other major ILECs. If, as respondents claim, the major ILECs ever had a "non-aggression pact," the proposed merger and related out-of-region strategy surely indicate it no longer exists.

- 47. Respondents present no support for their claim that the Bell Atlantic/GTE transaction will inhibit out-of-region entry. Any claim that the transaction would result in a "non-aggression pact" among ILECs should necessarily be viewed as highly suspect coming from MCI WorldCom, AT&T and Sprint, the principal rivals of the ILECs. These firms would be the principal beneficiaries of any such "non-aggression pact" because they will not face competition from ILECs in providing packages of services to various customers throughout the U.S. The success of any attempt to collude would require their participation, and respondents do not -- and cannot -- contend that they (or the many other CLECs) will participate in "coordinated interaction" that will lead to non-competitive outcomes.
- A8. Instead, MCI WorldCom, AT&T and Sprint are the leading firms in the provision of packages of local, long-distance and data services. These are precisely the firms that Bell Atlantic/GTE plans to challenge through their merger. The Bell Atlantic/GTE Application explains that the merger will enable them to compete more effectively in providing local, long-distance and data services for large business and other customers across the United States and internationally. These are precisely the customers and services on which MCI WorldCom, AT&T and Sprint appear to be focussing their marketing effort. The respondents' complaints are better understood as a response to concerns that Bell Atlantic/GTE will create a potent new competitor that will challenge respondents.
- 49. Moreover, a "non-aggression pact" involving ILECs alone agreeing not to enter each others' territories would not be effective without the participation of other CLECs who clearly would not benefit from participating in any such agreement. As discussed above, a significant number of CLECs are now deploying facilities and offering services. CLECs as a

These claims imply that Bell Atlantic and GTE have attempted to mislead regulators, investors and elected officials in outlining their plans to deploy an out-of-region strategy.

group already are gaining share from the major ILECs. For example, CLECs have installed more access lines than ILECs over the last two quarters.³⁷ Similarly, former Commission Chairman Reed Hundt predicts that CLECs will increase their market share by five percentage points per year, and the CLEC trade association has projected a 25 percent national share of local access lines by the year 2003.³⁸ Such an increase in competition from CLECs would make a purported "non-aggression pact" among the BOCs largely ineffective as these CLECs continue to deploy facilities rapidly throughout the United States.

50. The great heterogeneity of firms now competing to provide local services and bundled services would greatly complicate any attempt to engage in "coordinated interaction." For example, major ILECs like a merged Bell Atlantic/GTE will have a greater presence in some regions of the country than others. In contrast, AT&T, MCI Worldcom and Sprint currently have customers throughout the country. Many other CLECs have a regional presence and differ significantly with respect to the mix of large business, small business and residential customers they serve. Other CLECs also differ in the type of technology they plan to use and the extent to which they plan to lease, resell, or construct their facilities. Thus, future telecommunications markets likely will be characterized by a substantial number of firms with heterogeneous characteristics. It is widely recognized that "coordinated interaction" typically is not a concern under such conditions. Moreover, the respondents' arguments ignore that these many and varied firms that compete with ILECs today include some of the largest telecommunications firms in the world: AT&T, MCI WorldCom and Sprint.

J. B. Grubman and S. McMahon, Salomon Smith Barney Research Industry Note, May 6,

TR Daily, December 2, 1998 (http://www.tr.com/newsletters/trd/index.htm).

- C. Respondents' Claim that the Proposed Merger Will Increase the Merged Firm's Ability and Incentive To Engage in a "Price Squeeze" by Raising Prices Charged to Rivals for Local Access Is Without Merit.
- 51. Respondents claim that the proposed merger will increase the merged firm's ability and incentive to discriminate against rivals by raising local access prices. For example, AT&T argues that "[s]o long as Applicants continue to exercise market power over exchange access, a necessary input for providing long-distance service, they can subject their long-distance competitors to price squeezes." ³⁹
- 52. Respondents' price squeeze arguments have been made, evaluated, and rejected several times. For example, in its investigation of the Bell Atlantic/NYNEX merger, the Commission concluded that "we believe that price squeeze tactics are likely to fail under the circumstances presented here as a predatory tactic aimed at eliminating competition among interexchange competitors." Similarly, the same argument was rejected in the Commission's recent SBC/SNET decision. The Commission explained that "MCI made the identical argument in opposing the merger of Bell Atlantic and NYNEX. In the Bell Atlantic/NYNEX Order, the Commission concluded that this concern did not justify blocking the merger, and MCI does not challenge the Commission's analysis in this proceeding." These arguments center on the regulatory safeguards in place and the corresponding ease with which this type of discrimination could be detected.
- 53. Respondents' claims have been rejected in the past because they are based on flawed economic reasoning. According to AT&T, "[t]he opportunity to impose a price squeeze exists because Applicants' access services are priced well above cost. . . . When Applicants provide long-distance services, however, they will not pay these inflated access costs." However, this "price squeeze" argument ignores that when a local access provider also provides

³⁹ AT&T Comments, p. 30.

⁴⁰ FCC, Bell Atlantic/NYNEX Order, ¶117.

⁴¹ FCC, SBC/SNET Order, ¶24.

⁴² AT&T Comments, p. 31.

long-distance service, it gives up any supposedly "inflated access costs." The same is true for a local access provider that offers "new services" that rely on local access. That is, if a local access provider can charge a price for local access that exceeds its cost of providing local access, then such a firm that also sells long-distance or other services that involve the use of local access faces an "opportunity cost" when it, instead of a rival, makes a sale of one of these services. In particular, the local exchange provider loses any profit associated with making a sale of local exchange access to a rival long-distance provider.

- D. Respondents' Claim that the Proposed Merger Will Increase the Merged Firm's Ability and Incentive To Discriminate Against Rivals by Non-Price Means Also Is Without Merit.
- 1. Respondents' discrimination theory is based on contradictory assumptions.
- 54. Respondents claim that the proposed merger also will increase the merged firm's ability and incentive to discriminate against rivals by non-price (technological) means. In particular, Sprint's experts Michael L. Katz and Steven C. Salop stress this claim.⁴³
- 55. The theory of discrimination put forward by respondents is based on two contradictory assumptions. On the one hand, the theory presumes that customers of the merged firm will be able to detect the discrimination and service degradation resulting from ILECs' actions -- otherwise they would have no incentive to switch from the rival's service to that provided by the discriminating carrier. On the other hand, the theory presumes that regulators and rivals (including large sophisticated firms like the respondents) will be unable to detect such discrimination and service degradation. If regulators and rivals could detect such behavior, ILECs would not be likely to discriminate because they would likely be subject to significant regulatory penalties and potential antitrust violations.

See, for example, Sprint Comments, p. 28 and Katz and Salop, p. 17. Related points are made in comments from AT&T (p. 12) and MCI WorldCom (p. 38).

- 2. Evidence in wireless telecommunications and other markets indicates that ILECs do not have the ability and/or incentive to discriminate in providing local access to rivals.
- 56. Respondents' claims that ILECs have the ability and the incentive to discriminate in providing local access services to rival suppliers is inconsistent with available empirical evidence. For example, ILECs provide critical inputs to competing cellular carriers; however, a review of the evidence in the wireless telecommunications industry contradicts respondents' claim that ILECs can successfully discriminate against their rivals.
- 57. From the introduction of cellular telephone service in the mid-1980s, to the introduction of ESMR and PCS services in the last few years, virtually all areas in the country were served by two cellular providers. One of the cellular licenses in each area was originally given to the ILEC in that area, and the second license was awarded to a "non-wireline" carrier. Both cellular providers relied on the ILEC to provide local access services (e.g., to connect a cellular call to a landline phone). That is, the ILEC provided local access services to a firm with which it competed.
- 58. If respondents' non-price discrimination concerns were valid, I would expect that the non-wireline carriers would have been substantially disadvantaged as they competed with the ILEC-owned cellular carrier. However, non-wireline carriers have for many years competed on an equal footing against ILEC-owned cellular providers. The Commission, for example, noted in 1996 that "the market shares in each cellular service area have been divided on a roughly equal basis between wireline and nonwireline carriers." Furthermore, the actions of Pacific Telesis and U.S. West in divesting their cellular interests in 1994 and 1998, respectively, also are inconsistent with respondents' claim that an ILEC can disadvantage rivals that rely on the ILEC for local exchange access services.

Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services, Notice of Proposed Rulemaking, Order Remand, and Waiver Order, 11 FCC Rcd 16,639, 16,664, 47 (1996).

- 59. The success in recent years of PCS and ESMR providers that compete with ILECs' wireline cellular services provides further evidence that ILECs cannot successfully discriminate in providing local exchange access services to downstream rivals. For example, the advent of PCS services has lead to substantial declines in cellular prices, including those charged by ILECs' cellular subsidiaries. A May 1998 analysis of the pricing of wireless services noted that the average price for 30 minutes of use per month "fell an amazing 20 percent in just six months" between September 1997 and March 1998.45 Again, these circumstances suggest that ILECs do not have the ability to discriminate against rival firms to which they supply a key input.
- 60. Similarly, I am aware of no claims of harm to competition resulting from RBOC provision of information services and customer premises equipment (CPE) in competition with others. For example, information services (including the Internet) have grown at extraordinary rates in recent years. RBOCs are small players among a very large number Internet Service Providers. Similarly, Bell companies have achieved only a modest share of industry sales of CPE.46
- The widespread deployment of CLEC facilities is inconsistent with respondents' 3. discrimination concerns.
- 61. The widespread deployment of competitive local facilities using a variety of new technologies also contradicts respondents' claims that ILECs have the ability and incentive to discriminate against rivals in providing local access. For example, Teligent and Winstar have deployed fixed wireless technologies in competition with ILECs; firms such as AT&T/TCl, Time Warner Communications and Cox Communications are deploying cable-based local services; Level 3 is deploying local service based on Internet Protocol; and a variety of other firms. including Focal, GST, Hyperion, ICG and others are deploying switch-based local networks

Paul Kagan Associates, Competitive Rates in Wireless Telecom May '98, A Comprehensive Guide to the Rates in the Top 100 U.S. Markets, May 1998, p. 12. NATA, 1995 Telecommunications Review and Forecast, p. 128 (1995).

throughout the country. As discussed above, AT&T/TCG and MCI WorldCom (through MFS, Brooks Fiber, and MCI Metro) have the most extensive CLEC operations in place, with each operating in a large number of cities.

- 62. Respondents' actions also are inconsistent with their professed concerns that ILECs will discriminate in providing local exchange access services. For example, Sprint recently announced widespread deployment of its "ION" technology, which relies on local exchange access from ILECs. According to Sprint, deployment of ION will require the development of new types of interconnection. This action is inconsistent with the discrimination concerns expressed by Sprint.
- 4. Respondents greatly overstate the extent to which the proposed transaction would increase incentives for ILECs to discriminate against rivals.
- 63. Even if an ILEC could, without detection, discriminate technologically against potential rivals of long-distance or local exchange services, the proposed merger will not increase any incentives to discriminate unless, and only to the extent that, the benefits of such discrimination could be captured in the expanded geographic territories of the merged firm. For example, if discrimination by GTE would harm rivals only in areas where Bell Atlantic has little or no presence, the proposed merger would have little or no effect on GTE's incentive to discriminate, even under respondents' theory.
- 64. Assume, for example, that GTE had the ability to discriminate against a rival CLEC operating in its California service area. Under respondents' theory, the proposed transaction would increase its incentive to do so only if this CLEC also operated in Bell Atlantic's territory. Thus, even if geographic economies of scope are important in these businesses, the proposed Bell Atlantic/GTE merger would increase the incentive to discriminate only against potential rivals that had significant assets in both Bell Atlantic and GTE territories.
- 65. But a variety of CLEC competitors do not fit this mold. For example, CLECs such as GST and ICG operate in at least one of the five largest MSAs in which GTE operates, but do

not appear to operate (or have plans to compete) in Bell Atlantic's territory.⁴⁷ Similarly, several other CLECs, including Hyperion, Focal and Covad, plan to operate in Bell Atlantic's territory but do not appear to do so (or have plans to do so) in GTE's five largest MSAs (or instead operate only in Los Angeles).⁴⁸

- operating in both Bell Atlantic and GTE's service area is likely to be small because many of GTE's territories are sparsely populated. As a result, GTE has faced considerably less CLEC entry than Bell Atlantic.⁴⁹ Even under respondents' theory, a merged Bell Atlantic/GTE would not have a greater incentive to discriminate against CLECs that focus their initial efforts in areas served by either Bell Atlantic or GTE, but not both.
- 67. The proposed merger also would not have a substantial "spillover" for long-distance services. According to respondents' theory, the merger would affect the incentive to discriminate against long-distance rivals to the extent that it would increase the merged firm's ability to capture "spillovers" resulting from such discrimination.
- 68. According to Sprint's theory, discrimination by an integrated provider of long-distance and local services against rival long-distance providers in one region will discourage customers in other regions from obtaining services from their rivals. Discrimination will benefit the integrated firm if the customers adversely affected by discrimination turn to it (the integrated firm) to obtain long-distance service. Thus, according to respondents, the incentive to discriminate increases when an integrated firm can provide end-to-end service for a greater share of calls. They claim, in turn, that the proposed transaction increases the risk of discrimination by increasing the number of end-to-end long-distance calls that the merged firm can provide.

⁷ This analysis is based on a review of SEC filings by various CLECs.

See various measures of local competition presented in USTA's December 9, 1998 letter to The Honorable Thomas Billey, Chairman of the House Committee on Commerce. GTE, for

example, has considerably fewer resold lines than any of the RBOCs.

⁴⁸ GTE is the ILEC for portions of the Los Angeles MSA, including Santa Monica, Long Beach, and Pasadena. Covad and Focal offer, or plan to offer, service in Los Angeles. I have not investigated whether they plan to serve customers in GTE's operating areas.

- 69. The proposed transaction, however, would result in only a modest increase in the number of calls for which the merged Bell Atlantic/GTE could provide both originating and terminating service. According to Sprint, "the new firm would terminate 43% of the minutes that it controls on the originating end, which compares to a weighted average of 36% for the two companies separately." That is, Sprint claims that the merger will increase the aggregate percentage of long-distance calls originating and terminating in the same ILEC's territory by seven percentage points. Even if Sprint's calculation is correct, the Commission has previously found that an increase "of only six to seven percentage points" in the percentage of calls served at both ends by one firm raises no competitive concerns. ⁵¹
- 70. Furthermore, even if there were important "spillover" effects across ILEC territories, it does not follow that the merger will increase the merged firm's incentive to discriminate against rivals. In a simple model using the assumptions that are most favorable to the Katz and Salop theory, I show that a merger need not lead to an increased incentive to discriminate against CLECs. I explain my analysis in Appendix 3.
- 71. Finally, respondents fail to recognize that, even if all of their discriminatory concerns were valid (and as I have explained, they are not), and discrimination could make non-ILECs less effective competitors, the merger would add Bell Atlantic/GTE as a competitor in these markets. The addition of a new competitor in some or all of these markets (e.g., long-distance) could more than offset any reduction in competition resulting from any technological discrimination.

⁵⁰ Sprint Comments, p. 33.

⁵¹ See SBC/PacTel Merger Order, ¶53.

IV. SUMMARY OF CONCLUSIONS

- 72. Respondents ignore the fact that the dramatic industry changes in recent years have produced a substantial number of new benchmarks for regulators to analyze. In particular, an ILEC's performance in serving a CLEC can be compared with the ILEC's performance in providing service to itself. This type of benchmark is already used routinely and the proposed transaction would not limit its usefulness. Moreover, regulators' ability to adjust regulatory decisions can mitigate any loss in information that might result from the proposed merger.
- 73. Respondents' claim that the proposed transaction will reduce competition by combining two large providers of local exchange and exchange access services also exaggerates the risks of harm to competition. For example, their claim that the large size of Bell Atlantic/GTE alone will harm competition simply reflects the long-ago discarded antitrust notion that "big is bad."
- 74. Respondents' claim that the proposed transaction will result in "coordinated interaction" and a "non-aggression pact" ignore the simple fact that the proposed Bell Atlantic/GTE merger was accompanied by plans for significant out-of-region entry. If there ever was a non-aggression pact, recent events surely indicate that it no longer exists.
- 75. Respondents' claim that the proposed transaction will result in a price squeeze has been made and rejected previously. They introduce no new arguments suggesting that prior dismissal of these arguments are based on faulty economic reasoning.
- 76. In addition, respondents exaggerate the risks that the proposed merger will increase risks of discrimination by Bell Atlantic/GTE against its CLEC rivals. Available evidence on the success of non-wireline cellular providers, new PCS/ESMR wireless suppliers, information service providers and CPE providers indicates that concerns about ILEC discrimination against rivals are exaggerated. Similarly, the large-scale deployment of facilities by CLECs also is inconsistent with respondents' claims about ILECs' incentive and ability to discriminate. Finally, the theoretical arguments advanced by respondents that the proposed

transaction will result in increased incentives to discriminate are based on the self-contradictory proposition that discrimination will be significant enough to deter consumers from using the ILECs' competitors but not be detectable by regulators. In addition, respondents present no evidence that the changes in incentives they discuss are empirically significant.

I hereby declare, under penalty of perjury, that the foregoing is true and correct to the best of my knowledge and belief.

Kenneth J. Arrow

APPENDIX 1

BIOGRAPHICAL SKETCH

KENNETH J. ARROW

Personal

Born: 23 August, 1921 Wife's name: Selma

Children: David Michael and Andrew Seth

Education

B.S. in Social Science, City College, New York, 1940. Major: Mathematics.

M.A., Columbia University, 1941. Field: Mathematics. Ph.D., Columbia University, 1951. Field: Economics.

Positions

Captain, U. S. Army Air Corps, 1942-46 (Weather Officer).

Research Associate, Cowles Commission for Research in Economics, 1947-49.

Assistant Professor of Economics, University of Chicago, 1948-49.

Consultant, the RAND Corporation, 1948-date.

Acting Assistant Professor of Economics and Statistics, Stanford University, 1949-50.

Associate Professor of Economics and Statistics, Stanford University, 1950-53.

Professor of Economics, Statistics and Operations Research, Stanford University, 1953-68.

Economist, Council of Economic Advisers, U. S. Government, 1962.

Visiting Professor of Economics, Massachusetts Institute of Technology, Fall, 1966.

Fellow, Churchill College (Cambridge, England), 1963-64, 1970, 1973, 1986.

Guest Professor, Institute for Advanced Studies, Vienna, June 1964, June 1970.

Professor of Economics, Harvard University, 1968-74.

James Bryant Conant University Professor, Harvard University, 1974-79.

Joan Kenney Professor of Economics and Professor of Operations Research, Stanford University, 1979 to 1991.

Senior Fellow by Courtesy, Hoover Institution on War, Revolution and Peace, 1981-94.

Part-time Professor, European University Institute, 1986.

External Professor, Santa Fe Institute, 1988 to date.

Joan Kenney Professor of Economics Emeritus and Professor of Operations Research Emeritus, 1991 to date.

Fulbright Professor, University of Siena, Spring 1995.

University and Faculty Administration at Stanford University

Executive Head, Department of Economics, 1953-6

Member and Chair, Executive Committee of the Academic Council

Acting Executive Head, Department of Economics, 1962-3

Member and Chair, Advisory Board

Member and Chair, Senate of the Academic Council

Director, Stanford Institute for Theoretical Economics, 1991-93

Director, Stanford Center on Conflict and Negotiation, 1993-5

Honors and Awards

Gold Pell Medal (highest grades), City College, New York, 1940.

Phi Beta Kappa.

Social Science Research Fellow, 1952.

Fellow, Center for Advanced Study in the Behavioral Sciences, 1956-57.

John Bates Clark Medal, American Economic Association, 1957.

LL.D. (honorary), University of Chicago, 1967.

M.A. (honorary), Harvard University, 1968.

Marshall Lecturer, Cambridge University, Spring 1970.

D.Soc/Eco.Sci. (honorary), University of Vienna, 1971.

LL.D. (honorary), City University of New York, 1972.

Nobel Memorial Prize in Economic Science, 1972.

John R. Commons Lecture Award, Omicron Delta Epsilon, 1973.

D.Sci. (honorary), Columbia University, 1973.

D.Soc.Sci. (honorary), Yale University, 1974.

Dr. (honorary), Universite Rene Descartes, 1974.

LL.D. (honorary), Hebrew University of Jerusalem, 1975.

LL.D. (honorary), University of Pennsylvania, 1976.

D.Pol.Sci. (honorary), University of Helsinki, 1976.

Member, National Academy of Sciences (Chairman, Section 54, 1976-1979, Council member 1990 to date).

Fellow, American Academy of Arts and Sciences (Vice President, 1979-80, 1991-94).

Member, American Philosophical Society.

Member, Institute of Medicine.

Foreign Honorary Member, Finnish Academy of Sciences.

Corresponding Member, British Academy.

Sigma Xi (President, Stanford Chapter, 1981-82).

Tanner Lecturer, Oxford University, Spring 1983.

2nd Class Order of the Rising Sun, Japan, 1984.

Tanner Lecturer, Harvard University, Spring 1985.

Dr. of Letters, University of Cambridge, 1985.

Dr. Honoris Causa, Universite d'Aix-Marseille III, 1985.

von Neumann Prize of The Institute of Management Sciences and the Operations Research Society of America, 1986.

LL.D. (honorary), Washington University in St. Louis, 1989.

Clarendon Lectures, Oxford University, November 1989.

LL.D. (honorary), Ben-Gurion University of the Negev, 1992.

Member, Pontifical Academy of Social Sciences.

Laurea (honoris causa) Universita Cattolica del Sacro Cuore (Milan)

Dr. (hon.) Università del Sacro Cuore, 1994.

Dr. (hon causus) University of Uppsala, 1995.

Publication of Enduring Quality Award 1995, Association of Environmental and Resource Economics (with Anthony C. Fisher)

Kampe de Feriet Award (Information Processing for Management under Uncertainty), 1998

Medal of the University of Paris, 1998

Professional Societies

Econometric Society (Fellow; Vice President, 1955, President, 1956, Member of the Council, 1983). institute of Mathematical Statistics (Fellow).

American Statistical Association (Fellow).

American Economic Association (Member, Executive Committee, 1967-1969; President-elect, 1972; President, 1973; Distinguished Fellow).

The Institute of Management Sciences (President, 1963; Chairman of the Council, 1964).

Western Economic Association (President, 1980-1981).

American Association for the Advancement of Science (Fellow; Chair, Section K, 1982).

International Society for Inventory Research (President, 1983-1988).

Honorary President, International Economic Association; President 1983-1986; Member, Executive Committee, 1986-1992.

The Society for Social Choice and Welfare, Caen, France, First President, 1992-93.

Economists Allied for Arms Reduction, Co-Chair, 1990-1995

Business Positions

Member, Board of Directors, Varian Associates, Inc., 1973-1991

Member, Board of Directors, Abt Associates, Inc., 1975-1985

Member, Board of Directors, Fireman's Fund Insurance Company, 1980-1991

PUBLICATIONS OF KENNETH J. ARROW

<u>BOOKS</u>				
1.	[1951]	Social Choice and Individual Values. New York: Wiley.		
2.	[1958]	(with S. Karin and H. Scarf) Studies in the Mathematical Theory of Inventory and Production. Stanford. California: Stanford University Press.		
3.	[1958]	(with L. Hurwicz and H. Uzawa) Studies in Linear and Non-Linear Programming. Stanford, California: Stanford University Press.		
4.	[1959]	(with M. Hoffenberg and the assistance of H. Markowitz and R. Shephard) A Time Series Analysis of Interindustry Demands. Amsterdam: North-Holland Publishing Co.		
5.	[1963]	Social Choice and Individual Values. Wiley: New York, 2nd edition.		
6.	[1965]	Aspects of the Theory of Risk-Bearing. Yrjö Jahnssonin säätið Helsinki, Finland.		
7.	[1970]	(with M. Kurz) Public Investment, the Rate of Return, and Optimal Fiscal Policy. Baltimore and London: The Johns Hopkins Press.		
8.	[1971]	(with F. H. Hahn) General Competitive Analysis. San Francisco: Holden-Day; Edinburgh: Oliver & Boyd.		
9.	[1971]	Essays in the Theory of Risk-Bearing. Chicago: Markham; Amsterdam and London: North-Holland.		
10.	[1974]	The Limits of Organization. New York: W. W. Norton.		
11.	[1976]	(with S. Shavell and J. Yellen) <i>The Limits of the Market Economy</i> , (in Japanese). Memorandum for Ministry of International Trade and Industry, Japan.		
12.	[1976]	The Viability and Equity of Capitalism. E. S. Woodward lecture, Department of Economics, University of British Columbia.		

New York and Melbourne: Cambridge University Press.

14. [1983] Collected Papers of Kenneth J. Arrow. Volume 1, Social Choice and Justice. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

15. [1983] Collected Papers of Kenneth J. Arrow. Volume 2, General Equilibrium. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

13.

[1977]

(with L. Hurwicz) Studies in Resource Allocation Processes. Cambridge, London,

- 16. [1984] Collected Papers of Kenneth J. Arrow. Volume 3, Individual Choice under Certainty and Uncertainty. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.
- 17. [1984] Collected Papers of Kenneth J. Arrow, Volume 4, The Economics of Information. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

18.	[1985]	Collected Papers of Kenneth J. Arrow, Volume 5, Production and Capital. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.
19.	[1985]	Collected Papers of Kenneth J. Arrow, Volume 6, Applied Economics. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.
20.	[1986]	(with Hervé Raynaud) Social Choice and Multicriterion Decision-Making. Cambridge, Massachusetts: The MIT Press.

BOOKS EDITED

1.	[1960]	(with S. Karlin and P. Suppes) Mathematical Methods in the Social Sciences, 1959: Proceedings of the First Stanford Symposium. Stanford, California: Stanford University Press.
2.	[1962]	(with S. Karlin and H. Scarf) Studies in Applied Probability and Management Science. Stanford, California: Stanford University Press.
3.	[1969]	(with T. Scitovsky) Readings in Welfare Economics. American Economic Association Series of Republished Articles in Economics. Homewood, Illinois: Richard D. Irwin, Vol. XII.
4.	[1971]	Selected Readings in Economic Theory from Econometrica. Cambridge, Massachusetts, and London: MIT Press.
5.	[1978]	(with S. J. Fitzsimmons and R. Wildenmann) Zukunftsorientierte Planung und Forschung für die 80er Jahre. Koningstein/Ts., German Federal Republic: Athenaum Verlag.
6.	[1981]	(with C. C. Abt and S. J. Fitzsimmons) Applied Research for Social Policy: The United States and the Federal Republic of Germany. Cambridge, Massachusetts: Abt.
7.	[1981]	(with M. Intriligator) Handbook of Mathematical Economics, Volume I. Amsterdam, New York and London: North-Holland.
8.	[1982]	(with M. Intriligator) Handbook of Mathematical Economics, Volume II. Amsterdam, New York and London: North-Holland.
9.	[1985]	(with Seppo Honkapohja) Frontiers of Economics. Oxford and New York: Basil Blackwell Ltd.
10.	[1986]	(with M. Intriligator) Handbook of Mathematical Economics, Volume III. Amsterdam, New York and London: North-Holland.
11.	[1988]	(with M. J. Boskin) <i>The Economics of Public Debt.</i> Basingstoke and London: Macmillan in association with The International Economic Association.
12.	[1988]	(with P. W. Anderson and D. Pines) <i>The Economy as an Evolving Complex System.</i> Redwood City, California: Addison-Wesley.
13.	[1988]	The Balance between Industry and Agriculture in Economic Development. Volume I: Basic Issues. Basingstoke and London: Macmillan in association with The International Economic Association.
14.	[1991]	Issues in Contemporary Economics. Volume I, Markets and Welfare. Basingstoke and London: Macmillan for International Economic Association.
15.	[1994]	(with R. Amott, A.B. Atkinson, and J. Dreze) <i>Public Economics</i> , by William Vickrey. Cambridge, U.K., New York, and Oakleigh, Victoria: Cambridge University Press.

- 16. [1995] (with R.H. Mnookin, L. Ross, A. Tversky, and R. Wilson) *Barriers to Conflict Resolution*. New York and London; W. W. Norton.
- 17. [1996] (with E. Colombatto, M. Perlman, and C. Schmidt) *The Rational Foundations of Economic Behavior*. Basingstoke and London: Macmillan for the International Economic Association.
- 18. [1996] (with E. Colombatto, M. Perlman and C. Schmidt) *The Rational Foundations of Economic Behavior.* New York: St. Martin's Press, and Basingstoke and London: Macmillan, in association with the International Economic Association.
- 19. [1996] (with R.W. Cottle, B.C. Eaves and I. Olkin) *Education in a Research University*. Stanford, CA: Stanford University Press.
- 20. [1996-7] (with Amartya Sen and Kotaro Suzumura) *Social Choice Re-examined*. Basingstoke and London: MacMillan in association with the International Economic Association. 2 vol.
- 21. [1998] (with Yew-Kwang Ng and Xiaokai Yang) *Increasing Returns and Economic Progress*. Basingstoke, UK: Macmillan, and New York: St. Martin's.

COLLECTIVE STUDIES

- 1. [1971] (as a member of Climatic Impact Committee of the National Research Council, National Academy of Sciences, National Academy of Engineering) *Environmental Impact of Stratospheric Flight*. Washington, D.C.: National Academy of Sciences.
- 2. [1977] (as member of Nuclear Energy Policy Study Group) S. M. Keeny, Jr., et al., *Nuclear Power Issues and Choices*. Cambridge, Massachusetts: Ballinger.
- 3. [1979] H. H. Landsberg, et al., *Energy: The Next Twenty Years*. Cambridge, Massachusetts: Ballinger.
- 4. [1981] (as Chairman of the Committee for a Planning Study for an Ongoing Study of Costs of Environment-related Health Effects, Institute of Medicine) Costs of Environment-related Health Effects. Washington, D.C.: National Academy Press.
- 5. [1991] (as member of the Oversight Review Board of the National Acid Precipitation Assessment Program) *The Experience and Legacy of NAPAP*. Washington, DC: National Acid Precipitation Assessment Program.
- 6. [1993] (as Co-chair) Report of the NOAA [National Oceanic and Atmospheric Administration] Panel on Continent Valuation. *Federal Register*, 58, No. 10 (January 15, 1993): 4602-4614.
- 7. [1995] (with B. Bolin, R. Constanza, P. Dasgupta, C. Folke, C.S. Holing, B. O. Jansson, S. Levin, K. G. Maler, C. Perrings, and D. Pimentel) Economic growth, carrying capacity, and the environment. <u>Science</u> 268. 28 April 1995, 520-521.

NONTECHNICAL ARTICLES

- [1961] "Does the Majority Ever Rule?" introductory notes. Portfolio and Art News Annual 4:76-78.
 [1974] "Taxation and Democratic Values." The New Republic 171:18:23-25.
- 3. [1975] "How Much to Fear from OPEC?" *Moment* 1:2:32-34.
- 4. [1978] "Capitalism, Socialism, and Democracy," (symposium). Commentary 65:4:29-31.
- 5. [1978] "A Cautious Case for Socialism." Dissent, Fall, 472-480.
- 6. [1979] "The Economy and the Economist," Partisan Review 1:113-216.
- 7. [1981] "Two Cheers for Regulation," *Harper's* 262:18-22.
- 8. [1982] "Why People Go Hungry," New York Review of Books 29:12:24-26.
- 9. [1983] "The Economics of 1984," In P. Stansky (ed.) On Nineteen Eighty-Four. San Francisco: W. H. Freeman, pp. 43-48.
- 10. [1984] "The International Economic Order of the Twenty-First Century." In Osaka Junior Chamber, Inc., *Wisdom Toward the 21st Century.* Tokyo: YMCA Press, pp. 173-227 (in Japanese).
- 11. [1984] "The Economy as Order and Disorder." In P. Livingston (ed.) *Disorder and Order*. Saratoga, California: ANMA Libri., pp. 162-172.
- 12. [1986] "Kenneth J. Arrow." In W. Breit and R. W. Spencer (eds.) Lives of the Laureates: Seven Nobel Economists. Cambridge, Massachusetts, and London, pp. 43-57.
- 13. [1987] "Redistribution to the Poor: A Collective Expression of Individual Altruism." In F. Jimènez (ed.) *Poverty and Social Justice*. Tempe, Arizona: Bilingual Press, pp. 39-46.
- 14. [1989] "The Multiple Responsibilities of the Corporation." In J. E. Weiler (ed.), *The First International Symposium on Stakeholders*. Dayton, Ohio: Center for Business and Economic Research, School of Business Administration, University of Dayton, pp. 53-62.
- 15. [1989] Chapter 1. In W. Siebel (ed.) *The State of Economic Science*. Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research.
- 16. [1991] "Economic Forecasting." In G. E. Gaull (ed.) New Technologies and the Future of Food and Nutrition. New York: Wiley. Chapter 25, pp. 135-140.
- 17. [1992] "Decision Making by Individuals and Systems." In Office of Naval Research: Forty Years of Excellence. Arlington, Virginia: Office of Naval Research. Pp. 123-127.
- 18. [1992] "I Know a Hawk from a Handsaw." In M. Szenberg (ed.) *Eminent Economists*. Cambridge and New York: Cambridge University Press. Pp. 42-50.

19.	[1992]	"Moral Thinking and Economic Interaction." In Pontifical Council for Justice and Peace, Social and Ethical Aspects of Economics. Vatican City. Pp. 17-22.
20.	[1994]	"Gli Obblighi Etica del Mercato." Etica degli Affari e delle Professioni, VII: 1/94: 34-38.
21.	[1996]	(with M.L. Cropper, G.C. Eads, R.W. Hahn, L.B. Lave, R.G. Noll, P.R. Portney, M. Russell, R. Schmalensee, V.K. Smith, and R.N. Stavins) <i>Benefit-Cost Analysis in Environmental, Health, and Safety Regulations: A Statement of Principles.</i> La Vergne, TN: The AEI Press, c/o Publisher Resources, Inc.
22.	[1996]	"Environmental Aspects of Environmental Challenges," in H.W. Kendall et al., Meeting the Challenges of Population, Environment, and Resources: The Costs of Inaction. Washington, D.C.: The World Bank. Environmentally Sustainable Development Proceedings Series No. 14, pp. 29-31.
23.	[1996]	What Does the Present Owe the Future: An Economic and Ethical Perspective on Climate Change. Grace A. Tanner Lecture on Human Values XVII. Cedar City, Utah: Southern Utah University

PAPERS

1. On the Use of Winds in Flight Planning, Journal of Meteorology 6:150-159. [1949] 2. (with D. Blackwell and M. A. Girshick) Bayes and Minimax Solutions of Sequential [1949] Decision Problems. Econometrica 17:213-44. 3. [1950] Homogeneous Systems in Mathematical Economics: A Comment. Econometrica 18:60-62. 4. [1950] A Difficulty in the Concept of Social Welfare. Journal of Political Economy 58:328-46. 5. Alternative Proof of the Substitution Theorem for Leontief Models in the General [1951] Case. In T. C. Koopmans, (ed.) Activity Analysis of Production and Allocation. New York: Wiley, Chapter IX. (with T. E. Harris and J. Marschak) Optimal Inventory Policy. Econometrica 19:250-6. [1951] 7. Alternative Approaches to the Theory of Choice in Risk-Taking Situations. [1951] Econometrica 19:404-37. 8. [1951] Little's Critique of Welfare Economics. American Economic Review 41:923-34. 9. [1951] Mathematical Models in the Social Sciences. In D. Lerner and H. D. Lasswell (eds.). The Policy Sciences. Stanford, California: Stanford University Press, pp. 129-54. An Extension of the Basic Theorems of Classical Welfare Economics. In J. Neyman 10. [1951] (ed.), Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability. Berkeley and Los Angeles: University of California Press, pp. 507-32. The Determination of Many-Commodity Preference Scales by Two-Commodity Com-11. [1952] parison. Metroeconomica IV:107-15. 12. [1952] Le principe de rationalité dans les décisions collectives. Économie Appliquée V:469-84. Le rôle des valeurs boursières pour la répartition la meilleure des risques, 13. [1953] Économetrie. Colloques Internationaux du Centre National de la Recherche Scientifique, Vol. XI, pp. 41-47. 14. [1953] (with E. W. Barnakin and D. Blackwell) Admissible Points of Convex Sets, Contributions to the Theory of Games, II. Princeton: Princeton University Press, pp. 87-91. (with G. Debreu) Existence of Equilibrium for a Competitive Economy. Econometrica 15. [1954] 22:265-90. Import Substitution in Leontief Models. *Econometrica* 22:491-92. 16. [1954]

17.	[1956]	(with L. Hurwicz) Reduction of Constrained Maxima to Saddle-Point Problems. In J. Neyman (ed.) <i>Proceedings of the Third Berkeley Symposium on Mathematical Statistics and Probability</i> . Berkeley and Los Angeles: University of California Press, Vol. V, pp. 1-20.
18.	[1956]	(with A. C. Enthoven) A Theorem on Expectations and the Stability of Equilibrium. <i>Econometrica</i> 24:288-93.
19.	[1957]	Statistics and Economic Policy. Econometrica 25:523-31.
20.	[1957]	(with L. Hurwicz) Gradient Methods for Constrained Maxima. <i>Operations Research</i> 5:258-65.
21.	[1957]	Decision Theory and Operations Research. Operations Research 5:765-74.
22.	[1958]	Utilities, Choices, Attitudes: A Review Note. Econometrica 26:1-23.
23.	[1958]	Tinbergen on Economic Policy. <i>Journal of the American Statistical Association</i> 53:89-97.
24.	[1958]	The Measurement of Price Changes. In Joint Economic Committee, <i>The Relation-ship of Prices to Economic Stability and Growth</i> . Washington, D.C.: U.S. Government Printing Office, pp. 77-88.
25.	[1958]	(with M. Nerlove) A Note on Expectations and Stability. <i>Econometrica</i> 26:297-305.
26.	[1958]	(with A. Alchian and W. M. Capron) An Economic Analysis of the Market for Scientists and Engineers. Santa Monica, California: The Rand Corporation, RM 2190-RC.
27.	[1958]	(with M. McManus) A Note on Dynamic Stability. Econometrica 26:448-54.
28.	[1958]	(with L. Hurwicz) On the Stability of the Competitive Equilibrium. <i>Econometrica</i> 26:522-52.
29.	[1959]	Toward a Theory of Price Adjustment. In M. Abramovitz and others, <i>The Allocation of Resources</i> . Stanford, California: Stanford University Press, pp. 41-51.
30.	[1959]	(with W. M. Capron) Dynamic Shortages and Price Rises: The Engineer-Scientist Case. Quarterly Journal of Economics 63:292-308.
31.	[1959]	Rational Choice Functions and Orderings. <i>Economica</i> , N.S. 26:121-27.
32.	[1959]	(with H. D. Block and L. Hurwicz) On the Stability of the Competitive Equilibrium, II. <i>Econometrica</i> 27:82-109.
33.	[1959]	Functions of a Theory of Behavior Under Uncertainty. Metroeconomica 11:12-20.
34.	[1960]	(with L. Hurwicz) Competitive Stability Under Weak Gross Substitutability: The "Euclidean Distance" Approach. <i>International Economic Review</i> 1:38-49.

35.	[1960]	Optimization, Decentralization, and Internal Pricing in Business Firms. In <i>Contributions to Scientific Research in Management</i> . Western Data Processing Center, Graduate School of Business Administration, University of California, Los Angeles, pp. 9-18.
36.	[1960]	Decision Theory and the Choice of a Level of Significance for the t-Test. In I. Olkin and others (eds.). Contributions to Probability and Statistics. Stanford, California: Stanford University Press, pp. 70-78.
37.	[1960]	The Work of Ragnar Frisch, Econometrician. Econometrica 28:175-92.
38.	[1960]	Price-Quantity Adjustments in Multiple Markets with Rising Demands. In K. J. Arrow, S. Karlin, P. Suppes (eds.) <i>Mathematical Methods in the Social Sciences, 1959</i> . Stanford, California: Stanford University Press, pp. 3-16.
39.	[1960]	(with L. Hurwicz) Decentralization and Computation in Resource Allocation. In R. W. Pfouts (ed.), <i>Essays in Economics and Econometrics</i> . Chapel Hill: University of North Carolina Press, pp. 34-104.
40.	[1960]	(with L. Hurwicz) Stability of the Gradient Process in N-Person Games. Journal of the Society for Industrial and Applied Mathematics 8:280-94.
41.	[1960]	(with L. Hurwicz) Some Remarks on the Equilibria of Economic Systems. <i>Econometrica</i> 28:640-46.
42.	[1961]	Additive Logarithmic Demand Functions and the Slutsky Relations. <i>Review of Economic Studies</i> 28:176-81.
43.	[1961]	(with H. B. Chenery, B. Minhas and R. M. Solow) Capital-Labor Substitution and Economic Efficiency. <i>Review of Economics and Statistics</i> 43:225-50.
44.	[1961]	(with L. Hurwicz and H. Uzawa) Constraint Qualifications in Maximization Problems. Naval Research Logistics Quarterly 8:175-91.
45.	[1961]	(with A. C. Enthoven) Quasi-Concave Programming. Econometrica 29:779-800.
46.	[1962]	Case Studies: Comment. In National Bureau of Economic Research, <i>The Rate and Direction of Inventive Activity: Economic and Social Factors</i> . Princeton: Princeton University Press, pp. 335-38.
47.	[1962]	Economic Welfare and the Allocation of Resources for Invention. In National Bureau of Economic Research, <i>The Rate and Direction of Inventive Activity: Economic and Social Factors</i> . Princeton: Princeton University Press, pp. 609-25.
48.	[1962]	Optimal Capital Adjustment. In K. J. Arrow, S. Karlin, and H. Scarf (eds.), <i>Studies in Applied Probability and Management Science</i> . Stanford, California: Stanford University Press, pp. 1-17.
49.	[1962]	(with M. Nerlove) Optimal Advertising Policy Under Dynamic Conditions. <i>Economica</i> , N. S., 29:129-42.
50.	[1962]	The Economic Implications of Learning by Doing. Review of Economic Studies 29:155-73.

51.	[1962]	(with L. Hurwicz) Competitive Stability Under Weak Gross Substitutability: Nonlinear Price Adjustment and Adaptive Expectations. <i>International Economic Review</i> 3:233-55.
52.	[1963]	Conference Remarks. In M. Astrachan and A. S. Cahn (eds.), <i>Proceedings of RAND's Demand Prediction Conference, January 25-26, 1962.</i> Santa Monica, California: The RAND Corporation, RM-3358-RP, pp. 125-34.
53.	[1963]	Utility and Expectation in Economic Behavior. In S. Koch (ed.), <i>Psychology: A Study of a Science</i> . New York: McGraw-Hill, Vol. 6, pp. 724-52.
54.	[1963]	The Economic Cost to Western Europe of Restricted Availability of Oil Imports: A Linear Programming Computation. Appendix D in H. Lubell, <i>Middle East Oil Crisis and Western Europe's Energy Supplies</i> . Baltimore: Johns Hopkins Press, pp. 214-220.
55.	[1963]	Comments on Duesenberry's "The Portfolio Approach to the Demand for Money and Other Assets." Review of Economics and Statistics 45, Supplement pp. 24-27.
56.	[1963]	Uncertainty and the Welfare Economics of Medical Care. <i>American Economic Review</i> 53:941-73.
57.	[1963-4]	Control in Large Organizations. Management Science 10:397-408.
58.	[1964]	Optimal Capital Policy, the Cost of Capital, and Myopic Decision Rules. <i>Annals of the Institute of Statistical Mathematics</i> 16:21-30.
59.	[1964]	Research in Management Control: A Critical Synthesis. In C. P. Bonini, R. K. Jaedicke, and H. M. Wagner (eds.), <i>Management Controls: New Directions in Basic Research</i> . New York: McGraw-Hill, Chapter 17, pp. 317-327.
60.	[1965]	Connaissance, Productivité et Pratique. <i>Bulletin SEDEIS</i> , Étude No. 909 Supplement.
61.	[1965]	Statistical Requirements for Greek Economic Planning. Center of Planning and Economic Research, Lecture Series No. 18. Athens, Greece.
62.	[1965]	Uncertainty and the Welfare Economics of Medical Care: Reply (The Implication of Transaction Costs and Adjustment Lags). <i>American Economic Review</i> 55:154-58.
63.	[1965]	Criteria for Social Investment. Water Resources Research 1:1-18.
64.	[1965]	The Economic Context. In S. T. Donner (ed.) <i>The Future of Commercial Television</i> , 1965-1975 (privately printed), pp. 116-39.
65.	[1966]	Discounting and Public Investment Criteria. In A. V. Kneese and S. C. Smith (eds.), Water Research, Baltimore: Johns Hopkins Press, pp. 13-32.
66.	[1967]	Values and Collective Decision-Making. In P. Laslett and W. G. Runciman (eds.), <i>Philosophy, Politics and Society, Third Series.</i> Oxford: Basil Blackwell, Chapter 10, pp. 215-232.

67.	[1967]	The Place of Moral Obligation in Preference Systems. In S. Hook (ed.) <i>Human Values and Economic Policy</i> . New York: New York University Press, Part II, 3, pp. 117-19.
68.	[1967]	Samuelson Collected. Journal of Political Economy 85:506-13.
69.	[1968]	Economic Equilibrium. In <i>International Encyclopedia of the Social Sciences</i> . New York: The Free Press, Vol. 4, pp. 376-386.
70.	[1970]	Meyer A. Girshick. In <i>International Encyclopedia of the Social Sciences</i> . New York: The Free Press, Vol. 6, pp. 191-193.
71.	[1968]	The Economics of Moral Hazard: Further Comment. <i>American Economic Review</i> 58:537-39.
72.	[1968]	(pseudonym of Archen Minsol; joint with H. B. Chenery, B. S. Minhas, and R. M. Solow) Some Tests of the International Comparisons of Factor Efficiency with the CES Production Function: A Reply. <i>Review of Economics and Statistics</i> 50:477-9.
73.	[1968]	Optimal Capital Policy with Irreversible Investment, in J. N. Wolfe (ed.), Value, Capital, and Growth, Edinburgh: Edinburgh University Press, pp. 1-20.
74.	[1968]	Applications of Control Theory to Economic Growth, in American Mathematical Society, <i>Mathematics of the Decision Sciences</i> , Providence: American Mathematical Society, Part 2, pp. 85-119.
75.	[1969]	Classificatory Notes on the Production and Transmission of Technological Knowledge. American Economic Review Papers and Proceedings 59:29-35.
76.	[1969]	The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Nonmarket Allocation. In Joint Economic Committee, U.S. Congress, <i>The Analysis and Evaluation of Public Expenditures: The PPB System, Vol. 1</i> ; pp. 47-66.
77.	[1969]	(with M. Kurz) Optimal Consumer Allocation Over an Infinite Horizon. <i>Journal of Economic Theory</i> 1:68-91.
78.	[1969]	Tullock and an Existence Theorem. Public Choice VI: 105-112.
79.	[1969]	(with M. Kurz), Optimal Public Investment Policy and Controllability with Fixed Private Savings Ratio. <i>Journal of Economic Theory</i> 1:141-77.
80.	[1969]	(with D. Levhari) Uniqueness of the Internal Rate of Return with Variable Life of Investment. <i>Economic Journal</i> 79:560-66.
81.	[1969]	The Social Discount Rate. In G. G. Somers and W. D. Wood (eds.) Cost-Benefit Analysis of Manpower Policies. Kingston. Ontario: Industrial Relations Centre, Queen's University.
82.	[1970]	The Effects of the Price System and Market on Urban Economic Development. In K. J. Arrow et al., <i>Urban Processes As Viewed by the Social Sciences</i> . Washington, D.C.: The Urban Institute, pp. 11-20.

83.	[1970]	(with M. Kurz) Optimal Growth with Irreversible Investment in a Ramsey Model. <i>Econometrica</i> 38:331-344.
84.	[1970]	New Ideas in Pure Theory: Discussion. American Economic Review Papers and Proceedings 60:462-3.
85.	[1970]	(with R. C. Lind) Uncertainty and the Evaluation of Public Investment Decisions. <i>American Economic Review</i> 60:364-78.
86.	[1970]	Criteria, Institutions, and Function in Urban Development Decisions. In A. H. Pascal (ed.) <i>Thinking About Cities</i> . Belmont, California: Dickenson.
87.	[1970]	Induced Technical Change and Patterns of International Trade: Comment. In R. Vernon (ed.) <i>The Technology Factor in International Trade</i> . New York: National Bureau of Economic Research, pp. 128-132.
88.	[1971]	The Firm in General Equilibrium Theory. In R. Marris and A. Wood (eds.) <i>The Corporate Economy: Growth, Competition, and Innovative Potential.</i> Cambridge, Massachusetts: Harvard University Press, and London: MacMillan, pp. 68-110.
89.	[1971]	A Utilitarian Approach to the Concept of Equality in Public Expenditures. Quarterly Journal of Economics 85:409-415.
90.	[1972]	(with L. Hurwicz) An Optimality Criterion for Decision-Making Under Ignorance. In C. F. Carter and J. L. Ford (eds.), <i>Uncertainty and Expectations in Economics: Essay in Honour of G. L. S. Shackle</i> . Oxford: Basil Blackwell, pp. 1-11.
91.	[1972]	(with R. C. Lind) Uncertainty and the Evaluation of Public Investment Decisions: Reply. <i>American Economic Review</i> 62:171-2.
92.	[1972]	Problems of Resource Allocation in United States Medical Care. In R. M. Kurz and H. Fehr (eds.), <i>The Challenge of Life</i> . Basel and Stuttgart: Birkhauser, pp. 392-408.
93.	[1972]	Models of Job Discrimination. In A. H. Pascal (ed.) Racial Discrimination in Economic Life. Lexington, Massachusetts, Toronto, and London: D.C. Heath, Chapter 2, pp. 8-102.
94.	[1972]	Some Mathematical Models of Race in the Labor Market. In A. H. Pascal (ed.), Racial Discrimination in Economic Life. Lexington, Massachusetts, Toronto and London: D.C. Heath, Chapter 6, pp. 187-204.
95.	[1972]	Gifts and Exchanges. Philosophy and Public Affairs 1:343-62.
96.	[1972]	(with D. Levhari and E. Sheshiuski) A Production Function for the Repairman Problem. Review of Economic Studies 39:241-9.
97.	[1973]	Some Ordinalist-Utilitarian Notes on Rawls's Theory of Justice. <i>Journal of Philoso-phy</i> 70:245-63.
98.	[1973]	(with D. Starrett) Cost- and Demand- Theoretical Approaches to the Theory of Price Determination. In J. R. Hicks and W. Weber (eds.) Carl Menger and the Austrian School of Economics, Oxford: The Clarendon Press, Chapter 7, pp. 129-148.

99.	[1973]	Higher Education as a Filter. Journal of Public Economics 2:193-216.
100.	[1973]	General Economic Equilibrium: Purpose, Analytic Techniques, Collective Choice. In Les Prix Nobel en 1972. Stockholm: The Nobel Foundation, pp. 206-231.
101.	[1973]	Social Responsibility and Economic Efficiency. Public Policy 21:303-318.
102.	[1973]	Formal Theories of Social Welfare. In P. P. Wiener (ed.) <i>Dictionary of the History of Ideas</i> . New York: Scribner, Volume IV, pp. 276-284.
103.	[1973]	Information and Economic Behavior. Stockholm (lecture): Federation of Swedish Industries.
104.	[1973]	The Theory of Discrimination. In O. Ashenfelter and A. Rees (eds.) <i>Discrimination in Labor Markets</i> . Princeton: Princeton University Press, pp. 3-33.
105.	[1973]	(with F. J. Gould and S. M. Howe) A General Saddle Point Result for Constrained Optimization. <i>Mathematical Programming</i> 5:225-234.
106.	[1973]	Rawls's Principle of Just Saving. Swedish Journal of Economics 75:323-335.
107.	[1974]	The Measurement of Real Value Added. In P. A. David and M. W. Reder (eds.) Nations and Households in Economic Growth. New York and London: Academic Press, pp. 3-19.
108.	[1974]	Stability Independent of Adjustment Speed. In G. Horwich and P. A. Samuelson (eds.) <i>Trade, Stability, and Macroeconomics.</i> New York and London: Academic Press, pp. 181-202.
109.	[1974]	Capitalism, for Better or Worse. In L. Silk (ed.) Capitalism: The Moving Target. New York: Quadrangle/New York Times Company, pp. 105-113.
110.	[1974]	Unbounded Utility Functions in Expected Utility Maximization: Response. Quarterly Journal of Economics 88:136-138.
111.	[1974]	Limited Knowledge and Economic Analysis. American Economic Review 64:1-10.
112.	[1974]	Optimal Insurance and Generalized Deductibles. Scandinavian Actuarial Journal 1974:1-42.
113.	[1974]	(with A. C. Fisher) Environmental Preservation, Uncertainty, and Irreversibility. Quarterly Journal of Economics 88:312-319.
114.	[1974]	On the Agenda of Organizations. In R. Marris (ed.) <i>The Corporate Society</i> , New York and Toronto: Wiley, pp. 214-234.
115.	[1974]	The Combination of Time Series and Cross-Section Data in Interindustry Flow Analysis. <i>European Economic Review</i> 5:25-32.
116.	[1974]	Government Decision Making and the Preciousness of Human Life. In L. R. Tancredi (ed.) <i>Ethics of Health Care.</i> Washington, D. C.: National Academy of Sciences, Chapter II, pp. 33-47.

117.	[1975]	Vertical Integration and Communication. The Bell Journal of Economics 6:173-183.
118.	[1975]	Thorstein Veblen as an Economic Theorist. The American Economist 19:5-9.
119.	[1975]	On a Theorem of Arrow: Comment. Review of Economic Studies 62:487.
120.	[1975]	Economic Development: The Present State of the Art. Papers of the East-West Communication Institute. No. 14.
121.	[1976]	Economic Dimensions of Occupational Segregation: Comment I. Signs 1, No. 3, Part 2, pp. 233-237.
122.	[1976]	Quantity Adjustments in Resource Allocation: A Statistical Interpretation. In R. E. Grierson (ed.) <i>Public and Urban Economics</i> , Lexington, Massachusetts, Toronto and London: Lexington Books, Chapter 1, pp. 3-11.
123.	[1976]	Theoretical Issues in Health Insurance. The University of Essex, Noel Buxton lecture for 1973.
124.	[1976]	Welfare Analysis of Changes in Health Coinsurance Rates. In R. N. Rossett (ed.) The Role of Health Insurance in the Health Services Sector. New York: National Bureau of Economic Research, Chapter 1, pp. 2-23.
125.	[1976]	Evaluation of Social Experiments: Discussion. In C. G. Abt (ed.) <i>The Evaluation of Social Programs</i> . Beverly Hills and London: Sage Publications, pp. 49-54.
126.	[1976]	The Rate of Discount for Long-Term Public Investment. In H. Ashley, R. L. Rudman, and C. Whipple (eds.) <i>Energy and the Environment: A Risk-Benefit Approach</i> . New York: Pergamon, pp. 113-140.
127.	[1976]	The Genesis of Dynamic Systems Generated by Metzler Matrices. In R. Henn and O. Moeschlin (eds.) <i>Mathematical Economics and Game Theory: Essays in Honor of Oskar Morgenstern</i> . Berlin, Heidelberg, and New York: Springer-Verlag, pp. 629-644.
128.	[1977]	Extended Sympathy and the Possibility of Social Choice. <i>American Economic Review Papers and Proceedings</i> 67, No. 1:219-225.
129.	[1977]	Current Developments in the Theory of Social Choice. Social Research 44:607-622.
130.	[1978]	The Future and the Present in Economic Life. Economic Inquiry 16:157-170.
131.	[1978]	Nozick's Entitlement Theory of Justice. Philosophia 7:265-279.
132.	[1978]	Risk Allocation and Information: Some Recent Theoretical Developments. <i>The Geneva Papers on Risk and Insurance</i> , No. 8, June 1978 (Association Internationale pour l'Etude de l'Economie de l'Assurance).
133.	[1978]	Jacob Marschak's Contributions to the Economics of Decision and Information. American Economic Review, Papers and Proceedings, Vol. 68, pp. xii-xiv.
134.	[1978]	Jacob Marschak. In <i>International Encyclopedia of the Social Sciences</i> . New York: The Free Press, Vol. 18, Biographical Supplement, pp. 500-507.

135.	[1979]	(with R. Radner) Allocation of Resources in Large Teams. <i>Econometrica</i> 47:361-385.
136.	[1979]	The Economics of Information. In M. L. Dertouzos and J. Moses (eds.) <i>The Computer Age: A Twenty-Year View.</i> Cambridge, Massachusetts: MIT Press, pp. 306-317.
137.	[1979]	(with J. P. Kalt) <i>Petroleum Price Regulation</i> . Washington, D.C.: American Enterprise Institute for Public Policy Research.
138.	[1979]	The Property Rights Doctrine and Demand Revelation under Incomplete Information. In M. Boskin (ed.) <i>Economics and Human Welfare</i> . New York and London: Academic Press, pp. 23-39.
139.	[1979]	The Trade-Off Between Growth and Equity. In H. I. Greenfield, A. M. Levenson, W. Hamovitch, and E. Rotwein (eds.) <i>Theory for Economic Efficiency: Essays in Honor of Abba P. Lerner</i> . Cambridge, Massachusetts: MIT Press, pp. 1-11.
140.	[1980]	(with S. Chang) Optimal Pricing, Use and Exploration of Uncertain Natural Resource Stocks. In P. T. Liu (eds.) <i>Dynamic Optimization and Mathematical Economics</i> . New York: Plenum, pp. 105-16.
141.	[1980]	Microdata Simulation: Current Status, Problems, Prospects. In R. Haveman and K. Hollenback (eds.) <i>Microeconomic Simulation Models for Public Policy Analysis</i> . New York and London: Academic Press, Vol. 2, pp. 253-265.
142.	[1980]	Real and Nominal Magnitudes in Economics. <i>Journal of Financial and Quantitative Analysis</i> 25:773-783.
143.	[1981]	Futures Markets: Some Theoretical Perspectives. <i>Journal of Futures Markets</i> 1:107-113.
144.	[1981]	Optimal and Voluntary Income Distribution. In S. Rosefielde (ed.) <i>Economic Welfare</i> and the <i>Economics of Soviet Socialism: Essays in Honor of Abram Bergson</i> , Cambridge, United Kingdom: Cambridge University Press, pp. 276-88.
145.	[1981]	(with L. Pesotchinsky and M. Sobel) On Partitioning a Sample with Binary-Type Questions in Lieu of Collecting Observations. <i>Journal of the American Statistical Association</i> 76:402-9.
146.	[1981]	Pareto Efficiency with Costly Transfers. In J. Los (ed.) Studies in Economic Theory and Practice. Amsterdam: North-Holland Publishing Company, Chapter 6.
147.	[1981]	The Social Choice Perspective. Hofstra Law Review 9:1373-80.
148.	[1981]	The Response of Orthodox Economics. In H. E. Daly and A. F. Umana (eds.) Energy, Economics, and the Environment. Boulder, Colorado: Westview Press, pp. 109-113.
149.	[1981]	On Finance and Decision Making. In R. Vernon and Y. Aharoni (eds.) State-Owned Enterprise in the Western Economies. London: Croom Helm, pp. 63-69.

150.	[1982]	Risk Perception in Psychology and Economics. Economic Inquiry 20:1-9.
151.	[1982]	Income Testing and Social Welfare: An Optimal Tax-Transfer Model: Discussion. In I. Garfinkel (ed.) <i>Income-Tested Transfer Programs: The Case for and Against</i> . New York and London: Academic Press, pp. 319-323.
152.	[1982]	The Rate of Discount on Public Investments with Imperfect Capital Markets. In R. C. Lind and others, <i>Discounting for Time and Risk in Energy Policy</i> . Washington, D.C.: Resources for the Future, pp. 115-136.
153.	[1982]	Comment on Evolutionary Models in Economics and Law: Cooperative versus Conflict Strategies, by Jack Hirshleifer. In F. Zerbe (ed.) Research in Law and Economics, Volume 4: 81-87.
154.	[1983]	Contributions to Welfare Economics. In E. C. Brown and R. M. Solow (eds.) <i>Paul Samuelson and Modern Economic Theory</i> . New York: McGraw-Hill, pp. 15-30.
155.	[1983]	Innovation in Large and Small Firms. In J. Ronen (ed.) <i>Entrepreneurship</i> . Lexington, Massachusetts: Lexington Books, pp. 15-28.
156.	[1983]	Team Theory and Decentralized Resource Allocation: An Example. In P. Desai (ed.) <i>Marxism, Central Planning, and the Soviet Economy.</i> Cambridge, Massachusetts, and London: The MIT Press, Chapter 4, pp. 63-76.
157.	[1983]	Behavior under Uncertainty and Its Implications for Policy. In B. Stigum and F. Wenstop (eds.) Foundations of Utility and Risk Theory with Applications. Dordrecht: D. Reidel, pp. 19-32.
158.	[1984]	Permanent and Transitory Substitution Effects in Health Insurance Experiments. Journal of Labor Economics, 2:259-267.
159.	[1985]	The Informational Structure of the Firm. American Economic Review Papers and Proceedings 75: No. 2, 303-307.
160.	[1985]	Maine and Texas. American Economic Review Papers and Proceedings 75: No. 2, 320-323.
161.	[1985]	The Economics of Agency. In J. W. Pratt and R. J. Zeckhauser (eds.) <i>Principals and Agents: The Structure of Business</i> . Boston: Harvard Business School Press, Chapter 2, pp. 37-51.
162.	[1986]	Rationality of Self and Others in an Economic System. <i>Journal of Business</i> 59: S385-S399.
163.	[1986]	Planning and Uncertainty. In I. Adelman and J. E. Taylor (eds.) <i>The Design of Alternative Development Strategies</i> . Rohtak, India: Jan Tinbergen Institute of Development Planning, Chapter 9.
164.	[1986]	Comments, in R. G. Cummings, D. S. Brookshire, and W. D. Schulze (eds.) <i>Valuing Environmental Goods: An Assessment of the Contingent Valuation Method</i> , Totawa. New Jersey: Rowman and Allanheld, pp. 180-185.

165.	[1987]	The Demand for Information and the Distribution of Income. Probability in the Engineering and Informational Sciences 1:3-13.
166.	[1987]	Technical Information. Returns to Scale, and the Existence of Competitive Equilibrium. In T. Groves, R. Radner, and S. Reiter (eds.) <i>Information, Incentives, and Economic Mechanisms</i> . Minneapolis: University of Minnesota Press, Chapter 7, pp. 243-255.
167.	[1988]	Ricardos Werk aus der Sicht der modernen Okonomie. In K. J. Arrow, M. Ricardo, and H. Recktenwald, David Ricardo: <i>Eine moderne Würdigung</i> . Düsseldorf: Verlag Wirtschaft und Finanzen, pp. 43-59.
168.	[1988]	L'Informazione come Industria di Servizi. In G. Tamburini (ed.) Verso L'Economia dei Nuovi Servizi: I Settore Finanziario. Bologna: Il Mulino, Chapter 1, pp. 29-38.
169.	[1988]	Presidential address: General Economic Theory and the Emergence of Theories of Economic Development. Chapter 2 in K. J. Arrow (ed.) <i>The Balance between Industry and Agriculture in Economic Development, Volume 1</i> : Basic Issues. Basingstoke and London: Macmillan for the International Economic Association, pp. 22-32.
170.	[1988]	Overview of the Conference. In S. Borner (ed.) <i>International Finance and Trade in a Polycentric World</i> . London: Macmillan in association with the International Economic Association, pp. 392-396.
171.	[1989]	Joan Robinson and Modern Economic theory: An Interview. In G. Feiwel (ed.) <i>Joan Robinson and Modern Economic Theory</i> . New York: New York University Press, Chapter 3, pp. 147-185.
172.	[1989]	Von Neumann and the Existence Theorem for General Equilibrium. In M. Dore, S. Chakravarty, and R. Goodwin (eds.) <i>John von Neumann and Modern Economics</i> . Oxford: Clarendon Press, Chapter 2, pp. 15-28.
173.	[1989]	A "Dynamic" Proof of the Frobenius-Perron Theorem for Metzler Matrices. In T. W. Anderson, K. B. Atheyra and D. L. Iglehart (eds.) <i>Probability, Statistics, and Mathematics: Papers in Honor of Samuel Karlin</i> . Boston: Academic Press, pp. 17-26.
174.	[1991]	Certainty Equivalence and Inequivalence for Prices. In L. W. McKenzie and S. Zamagni (eds.) Value and Capital: Fifty Years Later. Basingstoke, U.K.: Macmillan for the International Economic Association, pp. 41-63.
175.	[1991]	Cowles in the History of Economic Thought. In <i>Cowles Fiftieth Anniversary</i> . New Haven: Cowles Foundation for Research in Economics, pp. 1-24.
176.	[1991]	The Dynamics of Technological Change. In Organization for Economic Co-operation and Development, <i>Technology and Productivity: The Challenge for Economic Policy</i> . Paris: OECD, pp. 473-6.
177.	[1991]	Panel Contribution: The Transition from Communism to an Alternative Economic Organisation. In A. B. Atkinson and R. Brunetta (eds.) <i>Economics for the New Europe</i> . Basingstoke and London: Macmillan, in association with the International Economic Association, pp. 377-382.

178.	[1991]	Scale Returns in Communication and Elite Control of Organizations. <i>Journal of Law, Economics, and Organization</i> 7, Special Issue, 1-6.
179.	[1992]	Informational Equivalence of Signals. In P. Dasgupta, D. Gale, O. Hart, and E. Maskin (eds.) <i>Economic Analysis of Markets and Games</i> . Cambridge, Massachusetts, and London: The MIT Press. Pp. 169-183.
180.	[1992]	Transition from Socialism. Estudios Economicos 6: No. 1, 5-22.
181.	[1992]	Sex Differentiation in Annuities: Reflections on Utilitarianism and Inequality. In R. Selten (ed.) <i>Rational Interaction</i> . Berlin: Springer-Verlag. Pp. 333-336.
182.	[1992]	The Basic Economics of Arms Reduction. In W. Isard and C. H. Anderton (eds.) Economics of Arms Reduction and the Peace Process. Amsterdam: Elsevier. Chapter 2. Pp. 57-61.
183.	[1992]	Excellence and Equity in Higher Education, Education Economics 1: 5-12.
184.	[1993]	Economic Integration and the Future of the Nation-State. Contemporary Policy Issues XI: 1-6.
185.	[1993]	Contingent Valuation of Nonuse Values: Observations and Questions. In J. Hausman (ed.) Contingent Valuation: A Critical Assessment. Amsterdam: North-Holland, Chapter XIV, pp. 479-484.
186.	[1993]	Does A Good Place Value News? In A. B. Atkinson (ed.) Alternatives to Capitalism: The Economics of Partnership. New York, St. Martin's Press, Chapter 3, pp. 33-44.
187.	[1993]	(with J. Edward Li) A Note on the Peace Dividend and Reallocation of Knowledge Skills. In J. Brauer and M. Chatterji (eds.) <i>Economic Issues of Disarmament</i> . Basingstoke and London: Macmillan, Chapter 3, pp. 26-32.
188.	[1994]	Methodological individualism and social knowledge. <i>American Economic Review Papers and Proceedings</i> 84: no. 2, 1-9.
189.	[1994]	General Economic Theory and Income Distribution. In J.H. Bergstand, T.F. Cosimano, J.W. Houck, and R.G. Sheehan (eds.) <i>The Changing Distribution of Income in an Open U.S. Economy</i> . Amsterdam, London, New York, and Tokyo: North Holland, 1994, Chapter 12, pp. 343-347. London: Macmillan, Chapter 3, pp. 26-32.
190.	[1994]	The production and distribution of knowledge. In G. Silverberg and L. Soete (eds.), The Economics of Growth and Technical Change: Technologies, Nations, Agents. Aldershot, U.K., and Brookfield, Vt.: Edward Elgar. Chapter 2, pp. 9-20.
191.	[1994]	(with Timothy Kehoe) Distinguished Fellow: Herbert Scarf's contributions to economics. <i>Journal of Economic Perspectives</i> 8: 161-181.
192.	[1994]	International peace-keeping forces: economics and politics. In M. Chatterji H. Jager and A. Rima (eds.) <i>The Economics of International Security</i> . Basingstoke: Macmillan, and New York: St. Martin's. Pp. 81-86.

193.	[1994]	Information and the organization of industry. Rivista internazionale di scienze sociali 52:111-124.
194.	[1995]	Foreword to, M. McFaul and T. Perlmutter (eds.) <i>Privitization, conversion, Enterprise Reform in Russia</i> . Boulder, San Francisco, and Oxford: Westview Press.
195.	[1995]	A note on freedom and flexibility. In K. Basu, P. Pattanaik, and K. Suzumura (eds.), Choice, Welfare, and Development. Oxford: Clarendon Press, pp. 7-16.
196.	[1995]	Some general observations on the economics of peace and war. Peace Economics, Peace Science, and Public Policy 2 (Winter): 1-8.
197.	[1995]	Information acquisition and the resolution of conflict, K.J. Arrow, R.H. Mnookin, L. Ross, A. Tversky, and R. Wilson (eds.) <i>Barriers to Conflict Resolution</i> . New York and London: Norton.
198.	[1995]	Economics as it is and as it is developing: a very rapid survey. In H. Albach and S. Rosenkranz (eds.) Intellectual Property Rights and Global Competition: Towards a New Systhesis. Berlin: Edition Sigma. Pp. 11-32.
199.	[1995]	Information, responsibility, and human services. In V.R. Fuchs (ed.) <i>Individual and Social Responsibility</i> . Chicago and London: University of Chicago Press, pp. 229-244.
200.	[1995]	Returns to scale, information, and economic growth. In B.H. Koo and D.H. Perkins (eds.) Social Capability and Long-Term Economic Growth. Basingstoke and London: Macmillan. Pp. 11-18.
201.	[1995]	The use of genetic and other medical information: ethical and market dilemmas. George Seltzer Distinguished Lecture, Industrial Relations Center, University of Minnesota.
202.	[1995]	Effet de serre et actualisation. Revue de L'Energie No. 471 (Octobre): 631-636.
203.	[1995]	(With D.W. Carlton and H.S. Sider) The competitive effects of line-of-business restrictions in telecommunications. <i>Managerial and Decision Economics</i> 16: 301-321.
204.	[1996]	Information, responsibility, and human services. In V.R. Fuchs (ed.), <i>Individual and Social Responsibility: Child Care, Education, Medical Care and Long-Term Care in America</i> . Chicago and London: The University of Chicago Press. Chapter 8, pp. 229-239.
205.	[1996]	Inequalities in income and wealth. In E. Malinvaud and M. Archer (eds.) The Study of the Tensions Between Human Equality and Social Inequalities from the Perspective of the Various Social Sciences. Vatican City: Pontifical Academy of Social Sciences. Pp. 115-124.
206.	[1996]	Comment on M. Kurz, "Rational preferences and rational beliefs." In K.J. Arrow, E. Colombatto, M. Perlman, and C. Schmidt (eds.) <i>The Rational Foundations of Economic Behavior</i> . New York: St. Martin's Press, and Basingstoke and London: Macmillan, in association with the International Economic Association. Pp. 363-363.

207.	[1996]	The impact of operations research and decision theory on teaching and research in economics. In K.J. Arrow, R.W. Cottle, B.C. Eaves, and I. Olkin (eds.) <i>Education in a Research University</i> . Stanford, CA: Stanford University Press, P. 353-369.
208.	[1996]	The theory of risk-bearing: small and great risks. Journal of Risk and Uncertainty 12: 101-111.7.
209.	[1996]	(with J. Parikh and G. Pillet as Principal Lead Authors) Decision-making frameworks for addressing climate change. In J.P. Bruce, H. Lee, and E.F. Haites (eds.) Climate Change 1995: Economic and Social Dimensions of Climate Change, Contribution of Working Group III to the Second Assessment of Intergovernmental Panel on Climate Change. Cambridge University Press: Cambridge, UK, New York, and Melbourne. Pp. 53-78.
210.	[1996]	(with W.R. Cline, K.G. Maler, M. Munasinghe, R. Squitieri, and J.E. Stiglitz) Intertemporal equity, discounting and economic efficiency. In J.P. Bruce, H. Lee, and E.F. Haites (eds.) <i>Climate Change 1995: Economic and Social Dimensions of Climate Change</i> , Contribution of Working Group III to the Second Assessment of Intergovernmental Panel on Climate Change. Cambridge University Press: Cambridge, UK, New York, and Melbourne. Pp. 125-144.
211.	[1996]	The economics of information: a survey. Empirica 23: 119-128.
212.	[1996]	Elements of the economics of information; information and increasing returns. Chung-hua Series of Lectures by Invited Eminent Economists, No. 22: Nanking, Taipei, ROC: Institute of Economics, Academia Sinica.
213.	[1996]	Technical information and industrial structure. <i>Industrial and Corporate Change</i> 5: 645-652.
214.	[1997]	Economic growth for a small country. In A.W. Gray (ed.) <i>International Perspectives on the Irish Economy</i> . Dublin: Indecon Economic Consultants. Chapter 1, pp. 1-8.
215.	[1997]	The benefits of education and the formation of preferences. In J.R. Behrman and N. Stacey (eds.) <i>The Social Benefits of Education</i> . Ann Arbor: University of Michigan Press. Chapter 2, pp. 11-16.
216.	[1997]	Invaluable goods. Journal of Economic Literature 35: 757-765.
217.	[1997]	The functions of social choice theory. In K.J. Arrow, A.K. Sen, and K. Suzumura, (eds.) Social Choice Re-examined. Basingstoke and London: Macmillan in association with the International Economic Association. Vol. 1, pp. 3-9.
218.	[1997]	Kapitaltheorie als Erweiterung der Werttheorie. In K.J. Arrow, C. Bliss, and S. Zamagni, <i>John R. Hicks und sein "Value and Capital."</i> Dusseldorf: Verlag Wirtschaft und Finanzen. Pp. 31-46.
219.	[1998]	Innovation and increasing returns to scale. In K.J. Arrow, Y-K Ng, and X. Yang, <i>Increasing Returns and Economic Progress</i> , Basingstoke, UK: Macmillan, and New York: St. Martin's. Chapter 18, pp. 403-408.
220.	[1998]	"What has economics to say about racial discrimination?" Journal of Economic Perspectives 12: 91-100.

Appendix 2

TECHNICAL EXPLANATION OF WHY FARRELL AND MITCHELL'S "AVERAGE-PRACTICE" ANALYSIS IS MISLEADING

Farrell and Mitchell's numerical example assumes that the number of firms monitored by regulators falls from eight to four. Their characterization of the loss of information due to this reduction is misleading. Although the number of observations in Farrell and Mitchell's hypothetical example falls by a factor of two, the variance of each observation (now the sum of two observations instead of one) falls by the same amount. Regulators have fewer pieces of information, but each piece is more reliable. Thus, neither the estimated average performance nor the true classically defined variance of these benchmarks will change at all.

Farrell and Mitchell use the increase in the Bayesian posterior variance as a measure of the fall in confidence that a regulator would have in the estimated benchmark. In this context, the posterior variance grows because the variance is not known, and due to their assumption of an uninformative prior distribution.

Although their calculations are numerically correct, Farrell and Mitchell greatly exaggerate the practical significance of these calculations. First, their small assumed sample sizes (eight firms merging to four) give the most dramatic results possible with respect to the posterior variance. Among examples in which the number of firms is cut in half, and for which the posterior variance can be computed, the "eight-to-four" example yields the largest change in posterior variance because the denominator in the calculated variance includes the term "n-3". In fact, as sample size grows, the posterior variance tends to the classical variance, which remains unchanged. This is particularly noteworthy as the numbers they choose are a poor reflection of the actual benchmarking environment. As I have discussed, the number of entities useful for benchmarking is considerably larger than the number of major ILECs. Second, their

^{1.} As discussed in Section II.C above, this hypothetical and its underlying assumptions are not appropriate for analyzing the proposed transaction.

assumption of an uninformative prior distribution is unreasonable. Prior information exists in the form of the history of prior benchmarks, and from other sources. Given prior information on the variance, the posterior variance would not fall as dramatically. Indeed, if the variance is known from prior experience, the problem becomes the same as in classical statistics, and the merger has no effect on the posterior variance.

Appendix 3

EFFECT OF MERGERS ON INCENTIVES TO DEGRADE SERVICE TO COMPETING LOCAL EXCHANGE CARRIERS

The Declaration of Michael L. Katz and Steven C. Salop claims that the incentive of ILECs to degrade service to a CLEC would be increased by merger. In the following, I use the assumptions most favorable to their case, although I do not believe they are accurate. I assume that there are two ILECs. Because of economies of scale, the CLEC would not find it profitable to enter just one. It would have to enter both markets to cover costs and make a profit. In the absence of a merger, each ILEC could degrade service or not. (For the purposes of the present argument, I am assuming their freedom to do so, although it is hardly reasonable, since it is in effect assumed that the customers can tell the difference in service while the CLEC cannot enforce its desire for high-quality interconnections.)

It is conceivable that degradation of service by one ILEC will reduce demand for the services supplied by the CLEC so much that it will not enter. In this case, the merger will clearly have no effect, since the CLEC's entry will have already been deterred. Therefore, to give the Katz-Salop argument its best chance, suppose that degradation by one ILEC will not prevent entry but that degradation by both will. This appears to be the best case for arguing that the merger will increase the incentives for degradation.

But this inference is not correct if the firms are at all rational. To put the matter simply, each firm will degrade assuming the other is rational enough to understand that it is in its interest to degrade also. No collusion is needed, just a common understanding of the possibilities for deterring entry through degradation by both.

Formally, let A and B be the two ILECs, and let C be the potential CLEC. Let s_A be the decision of firm A, "degrade," or, "not degrade," abbreviated as "d" and "not d," respectively. Similarly, let s_B be the decision of firm B, with the same abbreviations. Finally, let C's strategy, s_C , be "not enter" or "enter," abbreviated as "not e" and "e," respectively. Let P_A , P_B , and P_C be the payoffs to A, B, and C, respectively. P_A depends on s_A and s_C , P_B depends on s_B and s_C ,

and P_C depends on all three strategies. Clearly, $P_C(s_A, s_B, \text{ not e}) = 0$ no matter what the strategic choices of A and B are. Our assumptions about the effects of degradation on the profitability of C's entry can be written,

 $P_C(s_A, s_B, e) > 0$ if either $s_A = not d$ or $s_B = not d$.

 $P_{c}(d, d, e) < 0.$

We suppose that firms A and B make their strategic choices independently; then C decides whether or not to enter. Clearly, it will not enter if both firms have decided to degrade and will enter otherwise. This policy of C's can be anticipated by A and B. The decisions of A and B are taken to follow the principle of the Nash equilibrium. That is, A and B make choices such that neither would find it beneficial to change if the other does not. Clearly, the situation in which both firms degrade would be an equilibrium. If A degraded and B did not degrade, then C would enter, certainly making B worse off. The same argument applies from A's point of view.

To be complete, one would have to ask if there are other equilibria. It is true that there is another equilibrium in which neither A nor B degrade. In that case, it would not pay either to degrade since C would enter anyway. But clearly both A and B would be better off in the first equilibrium, on the assumption that degradation without C's entry is preferred to non-degradation with C's entry. Hence, the first equilibrium would certainly be chosen by both A and B, since each is aware that the other can see the value of degradation by both; in technical terms, the equilibrium in which both degrade Pareto-dominates the equilibrium in which neither degrades.

It is clear, then, that if it were possible to degrade service, whatever incentive there might be to do so would already exist without the merger. Hence, the merger in no way changes the incentives to degrade service.

BEFORE THE

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

in the Matter of

GTE CORPORATION, Transferor

And

CC Docket No. 98-184

BELL ATLANTIC CORPORATION, Transferee

For Consent to Transfer of Control

DECLARATION OF ROBERT H. GERTNER AND JOHN P. GOULD ON BEHALF OF GTE CORPORATION AND BELL ATLANTIC CORPORATION

DECEMBER 22, 1998

DECLARATION OF ROBERT H. GERTNER AND JOHN P. GOULD

I. INTRODUCTION

A. Summary of Conclusions

- 1. We have been asked by counsel for the Bell Atlantic Corporation ("Bell Atlantic") and the GTE Corporation ("GTE") to address claims made by various parties ("respondents") that have filed comments with the Federal Communications Commission ("the Commission") in opposition to the proposed Bell Atlantic/GTE merger. In particular, we have been asked to review respondents' claims that the proposed merger likely will harm competition in the provision of local telephone services by removing an important "potential competitor" in particular local areas, specifically certain areas in Pennsylvania and Virginia, where Bell Atlantic and GTE's local service territories share a common border. The respondents claim that there are two characteristics of GTE and Bell Atlantic that uniquely position those two firms as potential competitors in each other's territories: (1) they are incumbent local exchange carriers ("ILECs"); and (2) they are geographically contiguous in some areas of Pennsylvania and Virginia.
- 2. As we explain in this declaration, we find that neither element being an ILEC nor contiguity in combination or separately makes these two companies more effective potential competitors than numerous other firms. First, the evidence is inconsistent with respondents' claim that Bell Atlantic or GTE's experience as an ILEC provides either firm with important advantages as compared to non-ILEC potential entrants. Indeed, we find that the evidence suggests Bell Atlantic and GTE face some disadvantages as potential entrants relative to some non-ILECs. Second, respondents' claim that Bell Atlantic and GTE are especially important potential entrants into each other's territories in Pennsylvania and Virginia because of the geographic proximity of each other's service territories also is inconsistent with the evidence. In particular, AT&T claims that Bell Atlantic and GTE are the most likely potential

competitors in each other's territory because each of them can serve the other's customers within a 125-mile radius of each of their switches. We have analyzed this claim and determined that if it is correct, then there are a substantial number of other potential competitors among ILECs and competitive local exchange carriers ("CLECs") that also can serve customers in Bell Atlantic and GTE's service areas. This result holds even if we reduce the radius to 40 miles (approximately the operating radius of CLEC switches). Finally, economic theory suggests that respondents exaggerate the importance of removing one potential entrant on competition.

B. Qualifications

3. I. Robert H. Gertner, am Professor of Economics and Strategy at the Graduate School of Business of The University of Chicago. I received an A.B., summa cum laude, from Princeton University in 1981, where I majored in Economics, and a Ph.D. from the Massachusetts Institute of Technology in 1986, also in Economics. I am a Research Fellow at the National Bureau of Economic Research. In 1990-1991 I was a John Olin Fellow in Law and Economics at The University of Chicago's Law School. I specialize in the economics of industrial organization (the study of individual markets which includes the study of antitrust. regulation, and business strategy), game theory (the formal study of strategic interdependence), law and economics, and corporate finance. I am co-author of Game Theory and the Law, a book that applies the modern tools of game theory and information economics to legal issues. I have published numerous articles in academic journals including the Journal of Law and Economics, the Rand Journal of Economics, the Quarterly Journal of Economics, and the Journal of Finance. I am Co-Editor of the Journal of Business, a leading journal that publishes academic research applying economics to business problems, and Associate Editor of the Journal of Industrial Economics. I have taught courses at The University of Chicago in competitive strategy, industrial organization, financial economics, corporate law, and antitrust

law. A copy of my curriculum vitae that includes a list of my publications during the preceding ten years is attached as Exhibit 1.

- 4. In addition to my academic experience, I am Principal and Vice President of Lexecon Inc., an economics consulting firm that specializes in the application of economic analysis to legal and regulatory matters. I have worked as a consultant on antitrust and other litigation issues as well as business strategy problems with major telecommunications firms.
- 5. I, John P. Gould, am the Steven G. Rothmeier Professor and Distinguished
 Service Professor of Economics at the University of Chicago Graduate School of Business,
 where I have been a member of the faculty since 1965 and where I have taught courses or
 workshops in economics, quantitative methods and econometrics, financial economics, and
 business strategy. I am also Principal and Executive Vice President of Lexecon Inc., an
 economics consulting firm located in Chicago, London and Brussels. For ten years, from July
 1983 to June 1993, I served as Dean of the University of Chicago Graduate School of Business.
 From 1988 to 1991, I also served as Vice President for Planning for the University of Chicago.
 In 1978, I was Visiting Professor at the Graduate Institute of Economics at National Taiwan
 University. I received my S.B. degree with highest distinction from Northwestern University and
 my M.B.A. and Ph.D. in economics from the University of Chicago Graduate School of
 Business.
- 6. I have served as editor of the *Journal of Business* and associate editor of the *Journal of Financial Economics* and the *Journal of Accounting and Economics*, and I am a member of the American Economics Association and the Econometrics Society. I have published numerous articles in scholarly journals, including the *American Economic Review*, the *Journal of Political Economy*, the *Journal of Law and Economics* and the *Journal of Business*, and I am co-author of *Microeconomic Theory*, a textbook that covers all major areas of microeconomics. Microeconomics is that part of economics that deals with businesses, markets and industries, among other topics.

- 7. In addition to my academic and administrative experience, I served in Washington, D.C. as Special Assistant for Economic Affairs for then Secretary of Labor George P. Shultz and in a similar capacity at the Office of Management and Budget.
- 8. I am currently on the boards of Dimensional Fund Advisors, the Pegasus Funds (where I currently serve as chairman), Harbor Capital Advisors and Milwaukee Mutual Insurance Company. I have also been a Director of Vulcan Materials Company and Argonne-Chicago Corporation. I have testified in antitrust and other cases in U.S. Federal Courts, before the Federal Trade Commission and before the Canadian Competition Tribunal. My curriculum vitae is attached as Exhibit 2.

C. Organization of the Declaration

9. The remainder of our declaration is organized as follows. In section II, we discuss the role of "potential competition" in local telecommunications markets. In section III, we show that the evidence is inconsistent with respondents' claim that ILEC experience in other areas provides important advantages to potential entrants into the local telephone business. In section IV, we show that Bell Atlantic and GTE's geographic proximity to each other in certain areas of Pennsylvania and Virginia does not provide either firm with a substantial advantage over other potential competitors in each firm's local service areas. In section V, we explain why, as a matter of economic theory, respondents' arguments exaggerate the importance of one potential entrant on competition. Finally, we summarize our conclusions in section VI.

II. THE ROLE OF "POTENTIAL COMPETITION" IN LOCAL TELECOMMUNICATIONS MARKETS

10. Respondents claim that Bell Atlantic and GTE are important "potential competitors" into each other's local service areas in Pennsylvania and Virginia. For example, one of the sections of the Petition of AT&T Corp. to Deny Application ("AT&T") is entitled "The

Proposed Merger Would Eliminate One Of the Most Significant Potential Entrants in Each

Applicant's Territory."

Similarly, one of the sections of the Petition to Deny of Sprint

Communications Company L.P. ("Sprint") is entitled "Bell Atlantic and GTE Are Among The Most

Likely Potential Entrants Into Other Service Areas, Including Each Other's."

2

11. Economists recognize in a large number of cases the usefulness of analyzing actual and potential competition in determining market performance.³ However, there are important differences in actual and potential competition that imply different competitive concerns and antitrust scrutiny when a merger results in the elimination of an actual competitor rather than elimination of a potential competitor. Fundamentally, actual competitors differ from potential competitors because actual competitors have proven themselves in a marketplace they have succeeded in bringing a good or service to market that consumers are willing to buy. Actual competitors have invested resources that are often sunk, making it more likely that they will have competitive significance than a potential entrant especially where the potential entrant must sink significant resources to enter the market. The actions of such competitors (e.g., setting prices; developing new products) thus are an important constraint on the behavior of their rivals. In contrast, a potential competitor may not ever choose to make the needed investment to enter into a market; even if it does make the necessary investment, it may not succeed in developing, producing and distributing a product that consumers value. For this reason, the impact of potential competitors is difficult to identify ex ante even if they exert a constraining effect on the ability of incumbent firms to raise prices or restrict output.

1

AT&T, at 22.

² Sprint, at 11.

The Commission has analyzed "precluded entry" by firms that would have entered markets but for exclusionary regulations. (See Bell Atlantic/NYNEX Order and MCI WorldCom Order). Precluded entry analysis suggests that certain firms would have been actual competitors rather than potential competitors in the absence of regulation. However, our analysis of potential competition still applies because Bell Atlantic and GTE are only two of a large number of supposedly previously precluded entrants from each other's markets, and many of these supposedly precluded entrants actually have entered those markets.

- 12. Assessing the competitive significance of a specific potential entrant into today's telecommunications markets is particularly difficult because of the characteristics of this industry. Telecommunications is an industry that is growing rapidly, undergoing substantial deregulation, and facing substantial uncertainty, including uncertainty about the development of future technologies and about what "product" consumers likely will demand in the future. The respondents' arguments focus on brand name, geographical proximity and current switching facilities as the key factors in determining the success of an entrant in local service. But in such a dynamic market it is difficult to predict accurately the identity of successful potential entrants. These difficulties in assessing the competitive significance of a potential entrant in these circumstances means that the elimination of a particular potential entrant by merger raises substantially less antitrust concern than a merger that eliminates an actual competitor.⁴
- 13. An analogous situation arises in other high-tech markets such as computers. In the 1980s it was impossible to identify *ex ante* IBM's potential competitors in the computer hardware (or software) business. Nevertheless, from the perspective of 1998 we can determine which potential competitors became actual competitors and exerted a substantial competitive constraint on IBM. Another example is the company Amazon.com which did not exist just a few years ago and now has had a notable impact on competitors by exploiting the Internet. Similarly, in telecommunications markets the sources of competition that have emerged were not easily identifiable a few years ago. Either the potential competitors did not exist or they were engaged in other lines of business at that time.
- 14. The substantial uncertainty faced by telecommunications providers is reflected in market evidence. Specifically, entrants into the local telephone business have adopted diverse entry strategies. For example, some firms such as respondent AT&T have made substantial investments in cable TV assets, with the intention of offering cable telephony services in

Indeed, a merger of a potential entrant with an incumbent firm can lead to lower prices for consumers if there are efficiencies from that merger.

competition with ILECs. Other firms have invested substantially in wireless assets (e.g., Sprint, Winstar and Teligent). Industry observers also suggest that Internet telephony may become an important form of competition for the current ILECs.⁵ Wireless telephony also may become an important rival to current ILECs.⁶ Indeed, AT&T intends to compete directly with GTE's ILEC operation in Plano, Texas, where AT&T is offering its digital wireless service in a package designed to attract customers seeking second lines for their businesses or homes. By offering a \$40 monthly package of unlimited local calling bundled with various services such as voice mail. caller ID and call waiting, AT&T's prices are competitive today with GTE's wireline service in Plano.

15. Furthermore, substantial uncertainty remains about which products consumers will value in the future. Currently, most residential customers (and to a lesser extent, business customers) purchase local telephone and long-distance service from different providers. However, many telecommunications providers expect to provide "bundled" services in the near future on a national basis. For example, MCI WorldCom and AT&T have already begun to bundle long-distance and local toll services for residential and business customers.⁷ This change in the type of products desired by consumers is reflected in the substantial consolidation activity in the industry over the last few years. For example, WorldCom acquired MCI (Internet backbone, local and long distance), following its acquisitions of UUNET (an Internet provider), MFS and Brooks Fiber (local providers). Similarly, AT&T has acquired McCaw and Vanguard (wireless companies), TCG (a local provider), and is in the process of buying TCI (a cable company).

See, for example, Fall Internet World Review, October 16, 1998 which discusses AT&T's

recent initiative in Internet Protocol Telephone technology for data and voice transport.

See, for example, the Statement of Reed E. Hundt, FCC, before the U.S. House of Representatives Telecommunications and Finance Subcommittee, June 19, 1995. Hundt stated, "There are predictions that 40 percent of the population will be wireless users in ten years and that wireless will challenge the traditional wired network for basic phone service."

16. Other firms may adopt different strategies to enter local markets. Competition among them will select the winners and losers. Allowing firms to put their resources at risk in whatever way they choose generally enhances the public interest, while regulatory attempts to predict effective competitive strategies are likely to be much less successful. Thus the public interest is best served by not interfering with private competitive decisions absent tangible competitive harm. This is especially true in a case of a merger between an incumbent and a firm that has not entered the market in such a dynamic and uncertain environment.

III. THE EVIDENCE IS INCONSISTENT WITH RESPONDENTS' CLAIM THAT EXPERIENCE AS AN ILEC PROVIDES IMPORTANT ADVANTAGES TO POTENTIAL ENTRANTS

- another ILEC's service territory a substantial advantage over non-ILEC entrants. For example, Sprint claims that Bell Atlantic and GTE "have advantages in entering local markets that are unavailable to virtually all other potential entrants. These advantages include experience in providing local services, particularly expertise in established complex systems to handle administrative capabilities (billing, order taking, customer care, etc.) not enjoyed by other possible entrants such as cable companies or [competitive access providers]."
- 18. However, our review shows that ILEC experience provides no special advantage to a potential entrant (i.e., to an ILEC attempting to offer "out-of-region" local telephone service).

MCI Press Release, Local Toll Revolution: MCI Offers Millions of Dollars in Savings to Consumers in 40 States, June 2, 1997. AT&T, Now AT&T Puts Even More Within Your Reach, http://www.att.com/localtoll/consumer.

There are numerous instances when the *ex post* sources of competition were not obvious or even known *ex ante*, especially when there is rapidly changing technology and deregulation. Examples include Microsoft in computer operating systems, Dell in the personal computer

retailing and Walmart in mass merchandise retailing.

Sprint, at 11. Similarly, AT&T argues that "the provision of exchange services to a broad base of residential and business customers requires an extensive array of complex "back office" order taking, customer care, billing, fulfillment, and related systems that no [interexchange carrier] or cable company has today, for they are unique to the local exchange business" (AT&T, at 23).

Indeed, in certain circumstances, a firm's ILEC assets may be of little use when it attempts to compete for customers outside of its service area. For example, Sprint recently sold its Chicago-area ILEC operations to Ameritech before entering the area as a CLEC.

A. The Technology and Knowledge Needed to Provide Local Exchange Services is Widely Available

- 19. We understand that the technology ILECs use (e.g., switches, software) is comparable, and sometimes less flexible, to that used by many non-ILEC CLECs. In particular, we understand that Bell Atlantic and GTE largely rely on "legacy" systems for "back office" (e.g., billing) and other Operations Support Systems ("OSS") functions that may not be as robust in handling bundled services as the systems utilized by newer CLECs. For example, we understand that new billing systems and OSS can be installed in roughly six months, but that upgrading "legacy" systems can take more than two years. ¹⁰ We understand that GTE chose to invest in new back office systems for its CLEC subsidiary instead of relying on its legacy systems.
- 20. We understand that such systems are available from dozens of vendors. Several of these vendors are well-established in the business, and have supplied billing systems to such telecommunications providers as AT&T, Sprint, Unitel and Frontier. In addition to billing systems, much of the equipment needed to offer local exchange services is available on a "turnkey" system from major vendors such as Lucent and Nortel.
- 21. Moreover, any special knowledge about running a local exchange business not available from vendors also is readily available. Fundamentally, such knowledge is "human

The Yankee Group, "The Billing and Customer Care Software Industry: A Comparison of Competitive Vendors," Consumer Communications. July 1998, at 9.

Suk Declaration, ¶ 7, Application of Bell Atlantic Corporation and NYNEX Corportation for Consent to Transfer Control of Licenses and Authorizations.

capital" that resides in individuals. Individuals with ILEC experience can – and often do – take jobs working for CLECs. 12

- 22. Such "specialized" knowledge also can be acquired by purchasing an ILEC. There are hundreds of independent ILECS in the United States, including 17 in Pennsylvania and 16 in Virginia. Furthermore, as we have discussed, major telecommunications firms like AT&T and MCI WorldCom have recently demonstrated their willingness and ability to purchase telecommunications firms that already are, or soon will be, in the local exchange business.
- 23. Finally, a substantial amount of ILEC-specific information becomes known to competitors through interconnection negotiations and the regulatory process. For example, in New York there have been well over two years of regulatory proceedings on Bell Atlantic's 271 application involving evidentiary hearings and pleadings containing details of Bell Atlantic's operations, including OSS, power supply arrangements, loops and switches and the like.
 - B. Market Evidence Confirms that ILEC Experience Provides No Special Advantages to CLECs
- 24. Our review of the market evidence is consistent with our understanding that experience as an ILEC provides no special advantage to a firm that competes for local telephone business outside of its service area.
- 25. For example, Sprint recently announced plans to enter seven large cities as a CLEC.¹³ In three of the cities (Denver, Atlanta and Chicago) Sprint does not have ILEC operations in the metropolitan area and has only minimal presence in two others (New York and Houston). Only in Kansas City, where Sprint is headquartered, (and to a lesser extent in Dallas) does it have a substantial presence. In fact, last year the company sold its Chicago-area ILEC

We understand that certain key Bell Atlantic employees have left to work for competitors, including two interconnection product managers – one went to TCG (now part of AT&T) and the other went to Pathnet.

operations to Ameritech even though Chicago is on its list of target markets. This evidence suggests that Sprint's tong-distance assets, rather than its local exchange operations, form the basis for its CLEC operations.

26. As we have discussed, the purported specialized knowledge associated with ILEC experience could be acquired by buying one or more of the hundreds of independent ILECs in the United States, but AT&T, MCI WorldCom and others have not done so. Two major respondents that have extered the local telephone business have spent tens of billions of dollars to acquire CLECs or cable companies with no ILEC experience. During the last two years, MCI WorldCom purchased MFS (a CLEC with facilities in 23 states) for \$14 billion and Brooks Fiber (a CLEC with facilities in 13 states) for \$2.9 billion. Similarly, AT&T purchased TCG (with facilities in 30states) for \$11.3 billion, and AT&T is in the process of buying TCI, one of the country's largest cable companies, for \$48 billion. In contrast, we understand that neither firm has purchased any independent ILECs. Thus, these respondents' actions are inconsistent with their claims that ILEC experience provides a substantial unique advantage for potential entrants into the local telephone business.

BELL ATLANTIC AND GTE'S GEOGRAPHIC PROXIMITY TO EACH OTHER IS NOT IV. AN ADVANTAGE IN PENNSYLVANIA AND VIRGINIA

- 27. In addition to the claim that ILECs generally have an advantage in entering the local exchange market, respondent AT&T further claims that adjacent ILECs are the most likely and effective entrant into each other's market area. 14
- According to AT&T, the advantage of proximate ILEC assets has two aspects. 28. First, AT&T claims that each company's existing facilities, including switches and "back office"

Atlanta, Chicago, Dallas, Houston, Kansas City, Denver and New York. "Sprint Wins Access Agreements with Four Incumbent LECs for New Network," Communications Daily, June 18, 1998; "Sprint Shows Its Hand," *Internet Week*, June 15, 1998, at 7.

AT&T, at 23.

facilities have sufficient excess capacity to serve adjacent areas with little additional investment. Second, AT&T's claim is that proximity provides each firm with brand-name recognition in the other's territory, giving that firm an advantage over other potential entrants. Each of these claims is seriously flawed. GTE's existing switches are no better positioned geographically to serve Bell Atlantic's customers in Virginia and Pennsylvania than a number of other ILECs and CLECs, including Alltel, Sprint and AT&T. Similarly, Bell Atlantic does not enjoy an advantage on the basis of proximity over other ILECs and CLECs in serving GTE's customers. Moreover, market evidence indicates that Bell Atlantic and GTE do not have greater brand-name recognition than a number of other competitors or potential competitors.

A. Bell Atlantic and GTE's ILEC Businesses in Virginia and Pennsylvania

- 29. Bell Atlantic's customer base in Virginia and Pennsylvania is concentrated in urban areas. In Virginia, Bell Atlantic's service area is concentrated in the densely populated areas in eastern Virginia around Washington, Richmond and Norfolk. In addition, Bell Atlantic serves the areas around Roanoke and the area along the Kentucky border. In Pennsylvania, Bell Atlantic's service areas are concentrated around Pittsburgh, Philadelphia, Allentown, Harrisburg and Scranton.
- 30. In contrast to Bell Atlantic, GTE operates as an ILEC primarily in rural areas in Virginia and Pennsylvania. In Virginia, GTE services a small area of Northern Virginia, part of Norfolk, and the less densely populated areas along the Western shore of the Chesapeake Bay, south of Richmond, around Harrisonburg and Lynchburg, and along the West Virginia border in the Western part of the state. The total population of these areas is 885,369 with a density of 89 people per square mile, as compared to the total population of Bell Atlantic's Virginia service areas of 4,370,720 with a density of 284 people per square mile. Similarly, in Pennsylvania, GTE's service areas cover less densely populated areas around Erie, Greensburg, York, Lebanon and Lewisburg. The total population of GTE's service areas in Pennsylvania is

1,030,084 with a density of 190 people per square mile, as compared to the total population of 8,771,251 and a density of 487 people per square mile in Bell Atlantic's Pennsylvania service areas. We understand that the rural, dispersed, primarily residential nature of GTE's service areas in Pennsylvania and Virginia make these relatively unattractive targets for potential entrants.¹⁵

B. There is No Evidence that Bell Atlantic and GTE's Proximity Makes Either a Uniquely Effective Potential Rival for the Other

- 31. AT&T claims that the unique ability of Bell Atlantic and GTE to serve each other's customers derives from their ability to use remote digital loop carriers to extend their ILEC facilities to serve out-of-region end users. According to AT&T, this technology allows an ILEC or CLEC to serve customers within a 125-mile radius of its existing switches. If AT&T's claim is correct, Bell Atlantic can enter GTE service territories using pre-existing Bell Atlantic switches; similarly, GTE can enter Bell Atlantic service territories using pre-existing GTE switches. However, even if this is true, a large number of other ILECs and CLECs in Pennsylvania, Virginia and adjoining states also have switches within 125 miles of Bell Atlantic and GTE ILEC customers and could extend their facilities in the same way that AT&T claims it would be possible for GTE and Bell Atlantic to do so.
- 32. We found that 100 percent of the population in GTE service area that is within 125 miles of a Bell Atlantic switch also is within 125 miles of at least ten other firms' switches.¹⁷ We also found that 100 percent of the population in Bell Atlantic service areas that is within 125 miles of a GTE switch also is within 125 miles of at least ten other firms' switches.

Our findings are conservative because they exclude all potential entrants that do not have a switch within 125 miles of these areas. The analysis was performed under our direction by Telecom Policy and Analysis: a Kellogg, Huber Consulting Group. See Appendix 1 for a detailed explanation of the methodology and data used in this analysis.

For example, Bell Atlantic witnesses Stallard and Whelan have testified that Bell Atlantic does not have a compelling reason to attack GTE's customer base in Pennsylvania and Virginia and that such entry would be a distraction from Bell Atlantic's goal to grow on a nationwide scale.

¹⁶ AT&T, at 24.

- 33. The analyses summarized above are based on AT&T's contention that it is economically feasible to supply local telephone service up to 125 miles from a switch. We understand that, in general, the extent to which it is economically feasible to provide local service large distances from a switch depend on a variety of factors, including population density in the area near the switch. However, even assuming a much smaller geographic service capability of 40 miles a distance we understand many CLECS use in urban areas there is still no unique competitive advantage conferred by proximate ILEC switches. Tables 1 and 2 repeat the analysis using a 40-mile radius around each switch. The results indicate that virtually all of the population in Bell Atlantic and GTE service areas in Pennsylvania and Virginia have at least one other independent ILEC or CLEC with a switch within 40 miles. Indeed, over 82 percent of the population in Bell Atlantic's service areas is within 40 miles of six or more independent ILECs or CLECs. The comparable figure for GTE is 60 percent.
- 34. The analysis treats each switch within 125 (or 40) miles as equally capable of serving additional customers. However, this likely overstates the competitive significance of Bell Atlantic and GTE as potential competitors in each other's service areas because each likely is relatively capacity-constrained compared to relatively new CLECs. Specifically, Bell Atlantic and GTE, as long-established ILECs, have been serving a relatively stable number of customers over time, and thus do not have substantial excess capacity on their switches. We understand that Bell Atlantic's switch capacity utilization in Virginia and Pennsylvania for voice lines is over 85 percent. The capacity utilization figures for GTE are 82.5 percent in Virginia and 88.9 percent in Pennsylvania. In contrast, as a matter of economics, new CLECs, which anticipate gaining substantial new customers, likely have relatively low levels of capacity utilization. For example, AT&T reportedly has 135 switches running at 50 percent capacity.

Bell Atlantic Network Data.

Letter from Gerald W. Shannon of GTE to Gerald Masoudi of Kirkland & Ellis, December 15, 1998

Morgan Stanley, Dean Witter Report on AT&T, January 5, 1998.

- C. Bell Atlantic and GTE's Proximity Does Not Give Them Any Greater
 Advantages In Each Other's Service Areas Than Other Potential Entrants
- 35. Bell Atlantic and GTE have no advantages over many potential entrants and actually would have disadvantages relative to a number of others were they to enter each other's territories. We understand that other actual entrants, including major respondents AT&T, MCI Worldcom and Sprint, are companies with better known national brand names and established customer relations in Bell Atlantic and GTE's service areas. In fact, the IXCs such as AT&T, MCI WorldCom and Sprint have existing long-distance customers and facilities in Bell Atlantic and GTE's service areas while neither Bell Atlantic nor GTE have customers in each other's services areas. Likewise, cable TV and wireless companies already serve customers in Bell Atlantic's and GTE's service areas. The high marketing expenditures of residential long-distance providers implies that there is a significant value to relationships with existing customers that may be much more valuable than brand awareness by itself.
- 36. In addition, while brand often plays an important role in a customer's choice of providers, market evidence suggests that existing brand names do not always provide substantial advantages in a dynamic market like telecommunications where consumers more readily accept products with formerly unknown brand names. Thus, new telecommunications products and companies have succeeded even though they did not start out with well-established brand names. Examples include Sprint, MCI, Cellular One, Airfone and America Online. Furthermore, firms with established brand names have elected to create new brand names. For example, in 1994, Pacific Telesis spun off its cellular business under a completely new name, AirTouch. That previously unheard of company tripled its subscriber base in the three years after divestiture.²¹ Another example is Southwestern Bell changing its name to SBC.

²¹ Paul Kagan Associates, *Wireless Telecom Financial Databook 1998*, August 1998, at 208.

V. RESPONDENTS EXAGGERATE THE IMPORTANCE OF ONE POTENTIAL ENTRANT ON COMPETITION IN A MARKET

- Respondents argue that in portions of Pennsylvania and Virginia, one of the merging parties is an especially well-positioned potential entrant and a likely entrant in the other merging party's local markets. As we have explained, these claims are without merit. However, even if respondents' claims were valid (and they are not), economic theory implies that such a finding is insufficient to show that the merger is contrary to the public interest in those markets it does not follow that the elimination of a potential entrant or even a likely entrant inevitably leads to higher prices or any other harm to the public interest. The failure of respondents to consider the market implications of the elimination of a potential competitor leads to an exaggeration of the impact of the importance of a single potential competitor on market performance.
- Basic economic theory provides a useful framework for analyzing the potential effects to competition from the removal of a potential competitor. In particular, economic theory can be used to analyze the effect of eliminating a potential competitor on the number of firms in the market and the distribution of these firms' characteristics (e.g., efficiency, scale, product quality, and any other differentiating factors). The determination of whether a potential competitor chooses to enter a market depends on how its cost compares to the anticipated post-entry market price, which in turn depends on the incumbent firms' cost structures. If the anticipated price is below the potential competitor's long-run average cost, it is unlikely to enter.
- 39. In some circumstances the elimination of a potential competitor will have no effect on market outcomes. For example, if there are more potential competitors than can profitably enter the market, and each has the same cost structure, then the elimination of any

For the purposes of our discussion, we will assume that the only differentiating factor among firms is cost; our conclusions do not depend on this simplifying assumption.

one of these potential competitors will have no impact on market outcomes – the eliminated competitor will be replaced with an identically situated company.

- 40. Even if the merging potential competitor has lower costs than other potential competitors, it does not follow that competition declines and prices rise. The number of firms that enter the market may be unaffected by the elimination of a potential competitor. If fixed costs are high, the number of firms that can compete profitably in the market is low. If there are more potential entrants than the number of competitors the market can sustain, the elimination of one potential competitor is unlikely to affect the number of firms that will enter.
- An merger between an incumbent and a potential entrant will not have a significant negative effect on the competitive performance of the market unless the merging firm has a significant cost advantage over the marginal post-merger potential entrant. This is true even if the merging firm would have entered but for the merger. If the number of firms competing in the market is unaffected by a merger of a low-cost potential competitor and an incumbent, the effect of the merger on prices depends on the distribution of costs and position of the competing firms.²³ If there are efficiencies from the merger, the incumbent's costs will decline leading to a potential price reduction in the marketplace. Even if the marginal entrant has higher costs than the merging potential entrant, the merger can lead to a reduction in market price if the cost difference is small relative to the cost savings from the merger.
- A2. Respondents conclude that the merger will lead to higher prices in some markets because they believe that one of the merging firms is a likely entrant. However, as we have explained, they fail to demonstrate that conditions in these markets are such that the elimination of a potential competitor is likely to lead to a substantial (or even any) reduction in competition.

 Because our analysis indicates that the number of potential entrants is large and that GTE is not an especially well-positioned entrant in Bell Atlantic's service areas (and Bell Atlantic is not an

For example, in the Cournot model of competition with varying costs, the equilibrium price depends on the unweighted average of the incumbent firms' marginal costs.

especially well-positioned entrant in GTE's service areas), the elimination of GTE and Bell Atlantic as potential competitors is unlikely to have a negative impact on market prices, even if either would be an entrant in some of these regions absent the merger.

VI. SUMMARY OF CONCLUSIONS

A3. Respondents claim that the proposed merger of Bell Atlantic and GTE raises competitive concerns in Pennsylvania and Virginia because, as contiguous ILECs, the two companies currently are the most likely entrants into each other's service areas. Our review of the evidence indicates that the respondents' claim is unfounded. First, there is no special entry advantage resulting from being an ILEC. Second, Bell Atlantic and GTE enjoy no special entry advantages resulting from proximity to each other's service areas in Pennsylvania and Virginia. Moreover, even if we accept the premise that entry is likely to come from nearby ILECs or CLECs, there are numerous firms besides Bell Atlantic and GTE that meet that criterion. Therefore, the respondents' claim provides no economic basis for opposing the proposed merger in Pennsylvania and Virginia.

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

Executed on December 22, 1998.

Robert H. Gertner

P. Gould

APPENDIX 1: METHODOLOGY OF ILEC/CLEC RADIUS ANALYSIS

The following steps were performed to determine the number of non-Bell Atlantic, non-GTE ILECs and CLECs operating within a given radius (125 miles and 40 miles) of Bell Atlantic's and GTE's service areas in Pennsylvania and Virginia. First, carrier switch information from the November 1998 Bellcore Local Exchange Routing Guide ("LERG") was used to plot all ILEC and CLEC switches within 125 miles of Bell Atlantic's Pennsylvania and Virginia service areas, including switches in neighboring states. The source of local exchange company service areas is Geographic Data Technology, Inc.

The next step was to select all zip codes whose centroid (approximate geographic center) is within 125 miles of any of the identified switches. The zip code data comes from MapInfo Corporation. Then the list of carriers owning switches was cross-referenced to the selected zip code areas to generate a list of all zip code areas within 125 miles of a GTE switch and also within 125 miles of a given number of non-Bell Atlantic, non-GTE switches. Finally, the population from the 1990 U.S. Census, provided by Wessex Inc., was used to derive the population in the selected zip code areas.

The analysis is repeated using a 40-mile radius. The above procedure was then used to calculate figures for switch coverage in GTE's service areas.

Table 1

Percentage of Bell Atlantic Service Area Population in Pennsylvania and Virginia Within 40 Miles of a GTE Switch and a Given Number of Other Independent ILECs or CLECs

	Percentage Within 40 Miles of the Given Number or More of Additional ILECs or CLECs	
Number of Non-GTE, Non Bell Atlantic ILECs or CLECs	Total Population	Urban Population
1	99.7%	100%
2	99.7	100
3	98	99
4	95	97
5	84	84
6	82	82

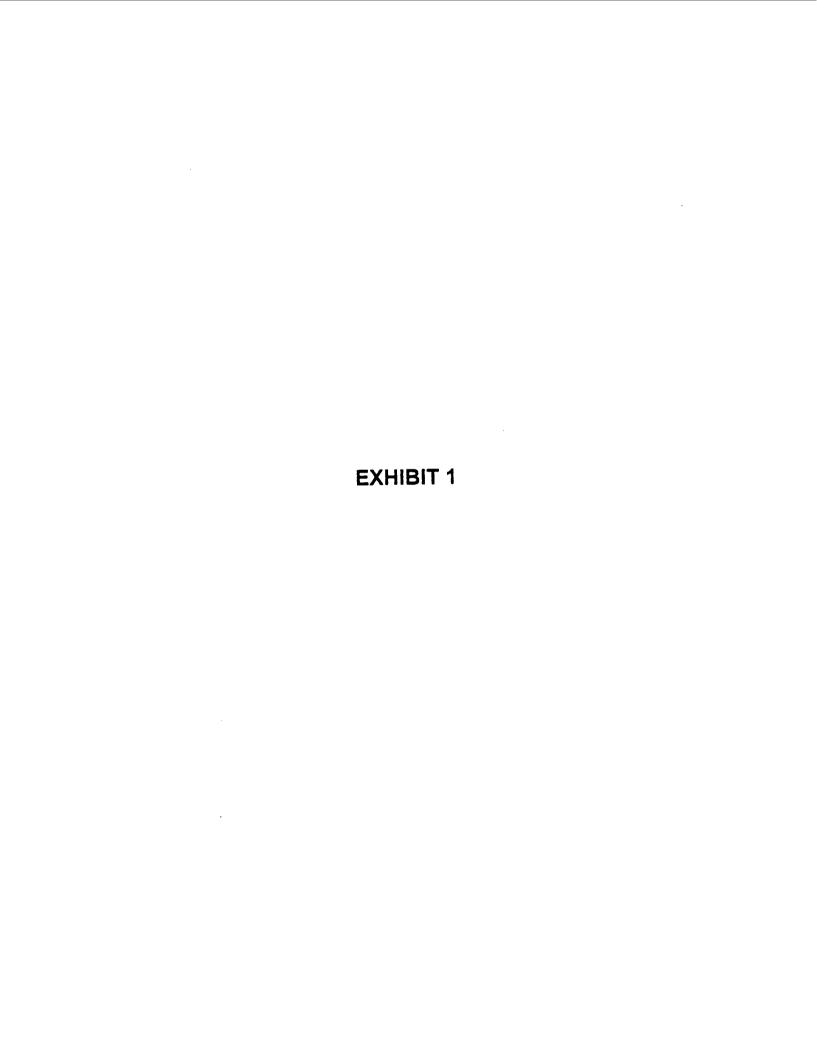
Source: Carrier switch information is from the November 1998 Bellcore Local Exchange Routing Guide (LERG). Zip codes are from MapInfo Corporation. Local exchange company service areas are from Geographic Data Technology Inc. Population is from the 1990 U.S. Census and Wessex Inc.

Table 2

Percentage of GTE Service Area Population
in Pennsylvania and Virginia Within 40 Miles of a Bell Atlantic
Switch and a Given Number of Other Independent ILECs or CLECs

Percentage Within 40 Miles of the Given Number or More of Additional ILECs or CLECs	
Total Population	Urban Population
99%	100%
96	100
93	98
88	95
73	75
60	66
	or More of Addition Total Population 99% 96 93 88 73

Source: Carrier switch information is from the November 1998 Bellcore Local Exchange Routing Guide (LERG). Zip codes are from MapInfo Corporation. Local exchange company service areas are from Geographic Data Technology Inc. Population is from the 1990 U.S. Census and Wessex Inc.



Robert H. Gertner

July 1998 Principal and Vice President

Business Address: Lexecon Inc.

332 S. Michigan Avenue Chicago, Illinois 60604

(312) 322-0200

Graduate School of Business The University of Chicago 1101 East 58th Street Chicago, Illinois 60637

(773) 702-7203 Fax: (773) 702-2044

E-mail:rob.gertner@gsb.uchicago.edu

Home Address:

5557 South Kenwood Avenue

Chicago, Illinois 60637

(773) 363-9079

EDUCATION

Massachusetts Institute of Technology, Ph.D., September, 1986. Thesis Title: "Essays in Theoretical Industrial Organization."

Princeton University, A.B., summa cum laude, June, 1981, major in Economics.

EMPLOYMENT

Professor of Economics and Strategy, Graduate School of Business, The University of Chicago, September 1995 - present.

Research Fellow, National Bureau of Economic Research, October 1994 - present.

Associate Professor of Economics and Strategy, Graduate School of Business, The University of Chicago, April 1995 - August 1995.

Associate Professor of Business Economics, Graduate School of Business, The University of Chicago, September 1990 - April 1995.

Visiting Associate Professor of Management and Strategy, J. L. Kellogg Graduate School of Management, Northwestern University, September 1994 - March 1995.

Assistant Professor of Business Economics, Graduate School of Business, The University of Chicago, September 1986 - August 1990.

Full-time Consultant, American Telephone and Telegraph Company, Microeconomic Analysis Group, September 1981 - July 1982.

OTHER POSITIONS

Editor, Journal of Business. July 1995 - present.

Associate Editor, Journal of Industrial Economics, August 1995 - present.

FELLOWSHIPS AND GRANTS

- John M. Olin Visiting Fellow in Law and Economics, The Law School, University of Chicago, 1990 1991.
- IBM Corporation Scholar, University of Chicago, Graduate School of Business 1989 1990.
- National Science Foundation Research Grant, "Bankruptcy and the Costs of Financial Distress," 1989 1991.
- Visiting Scholar, CEPREMAP, Paris, France, April 1988.
- Alfred P. Sloan Foundation Doctoral Dissertation Fellowship, 1985 1986.
- National Science Foundation Graduate Fellowship, 1982 1985.

ACADEMIC PUBLICATIONS

BOOK:

Game Theory and the Law, (with Douglas Baird and Randal Picker), Harvard University Press, November 1994.

PUBLISHED AND FORTHCOMING PAPERS

- "Agreement Under Section 1 of the Sherman Act." (with Andrew Rosenfield), November, 1997 (forthcoming The New Palgrave Dictionary of Economics and the Law).
- "Unravelling and Disclosure Laws," August 1997 (forthcoming The New Palgrave Dictionary of Economics and the Law).
- "Communication Among Competitors: Game Theory and Antitrust," (with Dennis Carlton and Andrew Rosenfield), Spring, 1997 George Mason Law Review, vol. 5.
- "Multimarket Contact and Tacit Collusion with Imperfect Monitoring," (with Barbara

- McCutcheon), December, 1992, revised, September, 1993, (under review, *Rand Journal of Economics*).
- "Settlement Escrows," (with Geoffrey Miller), *Journal of Legal Studies*, 24 January, 1995, 87-122.
- "Internal versus External Capital Markets," (with David S. Scharfstein and Jeremy C. Stein), Quarterly Journal of Economics, 109, November, 1994, 1211-1230.
- "Anatomy of Financial Distress: An Examination of Junk-Bond Issuers," (with Paul Asquith and David Scharfstein), Quarterly Journal of Economics, 109, August 1994, 625-658.
- "Asymmetric Information, Uncertainty, and Selection Bias In Litigation," 1993, *The University of Chicago Law School Roundtable*, Vol. 1993 (inaugural edition), 75-94.
- "Game Shows and Economic Behavior: Risk Taking on 'Card Sharks'," Quarterly Journal of Economics, 108, May, 1993, 507-521.
- "Search With Learning from Prices: Does Increased Inflationary Uncertainty Lead to Higher Markups?" (with Roland Benabou), *Review of Economic Studies*, 60, January, 1993, 69-94.
- "Strategic Contractual Inefficiency and the Optimal Choice of Legal Rules," (with Ian Ayres), 101, Yale Law Journal, January, 1992, 729-773.
- "A Theory of Workouts and the Effects of Reorganization Law," (with David Scharfstein, *Journal of Finance*, 46, September, 1991, 1189-1221.
- "Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules," (with Ian Ayres), Yale Law Journal, 99, November, 1989, 87-130. Excerpts appear in, Richard Craswell and Alan Schwartz, editors, Foundations of Contract Law, Oxford University Press, 1994.
- "Market Power and Mergers in Durable Goods Industries," (with Dennis Carlton), *Journal of Law and Economics*, 32, October 1989, S203-S226.
- "Simultaneous Signaling to the Capital and Product Markets," (with Robert Gibbons and David Scharfstein, Rand Journal of Economics, 19, Summer 1988, 173-190.

WORKING PAPERS

- "Tacit Collusion with Immediate Responses: The Role of Asymmetries," April, 1993, revised, December, 1994 (under review, *Journal of Political Economy*).
- "Internal Capital Markets: The Enforcement and Efficiency of Exclusive Capital Supply Contracts," December, 1994, formerly, "The Organization of Capital Market Transactions: Exclusive Contracts and Vertical Integration Under Asymmetric Information," June, 1986.
- "Externalities, Delay, and Coalition Formation in Multilateral Bargaining," August, 1994, originally titled, "Inefficiency in Three-Person Bargaining," June 1989.

- "Bankruptcy, Information Transmission and the Allocation of Control," (with Randal Picker), February, 1992, revised, April, 1994.
- "Capital Structure Signalling in Distressed Debt Workouts," November 1990, revised, September, 1993.
- "Internal Capital Markets." March, 1995.
- "Revenue and Efficiency Differences Between Sequential and Simultaneous Auctions with Limited Information," October, 1995.
- "Coordination, Dispute Resolution, and the Scope of the Firm," April, 1996.
- "Price Fixing Under the Sherman Act: The New Learning from Game Theory," with Andrew Rosenfield), May, 1996.
- "The Value-Maximizing Board," (with Steven Kaplan), December, 1996.

CASE STUDIES

"The Feature Animation Industry in 1995: Challenging Disney's Supremacy," (with Stacey Roth), March, 1995, revised, September, 1995.

"Selling the Radio Spectrum: The 30 MHz MTA PCS Auction," April 1995.

TEACHING EXPERIENCE

Microeconomics (M.B.A.)

Applied Microeconomics (M.B.A./Ph.D.)

Industrial Organization (Ph.D.)

Financial Markets and Institutions (M.B.A.)

Competitive Strategy (M.B.A.)

Corporation Law (J.D.)

Business Policy (M.B.A.)

Management of Organizations (M.B.A. Kellogg)

Seminar on Advanced Antitrust (J.D.)

Advanced Competitive Strategy: Game Theory in Practice (M.B.A.)

ADDITIONAL EXPERIENCE

- Analysis of antitrust and strategic issues in mergers, joint ventures, and monopolization litigation with Lexecon Inc.
- Consultant of a variety of strategic management issues including incentive compensation, supplier relationships, and acquisitions.
- Auction design and bidding adviser to WirelessCo. (joint venture of Sprint, TCI, Cox Cable, and Comcast) and AirLink L.L.C. in FCC spectrum auctions.
- Lost profit and valuation analysis in corporate litigation.
- Testimony before the Federal Trade Commission on Consumer Protection and Antitrust in Cyberspace.

CASES IN WHICH I PROVIDED DEPOSITIONS OR TRIAL TESTIMONY:

- Stratosphere Corporation, and Stratosphere Gaming Corp., United States Bankruptcy Court, District of Nevada, CN BK-S 97-20554-GWZ and BK-S 97-20555-GWZ, Deposition and trial testimony, in a case where the central economic issue was the structure of a credit enhancement to a loan agreement, February 1998.
- Trio Holdings et. al. v. Columbus Investment et. al. Cook County Circuit Court, Deposition and trial testimony on economic incentives in partnership and damages from self-dealing, for defendant, November 1997.
- Ellen Steffen et. al. v. Playmobil USA, Inc., United States District Court, Eastern District of New York, CV 95 2896, CV 96 3937, CV 96 3938, Deposition on economic issues in a vertical price fixing case, for defendant, May, 1997.
- Hi-Lite Products v. American Home Products, United States District Court, Northern District of Illinois, Case 92 C 0384, Deposition and trial testimony on damages a contract breach case, for plaintiff, January 1996.

EXHIBIT 2

JOHN P. GOULD July 1998

Principal and Executive Vice President

Business Address: The University of Chicago

Graduate School of Business

1101 East 58th Street

Chicago, Illinois 60637 (773) 702-9635

Lexecon Inc.

332 South Michigan Avenue

Chicago, Illinois 60604 (312) 322-0252

Home Address: 100 East Huron

Apartment 2105

Chicago, Illinois 60611 (312) 255-0013

EDUCATION

Ph.D., UNIVERSITY OF CHICAGO, 1966.

M.B.A., UNIVERSITY OF CHICAGO, 1963.

S.B. (with Highest Distinction), NORTHWESTERN UNIVERSITY, 1960.

EMPLOYMENT

LEXECON INC., Chicago, Illinois (Principal and Executive Vice President).

THE UNIVERSITY OF CHICAGO, Graduate School of Business: Steven G. Rothmeier Professor and Distinguished Service Professor of Economics (1996-present); Distinguished Service Professor of Economics (1984-1995); Dean, Graduate School of Business (1983-1993); Professor of Economics, Graduate School of Business (1974-1984); Vice-President for Planning (1988-1991); Associate Professor (1969-1974); Assistant Professor (1966-1969); Instructor (1965-1966).

National Taiwan University, Taipei, ROC, Visiting Professor of Economics, Graduate Institute of Economics (Summer 1978).

Executive Office of the President, Consultant for Economic Affairs to the Office of Management and Budget (1970).

Special Assistant for Economic Affairs to Secretary of Labor, George P. Shultz (1969-1970).

BIOGRAPHICAL SKETCHES

Who's Who in America
Who's Who in Economics, 1700-1980, edited by Blaug and Sturges, MIT Press

AWARDS AND FELLOWSHIPS

Beta Gamma Sigma, 1959
American Marketing Association Award, 1960
Wall Street Journal Award, 1960
Earhart Fellow, University of Chicago, 1962-1964
National Science Foundation Grants, 1972-1976
Mobil Foundation Faculty Research Grant, 1976

PROFESSIONAL AFFILIATIONS

Member, Commercial Club of Chicago Member, Economic Club of Chicago Member, American Economic Association

Member, Econometric Society

Member, Academic Council, World Economic Forum, Davos, Switzerland, 1990-91

Referee for several academic journals, including American Economic Review, Bell Journal of Economics, Canadian Journal of Economics, Econometrica, Economic Inquiry, Journal of Economic Theory, Journal of Business, Journal of Finance, Journal of Financial Economics, Journal of the American Statistical Association, Journal of Political Economy, International Economic Review, Management Science, Quarterly Journal of Economics, and Review of Economic Studies

Appearances on programs of the Econometric Society, 1965-1980

Director of Seminar on the Economics of Regulated Public Utilities, University of Chicago, 1971-1976

Reviewer of research projects for the National Science Foundation

OTHER PROFESSIONAL ACTIVITIES

Trustee, Pegasus Funds, 1996-present (Chairman 1997-present)

Trustee, First Prairie Funds, 1985-1996

Trustee, Harbor Funds, 1993-present

Director, United Way/Crusade of Mercy, 1986-1991

Director, Argonne-Chicago Development Corporation, 1986-1993

Director, DFA Investment Dimensions Group, 1986-present

Director, Milwaukee Mutual Insurance Company, 1997-present

Director, Vulcan Materials Company, 1988-1993

Director, Beta Gamma Sigma, 1992-1995

Director, Lookingglass Theatre Company, 1993-1996

EDITORIAL POSITIONS

Editor, *Journal of Business*, 1976-1983 Associate Editor, *Journal of Financial Economics*, 1976-1983 Associate Editor, *Journal of Accounting and Economics*, 1978-1981

TESTIMONIAL EXPERIENCE AND STATEMENTS

- Verified Statement of John P. Gould, William M. Landes and Robert S. Stillman on Behalf of Norfolk and Western Railroad Company and Chessie System Railroad (February 22, 1982).
- Joint Affidavit of John P. Gould and Gustavo E. Bamberger in Re: In the Matters of Review of the Pioneer's Preference Rules and Amendment of the Commission's Rules to Establish New Personal Communications Services. Proceedings before the Federal Communications Commission, ET Docket 93-266, Gen. Docket 90-314 (July 26, 1994).
- Joint Reply Affidavit of John P. Gould and Gustavo E. Bamberger in Re: In the Matters of Review of the Pioneer's Preference Rules and Amendment of the Commission's Rules to Establish New Personal Communications Services. Proceedings before the Federal Communications Commission, ET Docket 93-266, Gen. Docket 90-314 (August 8, 1994).
- Affidavit and Report of John P. Gould and Andrew M. Rosenfield in the matter of an application by the Director of Investigation and Research under section 79 of the Competition Act, R.S.C. 1985, C. C-34; and in the matter of certain practices by A.C. Nielsen Company of Canada Limited Between: The Director of Investigation and Research and The D&B Companies of Canada Ltd. and Information Resources, Inc. (September 20, 1994).
- Response Affidavit and Report John P. Gould and Andrew M. Rosenfield in the matter of an application by the Director of Investigation and Research under section 79 of the Competition Act, R.S.C. 1985, C. C-34; and in the matter of certain practices by A.C. Nielsen Company of Canada Limited Between: The Director of Investigation and Research and The D&B Companies of Canada Ltd. and Information Resources, Inc. (October 4, 1994).
- Testimony of John P. Gould John P. Gould and Andrew M. Rosenfield in the matter of an application by the Director of Investigation and Research under section 79 of the Competition Act, R.S.C. 1985, C. C-34; and in the matter of certain practices by A.C. Nielsen Company of Canada Limited Between: The Director of Investigation and Research and The D&B Companies of Canada Ltd. and Information Resources, Inc. (November 1, 1994).

- Statement of Professor John P. Gould, Distinguished Service Professor of Economics, University of Chicago Graduate School of Business and Dr. Gustavo E. Bamberger, Vice President and Senior Economist, Lexecon Inc. on Implementing Legislation for the Uruguay Round of GATT (S. 2467) (Pioneer Preference Provisions) Before the Senate Commerce Commission (November 14, 1994). Reprinted (S. 2467, GATT Implementing Legislation) Hearings Before the Committee on Commerce, Science, and Transportation, United States Senate, One hundred Third Congress, Second Session, U.S. Government Printing Office (1994).
- Report of John P. Gould in Re: Manville Corporation and Schuller International, Inc. v. Beazer East, Inc., f/k/a Koppers Company, Inc., Civil Action No. 93 CV 0025 in the District Court, City and County of Denver, State of Colorado (1995).
- Deposition of John P. Gould in Re: Manville Corporation and Schuller International, Inc. v. Beazer East, Inc., f/k/a Koppers Company, Inc., Civil Action No. 93 CV 0025 in the District Court, City and County of Denver, State of Colorado (April 4 and 5, 1995).
- Affidavit of John P. Gould in Re: <u>Industrial Diamond Antitrust Litigation</u>, Master File No. MDL-948 (WCC) M21-64, in the United States District Court, Southern District of New York (May 23, 1995).
- Expert Report of John P. Gould in Re: <u>Potash Antitrust Litigation</u>, MDL No. 981, No. 3-93-197, in the United States District Court, District of Minnesota, Third Division (September 18, 1995).
- Deposition of John P. Gould in Re: <u>Potash Antitrust Litigation</u>, MDL No. 981, No. 3-93-197, in the United States District Court, District of Minnesota, Third Division (October 5 and 6, 1995).
- Report of John P. Gould on Behalf of Zeneca, Inc., Case No. 94-897, MDL 997, in the United States District Court, Northern District of Illinois Eastern Division (November 1995).
- Expert Report of John P. Gould on the Pillsbury Company's Tontino's Hearty Pockets Product Strategy in Re: Chef America, Inc. v. Schwan's Sales Enterprises, Inc. and the Pillsbury Company, Civil Action Nos. 94-M-2611 and 95-M-397 in the United States District Court, District of Colorado (February 15, 1996).
- Expert Report of John P. Gould on the Schwan's Sales Enterprises, Inc.'s Red Baron Premium Pockets and Tony's Pizza Pockets Product Strategies in Re: Chef America, Inc. v. Schwan's Sales Enterprises, Inc. and the Pillsbury Company, Civil Action Nos. 94-M-2611 and 95-M-397 in the United States District Court, District of Colorado (February 15, 1996).
- Affidavit of John P. Gould in Re: <u>High Fructose Corn Syrup Antitrust Litigation</u>, MDL No. 1087 and Master File No. 95 1477, in the United States District Court, Central District of Illinois, Peoria Division (April 18, 1996).
- Supplemental Affidavit of John P. Gould in Re: <u>High Fructose Corn Syrup Antitrust Litigation</u>, MDL No. 1087 and Master File No. 95 1477, in the United States District Court, Central District of Illinois, Peoria Division (May 7, 1996).

- Declaration of John P. Gould, Ph.D. and Bradley N. Reiff, Ph.D. in Re: <u>Promofone. Inc..</u>

 <u>MovieFone Inc.. The Teleticketing Company. L.P., and The Falconwood Corporation v.</u>

 <u>Pacer Cats Corporation</u>, American Arbitration Association Case No. 13-181-00952-94 (May 2, 1996).
- Preliminary Reports of John P. Gould in Re: <u>Litton Systems, Inc. v. Honeywell, Inc.</u>, Case No. 90-0093MRP (Ex) in the United States District Court, Central District of California, Western Division (February 7 and March 7, 1997).
- Declaration of John P. Gould in Re: <u>Federal Trade Commission v. Staples. Inc. and Office</u>
 <u>Depot. Inc.</u>, Case No. 1:97CV701 (TFH) in the United States District Court, District of Columbia (May 12, 1997).
- Supplemental Declaration of John P. Gould in Re: <u>Federal Trade Commission v. Staples. Inc.</u> and Office Depot. Inc., Case No. 1:97CV701 (TFH) in the United States District Court, District of Columbia (May 16, 1997).
- Deposition of John P. Gould in Re: <u>Federal Trade Commission v. Staples, Inc. and Office Depot, Inc.</u>, Case No. 1:97CV701 (TFH) in the United States District Court, District of Columbia (May 14, 1997).
- Declaration of John P. Gould in Re: <u>Texarkana Memorial Hospital</u>, <u>Inc. d/b/a Wadley Regional Medical Center v. General Electric Company</u>, Civil Action No. 5:96 CV 319 in the United States District Court for the Eastern District of Texas, Texarkana Division (July 21, 1997).
- Expert Report of John P. Gould in Re: <u>The State of Texas v. The American Tobacco Company</u>, <u>et al.</u>, Civil Action No. 5:96CV91 (August 15, 1997).
- Deposition of John P. Gould in Re: <u>The State of Texas v. The American Tobacco Company, et al.</u>, Civil Action No. 5:96CV91 (August 27, 1997).
- Affidavit of John P. Gould in Support of the Motion of RJR Nabisco, Inc. for Summary Judgment Against Plaintiffs in Re: <u>William Barnes</u>, et al. v. The American Tobacco Company, et al., Civil Action No. 96-5903-CN in the United States District Court for the Eastern District of Pennsylvania (September 25, 1997).
- Supplemental Affidavit of John P. Gould in Re: William Barnes, et al. v. The American Tobacco Company, et al., Civil Action No. 96-5903-CN in the United States District Court for the Eastern District of Pennsylvania (October 13, 1997).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco, Inc. and RJR Nabisco Holdings Corp. on Motion to Dismiss For Lack of Personal Jurisdiction in Re: State of Nevada v. Philip Morris, Inc. et al., Case No. CV97-03279 in the Second Judicial District Court of the State of Nevada in and for Washoe County (February 25, 1998).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco, Inc. on Motion to Dismiss For Lack of Personal Jurisdiction in Re: The <u>State of Utah, ex rel., Jan Graham, in her capacity as Attorney General of the State of Utah v. R.J. Reynolds Tobacco Company, et al., Case No. 2:96CV0829B in the United States District Court for the District of Utah Central Division (March 24, 1998).</u>

- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco Inc. on Motion to Dismiss for Lack of Personal Jurisdiction in Re: <u>State of Hawaii</u>, by <u>Margery S. Bronster</u>, <u>Attorney General v. Brown & Williamson Tobacco Corporation</u>, et al., Civil No. 97-0441-01 in the Circuit Court of the First Circuit State of Hawaii (April 14,1998).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco, Inc. and RJR Nabisco Holdings Corp. on Motion to Dismiss For Lack of Personal Jurisdiction in Reseate of Indiana ex rel., Jeffrey A Modisett, Attorney General of Indiana v. Philip Morris Incorporated, et al., Cause No. 49D097-9702-CT-0236 in the Marion Superior Court, State of Indiana (April 21, 1998).
- Affidavit of John P. Gould in Re: <u>Iron Workers Local Union No. 17, et al. v. Philip Morris, Inc., et al.</u>, Case No. 1:97CV1422, in the United States District Court for the Northern District of Ohio (April 21, 1998).
- Expert Report of John P. Gould in Re: Federal Trade Commission v. Cardinal Health, Inc., Case No. 98 CV 595, and FTC v. McKesson Corp., Case No. 98 CV 596 (April 28, 1998).
- Deposition of John P. Gould in Re: Rolite, Inc., v. Wheelabrator Environmental Systems, Inc. and WMX Technologies, Case No. 94-CV-5854 (May 5, 1998).
- Deposition of John P. Gould in Re: <u>FTC v. Cardinal Health/Bergen Brunswig; FTC v.</u>

 <u>McKesson Corp./Amerisource Corp.</u>, Civil Nos. 98 00595/98 00596 in the United States District Court for the District of Columbia (May 18 and 19, 1998).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco Inc. and RJR Nabisco Holdings Corp. on Motion to Dismiss for Lack of Personal Jurisdiction in Re:

 The State of Oregon v. Philip Morris, Incorporated; R.J. Reynolds Tobacco Co.; et al.,
 No. 9706 00457, in the Circuit Court of the State of Oregon for the County of Multnomah (May 26, 1998).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco Inc. and RJR Nabisco Holdings Corp. on Motion to Dismiss for Lack of Personal Jurisdiction in Re:

 State of Idaho by and through Alan G. Lance, Attorney General v. Philip Morris, Inc.,

 RJR Nabisco Holdings Corp., et al., Case No. CV OC 9703239D, in the District Court of the Fourth Judicial District of the State of Idaho, In and For the County of Ada (May 28, 1998).
- Testimony of John P. Gould in Re: Federal Trade Commission v. Bergen Brunswig Corp. and Cardinal Health. Inc., Docket No. CA 98-595 and Federal Trade Commission v.

 Amerisource Health and McKesson Corp., Docket No. CA 98-596 in the United States District Court for the District of Columbia (July 14, 1998).
- Affidavit of John P. Gould in Support of Reply Memorandum of RJR Nabisco Inc. on Motion to Dismiss for Lack of Personal Jurisdiction in Re: State of Rhode Island Provident, SC. State of Rhode Island, by and through Jeffrey B. Pine, Attorney General v. Brown & Williamson Tobacco Corporation, et al., Docket No. C.A. No.: 97-3058 in the Superior Court (July 23, 1998).

PUBLISHED ARTICLES

- "Market Value and the Theory of Investment of the Firm," *American Economic Review* (September 1967), pp. 910-913.
- "Adjustment Costs in the Theory of Investment of the Firm," Review of Economic Studies (January 1968), pp. 47-55. Also available as reprint #106, Center for Mathematical Studies in Business and Economics, Department of Economics and Graduate School of Business, University of Chicago.
- "The Substitution Effects of Transportation Costs" (with Joel Segall), *Journal of Political Economy*, 77 (1969), pp. 130-137. Also available as reprint #148, for Mathematical Studies in Business and Economics, Department of Economics and Graduate School of Business, University of Chicago.
- "The Expected Utility Hypothesis and the Selection of Optimal Deductibles for a Given Insurance Policy," *Journal of Business* (April 1969), pp. 143-151. Available at Center for Mathematical Studies as reprint #155.
- "The Use of Endogenous Variables in Dynamic Models of Investment," Quarterly Journal of Economics (November 1969), pp. 580-599. Reprints available from CMSBE.
- "Diffusion Processes and Optimal Advertising Policy," in *Micro-Economic Foundations of Employment and Inflation Theory*, E. Phelps, editor (1970), W.W. Norton Co. Published in Great Britain (1971) by Macmillan and Co., Ltd. Paperback edition (1973), W.W. Norton Co.
- "The Micro-Economic Approach to the Demand for Physical Capital," abstract in *Econometrica Supplementary Issue* (1966). Available as Center report #6633.
- "The Neoclassical Model of Investment Behavior: Another View" (with R. Waud), *International Economic Review* (February 1973).
- "The Economics of Conflicts," The Journal of Legal Studies (June 1973).
- "Risk, Stochastic Preference and the Value of Information," *Journal of Economic Theory* (May 1974).
- "Transactions Costs and the Relationship Between Put and Call Prices" (with D. Galai), *Journal of Financial Economics* (1, 1974).
- "The Stochastic Structure of the Velocity of Money" (with C. Nelson), *American Economic Review* (June 1974).
- "Inventories and Stochastic Demand: Equilibrium Models of the Firm and Industry," *Journal of Business* (January 1978).
- "The Stochastic Properties of Velocity and the Quality Theory of Money" (with M. Miller, C. Nelson, and C. Upton), *Journal of Monetary Economics* (April 1978).

- "The Economics of Markets: A Simple Model of the Market-Making Process," in *Interfaces Between Marketing and Economics*, a supplement to the *Journal of Business* (July 1980).
- "Privacy and the Economics of Information," Journal of Legal Studies (December 1980).
- "Price Theory," in Encyclopedia of Economics, D. Greenwald, editor, McGraw-Hill (1982).
- "The Information Content of Specialist Pricing" (with R. Verrecchia), *Journal of Political Economic*, (February 1985).

BOOKS AND MONOGRAPHS

- Davis-Bacon Act—The Economics of Prevailing Wage Laws. American Enterprise Institute (November 1971). Reprinted in "Improved Technology and Removal of Prevailing Wage Requirements in Federally Assisted Housing," hearings before the Subcommittee on Housing and Urban Affairs, 92nd Congress (June 20-23, 1972).
- Ferguson and Gould, *Microeconomic Theory* (4th Edition), Richard D. Irwin (March 1975). The Japanese translation of the above book was published by Nihon Hyoron Sha Ltd. (Japan) in 1977. *Teoria Microeconomia*, Fondo De Cultura Economica (Mexico, 1978) (which is the Spanish translation of this book).
- Gould and Ferguson, *Microeconomic Theory* (5th Edition), Richard D. Irwin (March 1980).

 Solution manuals for 4th and 5th editions of the above book were published by Richard D. Irwin in 1975 and 1981 respectively.
- The Economics of the Davis-Bacon Act: An Analysis of Prevailing Wage Laws (with George Bittlingmayer), American Enterprise Institute (1980). This is an updated and expanded version of the above Davis-Bacon monograph.
- Microeconomic Theory, 6th Edition, with Edward Lazear. Homewood, Illinois: Richard D. Irwin, 1989.

EDITED VOLUMES

- Editor with D. Horsky, A. Madansky, and S. Sen of *Interfaces Between Marketing and Economics*, proceedings of a 1978 conference at the University of Rochester. Published as a supplementary volume of the *Journal of Business* (July 1980).
- Editor with S. Sen of *Pricing Strategy*, proceedings of a 1982 conference at the University of Rochester. Published as a supplementary volume of the *Journal of Business* (January 1984).

WORKING PAPERS AND UNPUBLISHED MANUSCRIPTS

- "A Model of Consumer Search Wage and Income Effects" (March 1972).
- "Information and Consumer Behavior: Aspects of Optimal Sequential Searching Policies" (August 1972).
- "Rational Expectations and the Theory of the Firm Under Certainty" (July 1976).
- "Toward a Positive Theory of Public Debt" (with M. Jensen), May 1977. Presented at 1977 Seminar on Analysis and Ideology, Interlaken, Switzerland.
- "Market Institutions and the Free Rider Problem" (with A. Rosenfield and A. Wallner).

 Presented at an invited session of the Western Economic Association in Los Angeles (July 1982). Revision in progress.

BOOK REVIEWS, NOTES, COMMENTS

- Review of Dewey, Modern Capital Theory, Journal of Business (January 1967).
- Review of Shubik, ed., "Essays in Mathematical Economics in Honor of Oscar Morgenstern, Journal of Political Economy (July 1968).
- Review of Cross, The Economics of Bargaining, Monthly Labor Review (September 1970).
- Comments on McKean's "Property Rights, Regulation of Chemicals, and Information Production" (Brookings Conference on Consumer Affairs, June 1972).
- Review of Galbraith, "Economics and the Public Purpose," *Chicago Tribune* (November 8, 1973).
- "The Rule of 69" (with R. Weil), Journal of Business (July 1974).
- Comments on Timothy W. McGuire's "Controls and Expectations," Conference on Wage and Price Controls, University of Rochester, in *The Economics of Price and Wage Controls*, supplement to the *Journal of Monetary Economics* (1976).
- Comments on V.L. Broussalian's "Risk Measurement and Safety Standards in Consumer Products," *NBER Conference Volume on Income and Wealth*, vol. 40 (1976).
- "Some Comments on the Positive Theory of Municipal Accounting" (comment on J. Zimmerman's "The Municipal Accounting Maze"), Journal of Accounting Research, vol. 15 (supplement) (July 1977).
- Discussion of Robert Verrecchia's "The Use of Mathematical Models in Financial Accounting" at 1982 Annual Accounting Research Conference, University of Chicago. *Journal of Accounting Research* (April 1982).

Discussion of Michael Katz's "Firm-Specific Differentiation and Competition Among Multiproduct Firms" at Pricing Strategy Conference, University of Rochester. *Journal of Business* supplement (1983).

RELATED RESEARCH ACTIVITIES AND PUBLICATIONS

- "Chairman of task force that prepared the report "Impact of Longshore Strikes on the National Economy," U.S. Department of Labor, Washington, DC, (January 1970).
- "Manpower and Economic Policy," Chapter 1 of the *Manpower Report of the President* (March 1970).
- "The Labor Component in the Cost of Housing," *Housing in the 70's*, U.S. Department of Housing and Urban Development, Washington, DC (1976).
- "National Economic Policy in the 1970's," Selected Paper #48, Graduate School of Business, University of Chicago (June 1976).
- "Large Scale Organizations and the Economic System," prepared for the Seminar on Free Enterprise Systems at the University of Illinois at Chicago (January 1978).
- "The Business Lobby and the Davis-Bacon Act," University of Chicago XP Club Newsletter (February 1980).
- "Econometric Analysis of an Alleged Price-Fixing Conspiracy." Paper presented at Lexecon Antitrust Seminar (October 1981) and appearing in conference volume *Antitrust Economics* (1981), Lexecon Inc.

SELECTED SPEECHES, CONSULTING AND RELATED ACTIVITIES

- Consultant to Chemetron Corporation, 1971-1978.
- Program Leader on Economics of Information at General Electric Foundation Program on Recent Developments in Applied Economics, University of Chicago, 1975-1982.
- Lecturer, Liberty Fund Seminar Series, University of Rochester, July 10-22, 1977.
- "Economic Policy and the Common Wisdom," a speech delivered at the University of Dayton Distinguished Economists Lecture Series, March 14, 1978.
- Expert Witness in antitrust cases and related cases before the U.S. Federal Court and the Federal Trade Commission, 1978-1981.
- Chairman, Ad Hoc Committee to Review Extension, The University of Chicago, 1980-1981.
- Guest commentator, Public Broadcasting Service, "The Nightly Business Report," 1991.

- "Teaching Business Leadership to Help the U.S. Remain Competitive in the Global Market-Place," a speech delivered to the Chicago Council on Foreign Relations Committee for Young Professionals, Chicago, Illinois, February 12, 1991.
- Speaker at The World Trade Institute of the Illinois World Trade Center Association conference on "Winning Strategies for Quality Improvement," Chicago, Illinois, October 18, 1991.
- "Practical Strategies for Image Growth," a speech delivered to the Conference Board's Corporate Image Conference, New York, New York, January 28, 1992.
- Speaker, U.S.-Japan Young Executives, Chicago, Illinois, May 29, 1992.

17

7

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	
CTE CORPORATION)	
GTE CORPORATION,)	
Transferor,)	
)	
and)	CC Docket No. 98-184
)	
BELL ATLANTIC CORPORATION,)	
)	
Transferee,)	
)	
For Consent to Transfer of Control.)	

DECLARATION OF ROBERT W. CRANDALL AND J. GREGORY SIDAK

CONTENTS

Robert W. Crandall and J. Gregory Sidak, being duly sworn, depose and say:

1. We have been asked by Bell Atlantic Corporation and GTE Corporation to evaluate the claims, advanced by experts retained by AT&T, MCI WorldCom, and Sprint (companies that we shall collectively call "the IXCs"), that the proposed merger of Bell Atlantic and GTE will reduce competition in downstream markets—principally long-distance and Internet services—due to vertical foreclosure and price squeezes that could assertedly be employed profitably by the combined company.

Declaration of Robert W. Crandall and J. Gregory Sidak, December 23, 1998

QUALIFICATIONS

- 2. Our professional qualifications for submitting this expert declaration are as follows.
- 3. My name is Robert W. Crandall. I am a Senior Fellow in Economic Studies at the Brookings Institution in Washington, D.C., a position that I have held since 1978. My areas of economic research are antitrust, telecommunications, the automobile industry, competitiveness, deregulation, environmental policy, industrial organization, industrial policy, mergers, regulation, and the steel industry.
- 4. I have twice served in the federal government. I was Acting Director, Deputy Director, and Assistant Director of the Council on Wage and Price Stability in the Executive Office of the President. In 1974-75, I was an adviser to Commissioner Glen O. Robinson of the Federal Communications Commission (FCC).
- 5. I was an Assistant Professor and Associate Professor of Economics at the Massachusetts Institute of Technology between 1966 and 1974. I have also taught at George Washington University.
- 6. I have written widely on telecommunications policy, the economics of broadcasting, and the economics of cable television. I am the author or co-author of four books on communications policy published by the Brookings Institution since 1989: Changing the Rules: Technological Change, International Competition, and Regulation in Communications, with Kenneth Flamm (1989); After the Breakup: U.S. Telecommunications in a More Competitive Era (1991); Talk is Cheap: The Promise of Regulatory Reform in North American Telecommunications, with Leonard Waverman (1996); and Cable TV: Regulation or Competition?, with Harold Furchtgott-Roth

(1996). In addition, I have published four other books on regulation and industrial organization with the Brookings Institution: The Extra Mile: Rethinking Energy Policy for Automotive Transportation, with Pietro S. Nivola (1995); Manufacturing on the Move (1993); Up from the Ashes: The U.S. Minimill Steel Industry, with Donald F. Barnett (1986); and Regulating the Automobile, with Howard K. Gruenspecht, Theodore E. Keeler, and Lester B. Lave (1986). My work has been cited on numerous occasions by the federal judiciary and the FCC.

- 7. I have been a consultant on regulatory and antitrust matters to the Antitrust Division of the U.S. Department of Justice, to the Federal Trade Commission, to the Canadian Competition Bureau, and to more than twenty companies in the telecommunications, cable television, broadcasting, newspaper publishing, automobile, and steel industries. I have also been a consultant to the Environmental Protection Agency and the U.S. Department of the Treasury.
- 8. I received an A.B. (1962) from the University of Cincinnati and a Ph.D. in economics (1968) from Northwestern University.
- 9. My name is J. Gregory Sidak. I am the F. K. Weyerhaeuser Fellow in Law and Economics at the American Enterprise Institute for Public Policy Research (AEI) in Washington. D.C., where I direct AEI's Studies in Telecommunications Deregulation. I am also a senior lecturer at the Yale School of Management, where I teach a course on telecommunications regulation and strategy with Professor Paul W. MacAvoy. In addition to holding these two academic positions, I am a Principal in LECG, Inc., an economic consulting services firm that provides economic and financial analysis, expert testimony, litigation support, and strategic management consulting to a broad range of public and private enterprises.
 - 10. I have previously worked in the federal government. From 1987 to 1989, I was

 Declaration of Robert W. Crandall and J. Gregory Sidak, December 23, 1998

Deputy General Counsel of the FCC. From 1986 to 1987, I was Senior Counsel and Economist to the Council of Economic Advisers in the Executive Office of the President.

- other network industries, antitrust policy, and constitutional law issues concerning economic regulation. I have written four books concerning pricing, costing, competition, and investment in regulated network industries: Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States (Cambridge University Press 1997), co-authored with Daniel F. Spulber; Toward Competition in Local Telephony (MIT Press & AEI Press 1994), co-authored with William J. Baumol; Transmission Pricing and Stranded Costs in the Electric Power Industry (AEI Press 1995), also co-authored with Professor Baumol; and Protecting Competition from the Postal Monopoly (AEI Press 1996), also co-authored with Professor Spulber. I am also the author of a fifth book, Foreign Investment in American Telecommunications (University of Chicago Press 1997), and of more than thirty scholarly articles in law reviews and economics journals.
- 12. I have been a consultant on regulatory and antitrust matters to the Antitrust Division of the U.S. Department of Justice, to the Canadian Competition Bureau, and to more than thirty companies in the telecommunications, electric power, natural gas, mail delivery, broadcasting, newspaper publishing, and computer software industries in North America, Europe, Asia, and Australia.
- 13. From Stanford University, I earned A.B. (1977) and A.M. (1981) degrees in economics and a J.D. (1981) in law. I was a member of the *Stanford Law Review*.

14. We file this declaration in our individual capacities, and not on behalf of the Brookings Institution, the American Enterprise Institute, or the Yale School of Management.

SUMMARY OF CONCLUSIONS

- The IXCs' economic experts argue that integrated incumbent local exchange companies (ILECs) have the incentive to employ a variety of discriminatory tactics and price squeezes in selling retail services that use their own access services (including unbundled network elements) as inputs. The IXCs' experts simply recite the fact that under certain assumptions ILECs may have the *incentive* to employ these tactics, but those experts do not demonstrate that these assumed conditions are realistic. Nor do they offer evidence that such tactics have been employed by either Bell Atlantic, GTE, or other ILECs. There is a lengthy history of ILEC integration into information services, wireless services, intraLATA long distance services and—in the case of Frontier, Sprint, and GTE—interLATA long distance services, but the IXCs' experts are unable to provide any evidence that discriminatory tactics have been employed by the ILECs in any of those markets. Contrary to their theoretical predictions, competition has flourished in those markets.
- 16. Even if the IXCs' experts were correct that vertical foreclosure is a feasible and profitable strategy for an ILEC, they do not provide evidence that the combination of two ILECs, such as GTE and Bell Atlantic, has an effect on such a strategy. They rely in toto on the allegation that the combination of Bell Atlantic and GTE will allow the merged company to capture "spillovers" from vertical foreclosure that neither company could capture alone. The IXCs' experts fail to show that such spillovers are currently captured by integrated ILECs in proportion

to their size.

- 17. In addition to arguing vertical foreclosure, the IXCs' experts argue that the merger exacerbates the dangers of a "price squeeze" by the combined company against its less integrated rivals, with anticompetitive results. Under the assumptions of the IXCs' experts, many ILECs currently have the ability and incentive to engage in such a price squeeze, yet the IXCs' experts fail to demonstrate that such squeezes are ever actually employed—and, if they are, that they result in anything other than lower prices for consumers. To our knowledge, no IXC has been driven from the market by any such purported "squeeze."
- 18. Finally, the IXCs' experts raise the specter of the combined company gaining monopoly control of Internet services through its position in offering intermediate access services and network elements. Were that possibility plausible, the largest ILECs would be moving in that direction today. Instead, the ILECs are paying large sums in reciprocal compensation to competitive local exchange carriers (CLECs) established by Internet service providers (ISPs) as the result of a regulatory distortion in pricing.

I. THE ALLEGATIONS OF VERTICAL FORECLOSURE

19. The IXCs advance their arguments of potential vertical foreclosure caused by the merger in declarations or affidavits supplied by Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury, by Kenneth C. Baseman and A. Daniel Kelley, and by David L. Kaserman

^{1.} Declaration of Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury: An Economic Analysis of the Proposed Bell Atlantic/GTE Merger (filed on behalf of Sprint Communications Company L.P., Nov. 23, 1998).

^{2.} Declaration of Kenneth C. Baseman and A. Daniel Kelley (filed on behalf of MCI WorldCom, Inc., Nov. 23, 1998) [hereinafter Baseman-Kelley Declaration].

and John W. Mayo.³ These commenters either simply assert that Bell Atlantic and GTE possess market power in the local exchange, or they rely on the incorrect analysis in the declaration of John B. Hayes.⁴

- 20. The Besen-Srinagesh-Woodbury declaration itself relies on a previous declaration submitted by Michael L. Katz and Steven C. Salop in the SBC-Ameritech merger proceeding before the Commission. This latter declaration by Katz and Salop supplies the principal theoretical basis for the IXCs' contention that the current merger could reduce competition through the vertical foreclosure of access services and intermediate network elements supplied by Bell Atlantic and GTE. We therefore respond in this section primarily to the arguments advanced by Katz and Salop.
- 21. The Katz-Salop declaration argues that the larger "footprint" created by the SBC-Ameritech merger increases the incentive for the combined company to engage in various forms of vertical foreclosure. Because access services are still regulated by federal and state authorities, Katz and Salop are forced to concede that the merger does not enhance the *ability* of the combined company to raise the *price* of access.⁶ Rather, they claim that the merger increases the *incentive*

^{3.} Affidavit of David L. Kaserman and John W. Mayo (filed on behalf of AT&T Corp., Nov. 23, 1998).

^{4.} Declaration of John B. Hayes: Market Power and the Bell Atlantic-GTE Merger (filed on behalf of Sprint Communications Company L.P., Nov. 23. 1998). As shown in Declaration of Professors Robert H. Gertner and John P. Gould (filed on behalf of Bell Atlantic Corp. and GTE Corp., Dec. 23, 1998), the Hayes analysis fails to account for cross-subsidization in the current ILEC rate structure and eschews any effort to conduct the rigorous market definition required for serious antitrust analysis.

^{5.} Declaration of Michael L. Katz and Steven C. Salop: Using a Big Footprint to Step on Competition: Exclusionary Behavior and the SBC-Ameritech Merger, Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications Inc., Transferee, CC Dkt. No. 98-141 (filed on behalf of Sprint Communications Company L.P., Oct. 14, 1998) [hereinafter Katz-Salop Declaration].

^{6.} Katz and Salop speculate that "SBC may benefit [after its merger with Ameritech] from economies of scope in fighting regulatory battles in multiple state forums." Katz-Salop Declaration at 40-41 ¶ 65. Surely, it would be constitutionally

for the combined company to degrade the *quality* of its access services (or intermediate network elements) in a variety of hypothetical ways. If, however, a firm has an incentive, but not the means, to engage in anticompetitive behavior, then it necessarily follows that competitive harm cannot possibly occur.

22. Katz and Salop's hypothesis can be simply stated: If exclusionary behavior is subject to a positive spillover effect between markets, then the merger would increase the incentives of the companies to engage in exclusionary behavior. In short, the Katz-Salop declaration makes a number of arguments based on a purely theoretical and hypothetical analysis of "spillovers" of the benefits of asserted reductions in the quality of access services. Not only is their theoretical approach flawed and incomplete, but Katz and Salop fail to provide any evidence that such foreclosure has actually occurred and has harmed competition in any downstream market. Given that the ILECs have, for many years, been offering access services to firms that compete with them in a variety of downstream services, one must conclude that the Katz-Salop hypotheticals are just that-hypothetical cases without grounding in the reality of current market conditions. The Commission should disregard the Katz-Salop hypothesis—and, by extension, the arguments made by all of the IXCs' other experts who rely on the Katz-Salop hypothesis. The Katz-Salop model is incomplete, ignores the reality of the regulatory system, and is refuted by the

impermissible for a regulator to block a merger in the belief that the combination would enhance one's ability to petition government, a right expressly protected by the First Amendment. Katz and Salop also argue that "regulators will no longer be able to monitor, detect and prove the existence of exclusionary conduct by SBC using Ameritech's conduct as a benchmark, or vice versa." Id. This argument is comprehensively analyzed and found wanting in Declaration of Kenneth Arrow (filed on behalf of Bell Atlantic Corp. and GTE Corp., Dec. 23, 1998). Finally, Katz and Salop allege that "by controlling both ends of access, the integrated company may be better able to evade regulatory oversight of the quality of the access it provides by better rationalizing its exclusionary tactics." Id. The Commission should dismiss this argument entirely, recognizing that it is nothing more than a speculative attempt to conjure up a new potential "problem" by recombining the "regulatory economies of scope" and "benchmarking" arguments.

facts.

- 23. The Telecommunications Act of 1996 requires ILECs to provide interconnection services to all carriers requesting them under terms to be negotiated and ultimately approved by regulatory authorities. Both Bell Atlantic and GTE are currently subject to those provisions. Moreover, Bell Atlantic must satisfy a section 271 "competitive checklist" of those requirements to be permitted to provide in-region interLATA services. The merger does not diminish those responsibilities, nor does it lessen regulatory oversight of the companies' interconnection activities.
- 24. Katz and Salop also make the crucial assumption that the externality in exclusionary behavior between the two ILECs is positive (for example, pre-merger discriminatory behavior by Bell Atlantic supposedly would increase GTE's profits by retarding CLEC entry in GTE's territories). The externality, however, is much more likely to be *negative*, in which case the discriminatory behavior by ILEC A in its territory leads the CLEC to concentrate its entry efforts in the territory of ILEC B. If the externality is indeed negative, the merger is likely to *reduce* exclusionary behavior, as the negative externality is internalized. Put simply, before the merger the ILECs could be over-discriminating in a "beggar-thy-neighbor" effort to induce CLECs to enter somebody else's market instead. After the merger, such hypothetical discrimination is reduced as the ILEC realizes that exclusionary behavior in one of its markets is self-defeating

^{7. 47} U.S.C. §§ 251, 252.

^{8.} Id. § 271.

^{9.} See Reply Affidavit of Richard Schmalensee and William Taylor, Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications Inc., Transferee, CC Dkt. No. 98-141, at 23 ¶ 47 (filed on behalf of SBC Communications, Inc. and Ameritech Corporation, Nov. 12, 1998).

because it induces increased entry in another one of its markets. Katz and Salop make no empirical showing as to whether their theoretical externality is likely to be positive or negative. Consequently, the Commission should conclude that the Katz-Salop hypothesis cannot predict whether exclusionary behavior would increase or decrease as a result of the merger. It would be economic caprice for the Commission to use a model that cannot produce coherent predictions of exclusionary conduct to inform the agency's public interest determination under the Communications Act.

- Atlantic and GTE will not induce the combined company deliberately to reduce the quality of its wholesale access services. Such reductions in quality would redound to the merged companies' disadvantage through adverse reputation effects with other customers. An ILEC's deliberate reduction in the quality of inputs supplied to customers that compete with it in downstream markets would thus have severe spillover effects of its own among other customers. Such a strategy would be short-sighted in an increasingly competitive market.
- 26. Katz and Salop, as well as the IXCs' other declarants cited above, advance what are by now very familiar arguments concerning the ILECs' potential to exercise vertical foreclosure of rivals. It is alleged that ILECs can engage in various exercises of quality degradation that are difficult to detect. Those actions are only broadly hinted at—delaying repair services on leased network elements; making collocation difficult; processing CLEC orders more slowly than their own; and even reducing the quality of the voice/data signal transmitted by their unintegrated rivals through the ILECs' facilities. Those arguments are never accompanied by any empirical measure of the extent of such alleged abuses or their effect on final service prices or

quality despite the fact that ILECs have for many years been offering access services to firms that compete with them in downstream markets.

- 27. The Katz-Salop declaration alleges that the ILECs have the *incentive* to engage in quality-degrading acts of vertical foreclosure because in so doing they protect high-margin retail services from competition while forgoing much less lucrative returns from wholesale services. But that assertion is no more than an obvious deduction: The CLECs will first attack the ILECs' high-margin services. Therefore, the ILECs have every incentive to defend their sales of such services by vigorously competing in any manner permitted by the regulators. That incentive to engage in commercial self-defense does not prove, however, that the ILECs could successfully degrade the quality of access to their rivals even if they desired to do so. The asserted incentive surely does not establish that such degradation would be a successful strategy.
- 28. For the ILECs to have the incentive to degrade their wholesale services, they must not suffer economic losses from such activities. By reducing the quality of their wholesale access services, the ILECs would induce their customers to search for alternatives (such as the services of competitive access providers) or even to construct their own facilities. If an ILEC in general, and Bell Atlantic-GTE in particular, could reduce competition through degradation of its access services, it would have to be surgically precise in such attempts. The ILEC surely would not wish to reduce the demand for these wholesale services that are purchased by firms serving other markets or even to reduce the quality of the ILEC's own downstream retail services. The Commission has reached a similar conclusion about allegations of ILEC discrimination against IXCs:

[C]ommenters argue that the incumbent LEC will be able to . . . degrade the service of IXC competitors, by blocking calls at its own switch. Based on this record, we conclude that these concerns are not well-founded [I]ncumbent LECs have compelling incentives to deliver interstate calls to an IXC's POP. As competition develops for local service, it appears doubtful that an incumbent LEC would find it advantageous to block deliberately interstate calls placed by their end user customers. Such practices would encourage entry by new competitors and increase the interest of affected end users in finding a more reliable service provider. We also find it unlikely that either originating or terminating incumbent LECs would intentionally risk the collection of often significant perminute access charge revenues on a completed long-distance call in order to collect additional, much smaller per-call setup charges. Finally, we know of no significant allegations of degraded service quality attributable to the very similar current regime. We are prepared, however, to investigate claims that an incumbent LEC is blocking calls in an intentional or discriminatory manner. 10

29. Even if the contentions that the ILECs have the incentive and ability to degrade the quality of their access services were correct, it does not follow that those dangers would be heightened by the merger of Bell Atlantic and GTE. These same theoretical threats of vertical foreclosure would exist with any ILEC of any size. Katz and Salop are thus forced to make yet another set of heroic assumptions to try to link this merger to increased threats of vertical foreclosure. For this purpose they invoke a notion of "spillover" effects: the alleged vertical foreclosure benefits integrated ILECs at each end of any communication. To the extent that either GTE or Bell Atlantic has separately engaged in such activity, Katz and Salop theorize, each of the two companies may have created benefits of reduced competition for the other company when it is at the other end of the call. By combining their operations, the merger partners would

^{10.} Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure, Pricing End-User Common Line Charges, First Report and Order, CC Dkts. No. 96-262, 94-1, 91-213, 95-72, 12 F.C.C. Rcd. 15,982, 16,043 ¶ 142 (1997).

internalize these externalities, according to Katz and Salop, and the combined companies therefore would supposedly increase the profitability of the alleged vertical foreclosure.

- Once again, the IXCs' experts submit their allegations of the potential profitability of anticompetitive actions without offering any empirical support. Were such degradations of quality possible and effective in preventing competition, one might expect that the largest ILECs would already be the most successful in foreclosing competition in downstream markets. Frontier, Sprint, and GTE are large carriers that have combined local and long-distance services for a number of years. Were vertical foreclosure through access degradation a successful anticompetitive strategy, one would expect those companies to have achieved greater market power than the scores of smaller ILECs that also offer long-distance services. There is, however, no evidence of successful foreclosure by Frontier, Sprint, and GTE that we have seen. Indeed, the available empirical evidence is inconsistent with the Katz-Salop foreclosure hypothesis.
- 31. In addition, every wireless carrier requires interconnection with an ILEC in its region to operate successfully. In each local area, the ILEC was initially allocated one of the two initial cellular licenses, and most ILECs continue to offer wireless services and wireless-wireline interconnection to their wireless rivals. We know of no evidence that the ILECs have attempted to degrade the wireline interconnection of their local wireless competitors. Nor are we aware that the ILECs have been able to gain a competitive advantage over their unintegrated wireless rivals. In general, the wireline-owned cellar carrier (the "B" carrier) has not gained more market share than the non-wireline cellular carrier. Nor have the ILECs thwarted the competitive thrust of the

^{11.} See Fred S. McChesney, Empirical Tests of the Cross-Subsidy and Discriminatory-Access Hypotheses in Vertically Integrated Telephony, 16 Managerial & Decision Econ. 493 (1995).

new PCS and ESMR wireless services through vertical foreclosure of wireline access, despite the fact that these new wireless providers have succeeded in attracting customers from them and in severely reducing wireless rates. Surely, the wireless market provides the best possible test of the IXCs' experts' theories of foreclosure—and the theory fails decisively in that market.

32. If a competitive issue were to arise from the joint control of the originating and terminating ends of access, one would expect that such instances of exclusionary behavior would have been identified in the case of intraLATA toll. Bell Atlantic and GTE each historically carried a very large share of intraLATA toll traffic originating in their ILEC territories, until state regulators required 1+ equal access for intraLATA calls. In Bell Atlantic's case in particular, a very large proportion of intraLATA toll would both originate and terminate on its network, while the ratio for GTE would have been somewhat smaller. There has been no evidence of discrimination in the intraLATA market since the advent of 1 + preselection. For example, GTE's share of intraLATA toll traffic originating in its Florida territories dropped from 82 percent in December 1996 to less than 37 percent in December 1998. 2 Similar declines over the same period were recorded by GTE in Ohio (from 79 percent to 39 percent), Illinois (from 89 percent to 45 percent), Pennsylvania (from 78 percent to 38 percent), and Virginia (92 percent to 55 percent), a pattern which repeated itself across many GTE and Bell Atlantic territories. 13 Clearly, such share losses have occurred at a much faster rate than the erosion of AT&T's dominant position in interLATA toll since 1984, which indicates that ILECs have not excluded IXCs from intraLATA toll provision to any measurable extent. Consequently, there is little basis to fear that

^{12.} Information provided by GTE.

^{13.} Information provided by GTE and Bell Atlantic.

combination of the two companies should raise concerns based on the control of originating and terminating access.

33. We are forced to conclude that the theories of vertical foreclosure advanced by the IXCs' experts are just that—theories. The inapplicability of those theories to current market conditions is demonstrated by the conspicuous absence of empirical evidence to support them. Indeed, we believe that the wireless market and the long-distance operations of existing (non-RBOC) ILECs provide sufficient evidence to reject the applicability of those theories to current telecommunications markets.

II. THE ALLEGATIONS OF PRICE SQUEEZES

- 34. Baseman and Kelley raise the specter that the merger of Bell Atlantic and GTE would make possible "price squeezes" in long-distance and other downstream services that would use the combined firm's access services. In so doing, Baseman and Kelley reject the safeguards provided by imputation tests as too complicated for regulators to implement.
- 35. A price squeeze by an integrated seller of communications services would only make sense if the integrated ILEC could not obtain its maximum profits from the upstream market for access services alone and if such a squeeze were to allow it eventually to raise prices in the downstream market sufficiently to compensate it for losses caused by the squeeze. The first requirement—the inability to obtain maximum profits from the upstream access service—is obviously met because access services are regulated by federal and state regulators. The second requirement, however, is surely unlikely to be met.
 - 36. For a price squeeze to be profitable, the ILEC would have to be able to raise prices

above current market levels at some future date. Those price increases would have to be large enough to compensate the ILEC for the profits forgone by holding prices artificially below current market levels to "squeeze" its unintegrated rivals. This strategy, in turn, would require that some current competitors-AT&T, Sprint, MCI WorldCom, Frontier, and others-be driven from the market. Otherwise, the new low-price equilibrium would simply persist to the great benefit of consumers. Even in the improbable event that an ILEC could drive one of the big IXCs into bankruptcy, the fiber-optic transmission capacity of that carrier would remain intact, ready for another firm to buy the capacity at a distress sale and immediately undercut the ILEC's noncompetitive prices. In 1996 the Commission embraced, with respect to newly enacted section 272, the logic of such skepticism toward hypothesized ILEC predation.¹⁴ That skepticism accords with the conclusion of many respected regulatory economists. 15 The IXCs' experts ignore the weight of such analysis and utterly fail to explain how Bell Atlantic or GTE or the merged Bell Atlantic-GTE could successfully employ a squeeze that drives large IXCs from the market. Even if, arguendo, the ILECs flouted the imputation test, it is highly unlikely that rates would be driven below the IXCs' incremental costs of no more than 2 cents per minute plus access charges. We too are extremely skeptical that such a "squeeze" is even remotely possible.

^{14.} Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended; and Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, Notice of Proposed Rulemaking, CC Dkt. No. 96-149, 11 F.C.C. Rcd. 18,877, 18,943 ¶ 137 (1996) (citing Daniel F. Spulber, Deregulating Telecommunications, 12 YALE J. ON REG. 25, 60 (1995); other citations omitted).

^{15.} E.g., PAUL W. MACAVOY, THE FAILURE OF ANTITRUST AND REGULATION TO ESTABLISH COMPETITION IN LONG-DISTANCE TELEPHONE SERVICES 186-90 (MIT Press & AEI Press 1996); Susan Gates, Paul Milgrom & John Roberts, Deterring Predation in Telecommunications: Are Line-of-Business Restraints Needed?, 16 Managerial & Decision Econ. 427 (1995); Paul S. Brandon & Richard L. Schmalensee, The Benefits of Releasing the Bell Companies from the Interexchange Restrictions, 16 Managerial & Decision Econ. 349 (1995); Jerty A. Hausman, Competition in Long-Distance and Telecommunications Markets: Effects of the MFJ, 16 Managerial & Decision Econ. 365 (1995); Kenneth J. Artow, Dennis W. Carlton & Hal S. Sider, The Competitive Effects of Line-of-Business Restrictions in Telecommunications, 16 Managerial & Decision Econ. 301 (1995).

and Southern New England Telephone (SNET) have engaged in price squeezes in the distant and recent past. Baseman and Kelley do not contend, however, that those alleged squeezes have been successful in driving any IXCs from New York or Connecticut. Indeed, a review of the experience in Connecticut suggests that competition is vigorous in the interexchange market and that all national competitors continue to operate there—albeit at lower prices than existed before SNET's entry. That outcome demonstrates increased competition and would only be contrary to the public interest if lower long-distance prices reduce consumer welfare. This empirical evidence confirms the well-known theoretical proposition that even inefficient ILEC entry into long-distance markets will produce welfare gains to society that would more than offset the potential welfare losses from that inefficiency. Finally, it is ironic that the IXCs would raise the specter of a price squeeze at a time when empirical analyses conclude that the IXCs have not passed through fully the recent and continuing ILECs' reduction in carrier access charges. The property of the production in carrier access charges.

III. ALLEGATIONS OF EXCLUSIONARY BEHAVIOR WITH RESPECT TO INTERNET SERVICES

38. Baseman and Kelley allege that ILECs in general, and GTE and Bell Atlantic in

^{16.} See PETER W. HUBER, LOCAL EXCHANGE COMPETITION UNDER THE 1996 TELECOM ACT: RED-LINING THE LOCAL EXCHANGE CUSTOMER (prepared for BellSouth Corp. and SBC Corp., Nov. 4, 1997).

^{17.} See P.J. Hinton, J.D. Zona, R.L. Schmalensee & W.E. Taylor, An Analysis of the Welfare Effects of Long-Distance Market Entry by an Integrated Access and Long-Distance Provider, 13 J. REG. ECON. 183 (1998).

^{18.} See MACAVOY, THE FAILURE OF REGULATION AND ANTITRUST, supra note 15; P.S. Brandon & W.E. Taylor, AT&T, MCI and Sprint Failed to Pass Through the 1998 Interstate Access Charge Reductions to Consumers (filed ex parte in CC Docket No. 96-262 on behalf of the United States Telephone Association, Oct. 22, 1998).

particular, control a bottleneck facility in the provision of Internet services. ¹⁹ Baseman and Kelley assert that Bell Atlantic and GTE "control the connection to the end-user," ²⁰ and they further speculate that this asserted "control" may afford opportunities for Bell Atlantic and GTE to discriminate against unaffiliated ISPs and monopolize the market for Internet service provision. The Baseman-Kelley theory, however, is logically flawed and fails on five independent grounds:

- 1. Bell Atlantic and GTE do not have unique means to discriminate against unaffiliated ISPs.
- 2. Bell Atlantic and GTE do not control a bottleneck facility in the provision of Internet services.
- 3. GTE is not a dominant firm in the provision of ISP services, and the transaction would not materially increase GTE's presence in the ISP arena. This distinction is critical, as the targeted-degradation argument of Professors Jacques Crémer, Patrick Rey, and Jean Tirole, which the IXCs' experts inappropriately cite, applies only to dominant firms.
- 4. Bell Atlantic and GTE have not discriminated against unaffiliated Internet service providers despite the allegation that they have both an incentive and the ability to do so.
- 5. Allegations that discrimination is more likely when new technologies are being introduced are sheer speculation that is contradicted by the facts, by the Commission's findings, and by the IXCs' experts themselves.

^{19.} Baseman-Kelley Declaration at ¶¶ 87-92 et seq.

^{20.} Id. at ¶ 91.

We now discuss these five points in turn.

A. Bell Atlantic and GTE Do Not Have Unique Means to Discriminate Against ISPs

- 39. In making their allegations of potential discrimination against ISPs, Baseman and Kelley suggest that Bell Atlantic and GTE somehow have a novel and unique way to discriminate against ISPs. This alleged discrimination supposedly could take the form of either quality degradation or delayed provisioning of circuits. Again, a common sense examination of the relationship between ISPs and ILECs shows this allegation to be specious.
- 40. First, consider traditional dial-up access. As noted above, ISPs serve dial-up customers through multi-line business services, which the ISPs either purchase from the ILEC or from a competing CLEC. By definition, dial-up customers use standard voice circuits, and many customers use those circuits for other ILEC services. Therefore, to discriminate against dial-up ISPs using a strategy of quality degradation, an ILEC would need to degrade service on all its voice facilities. Surely such pervasive service degradation would be unprofitable. If an ILEC attempted to discriminate against ISPs in the manner that Baseman and Kelley hypothesize, then ISPs and other local exchange customers would switch to CLECs. The ILEC would suffer additional losses as residential users switched their local telephone service to other providers, and as regulators imposed quality-of-service penalties. Such discrimination clearly would not benefit Bell Atlantic and GTE.
- 41. Discriminating against ISPs through delayed provisioning would be equally futile. ISPs are large, lucrative business customers, whose premises are located in close proximity to existing central offices in high-density metropolitan areas. ISPs have their pick of competitive

local exchange providers.²¹ If the ILEC were to give an ISP discriminatorily slow provision of the necessary inward trunks, the ISP would merely transfer its account to one of many CLECs offering more responsive service. As before, the ILEC would suffer a large reduction in its own cash flow as a result of the attempted discrimination.

- 42. In the case of high-speed Internet access service, ILECs would have even less to gain by discriminating against ISPs.²² In the case of such service, the ILEC either provides the high-speed transport from the end user to the ISP (over a local DS-1 line or its own xDSL offering, for example) or supplies the unbundled loop to which the ISP adds its own central office and customer premises equipment to supply xDSL and similar offerings. The provisioning process for high-speed circuits and unbundled loops is already in place. Similarly, direct quality measurements are in place that would allow competitors and regulators to detect any delayed provisioning.²³
- 43. Furthermore, Baseman and Kelley ignore the fact that Congress and the FCC imposed imputation safeguards. That is not to say that these requirements need to work perfectly. They need only work well enough to blunt the hypothesized incentives for upstream-downstream

^{21.} See Merrill Lynch, The Mysterious World of ISP-Related Reciprocal Compensation (Telecom Services-Local Investment Report, Oct. 27, 1998).

^{22.} The FCC explicitly "reject[ed] the argument that the possibility of a price squeeze warrants the Commission's transfer to the states of its ratemaking authority with respect to interstate DSL services." Investigation of New Access Offerings Filed by Bell Atlantic, BellSouth, GTE System Telephone Companies, and Pacific Bell Establishing Asymmetrical Digital Subscriber Line Service, Memorandum Opinion and Order, CC Dkts. Nos. 98-168, 98-161, 98-167, 98-103, ¶ 1 (released Nov. 30, 1998) (FCC 98-317).

^{23.} The merger applicants have entered into specific time and quality-of-service commitments for the provision of collocation and interconnections services to their competitors. For example, Bell Atlantic commits in its southern region to provide competitors with physical collocation within 120 business days and virtual collocation within 60 business days, subject to the relevant central office not being declared exhausted *before* state regulators. *See* Bell Atlantic Network Services FCC Tariff #1 § 19, pp. 945-947 (13th rev. Dec. 3, 1998). The Bell Atlantic and GTE operating companies also make similar commitments through tariffs filed with state commissions.

coordination. If imputation requirements result in an inability of the ILEC to internalize fully the discriminatory effects being posited by the IXCs' experts, then the Katz-Salop results generally do not obtain.

B. Bell Atlantic and GTE Do Not Possess Bottleneck Control Over ISPs

- 44. The Baseman-Kelley allegation of "bottleneck control" is based on the trivial observation that most residential customers in GTE's and Bell Atlantic's territories currently gain access to the Internet through dial-up connections. Baseman and Kelley ignore, however, that customers seeking dial-up access to an unaffiliated ISP use the same circuits and technology as do customers for voice telephony. In other words, dial-up service is, by definition, simply traditional local service. For example, ISPs unaffiliated with Bell Atlantic or GTE simply purchase multi-line business service, from either Bell Atlantic or GTE or from a competing CLEC. If the Baseman-Kelley theory were plausible, it would imply that GTE or Bell Atlantic has bottleneck control over services provided by any multi-line business customer whose business relies significantly on local telephony.
- 45. Furthermore, Baseman and Kelley completely ignore the fact that large volumes of end-user Internet traffic now move over other facilities, such as competitive access provider lines, cable modems, terrestrial wireless services (for example, Metricom's Ricochet), and satellite links. ILEC provision of high-speed circuits has been deemed a competitive service in many states, including Florida for GTE, 25 and Pennsylvania for Bell Atlantic, 26 as CLECs continue to

^{24.} See generally J. Gregory Sidak & Daniel F. Spulber, Cyberjam: The Law and Economics of Internet Congestion of the Telephone Network, 21 HARV. J.L. & PUB. POL'Y 327 (1998).

^{25.} See FLA. STAT. ch. 364.051 (1998). Large ILECs may elect price regulation under section 364.051, allowing limited

enter and expand their service provisions. Although relatively few end users may use high-speed facilities currently, that proportion is growing rapidly. An increasing number, however, use the services of carriers other than the ILECs. The growth of special access is accelerating. For example, the number of voice-grade equivalent special-access circuits provided by Bell Atlantic and GTE in their territories jumped 40 percent in 1997, almost doubling their historic growth rate.²⁷ The CLECs are currently extremely competitive with ILECs in the provision of high-speed access, and the CLECs are capturing a substantial and growing share of that segment. In 1996, for example, a leading competitive access provider described its corporate strategy as follows:

The Company's strategy is to become the primary provider of telecommunications services to business and government end users. The Company believes business and government users have distinct telecommunications service requirements, including maximum reliability, consistent high quality, capacity for high-speed data transmission, responsive customer service and continuous attention to service enhancement and new service development. The Company believes it has significant advantages over its competitors as a result of the Company's . . . expertise in developing highly reliable, advanced digital fiber optic networks which offer substantial transmission capacity.²⁸

Now, nearly three years later, data-focused CLECs such as MFS/Brooks (owned by MCI WorldCom), TCG (owned by AT&T), WinStar, Teligent, and Internet specialists such as

upwards flexibility for all services other than basic services (flat-rate voice-grade residential or single-line business local exchange service), voice-grade flat-rate multi-line business local exchange service, and network access services.

^{26.} See Emergency Ratification Order, Petition of Bell Atlantic-Pennsylvania Inc. For a Determination of Whether Digital Data Services and High Capacity Services Are Competitive, Dkt. No. P-00950929, AT&T Communications of Pennsylvania Inc., v. Bell Atlantic-Pennsylvania, Inc., Dkt. No. P-00950929C0001, at 3, ordering clause 3 (Pa. Pub. Util. Comm'n, Oct. 13, 1995) ("Bell's HICAP service is hereby classified as competitive").

^{27.} See FCC, 1997-98 STATISTICS OF COMMON COMMUNICATIONS CARRIERS at table 2.10.

^{28.} MFS COMMUNICATIONS CO., 1995 SEC FORM 10-K at 1 (1996). "Because MFS believes it has certain advantages relative to quality control... resulting from its use of the Company's existing fiber optic networks, MFS Intelenet believes that it may enjoy certain advantages with respect to certain of its competitors." *Id.* at 6.

Metricom indeed enjoy phenomenal growth in lines that far exceeds the rate of growth in lines for either Bell Atlantic or GTE.²⁹ Finally, cable modems are poised to become an important means of residential Internet access, with projected growth rates of over 100 percent per annum—"surging from 350,000 subscribers in mid-1998 to more than 2 million by end of 1999"³⁰—and are expected to account for 80 percent of residential Internet access connections by 2002.³¹ That projected growth in Internet access over the cable infrastructure is, of course, a principal justification that AT&T has offered for its acquisition of TCI.³² In short, by focusing only on dial-up access to the Internet, Baseman and Kelley erroneously exclude many actual and potential competitors from consideration.

C. The Transaction Would Not Enable Bell Atlantic-GTE to Dominate the Internet

46. GTE is not a dominant firm in the provision of ISP services, and the transaction would not materially increase GTE's presence in the ISP arena. Bell Atlantic currently has relatively few ISP customers, and even after the merger the combined firm would rank far behind America Online, the largest ISP in the nation.³³ The combined GTE/Bell Atlantic ISP operation

^{29.} See FCC, 1997-98 STATISTICS OF COMMON CARRIERS, at table 2.10.; Salomon Smith Barney, CLECs Surpass Bells In Net Business Line Additions For First Time, May 6, 1998.

^{30.} See Forrester Research Press Release, High-Speed Internet Access, Sept. 1, 1998.

^{31.} See Paul Kagan Associates, Inc., U.S. High-Speed Access Cable & ADSL Projection Model, 1997-2006, in CABLE TV TECHNOLOGY (Feb. 28, 1998).

^{32.} See AT&T Press Release, AT&T, TCl to Merge, Create New AT&T Consumer Services Unit, June 24, 1998. "Today we are beginning to answer a big part of the question about how we will provide local service to U.S. consumers," said C. Michael Armstrong, chairman and CEO of AT&T. "Through its own systems and in partnership with affiliates, AT&T will bring to people's homes the first fully integrated package of communications, electronic commerce, and video entertainment services."

^{33.} Estimated AOL and AT&T subscriber counts from AT&T Changes Internet Service, Fees, L.A. TIMES, Dec. 16, 1998 (quoting AT&T's projected customer base pending the acquisition of IBM Corp.'s network business).

would be less than half the size of the next largest competitor and less than one-fourteenth the size of the largest ISP, AOL.³⁴

47. This distinction is critical because the network-dominance strategy that the IXCs' experts hypothesize relies on the existence of a *dominant* firm. Baseman and Kelley, for example, quote the Crémer-Rey-Tirole result.³⁵ But Baseman and Kelley fail to observe that Professors Crémer, Rey, and Tirole actually stated:

In the absence of a dominant backbone, the unilateral degradation strategy is much riskier[,] . . . encourag[ing] migration of [part] of its installed base and new customers to other networks. We would expect interconnectivity to continue prevailing in the Internet industry as long as a dominant player does not emerge.³⁶

Thus, Baseman and Kelley quote the Crémer-Rey-Tirole result out of context, as the targeted-degradation argument applies only to dominant firms. Crémer, Rey, and Tirole examined the specific case in which a merger would create a dominant firm with a share of more than 50 percent, at least three times the size of the second largest firm.³⁷ Such assumed conditions clearly do not accurately describe the merger of Bell Atlantic and GTE.

48. Finally, the combined Bell Atlantic-GTE will still be several times smaller than the ISP and telecommunications providers against which the merged company will compete, such as America Online and MCI WorldCom. Earthlink, one of the largest ISPs, is controlled by Sprint

^{34.} GTE subscribers from BOARDWATCH, 1998 ISP DIRECTORY. Bell Atlantic subscribers from internal company data.

^{35.} Baseman-Kelley Declaration at 54 ¶ 95 (discussing Jacques Crémer, Patrick Rey & Jean Tirole, The Degradation of Quality and the Domination of the Internet (Apr. 8, 1998) (prepared for GTE Communications Corporation)).

^{36.} Crémer, Rey & Tirole, supra note 35, at ¶ 9 (emphasis added).

^{37.} *Id*.

and may soon be a wholly owned subsidiary.³⁸ Meanwhile, the largest IXC, AT&T, has already acquired one of the largest CLECs, TCG. AT&T is also acquiring the largest provider of alternative residential broadband access, TCI, by virtue of its ownership of and marketing relationship with @Home. (Previously, AT&T offered to acquire America Online.³⁹) And AT&T is acquiring a large data network unit from IBM.⁴⁰ Finally, AT&T is entering into a local telephone venture with Time-Warner.⁴¹

D. Bell Atlantic and GTE Have Not Discriminated Against Unaffiliated ISPs

49. If GTE and Bell Atlantic actually had both the incentive and the opportunity to discriminate against unaffiliated ISPs, then one would expect to find evidence of such behavior in the ISP market. Because of the enormously inefficient pricing of ILEC provision of dial-up Internet access, ILECs experience substantial cost increases for every dial-up customer that is

^{38.} See Inside Wall Street, Sprint: Sauntering After Earthlink?, BUS. WK., Dec. 7, 1998, at 134. Sprint currently owns 27 percent on a fully diluted basis, received in consideration for the transfer to Earthlink of approximately 130,000 Sprint Internet passport subscribers, \$24 million in cash, and the exclusive right to use certain ports in Sprint's high-speed network. Sprint also agreed to deliver a minimum of 150,000 new subscribers per year for five years to Earthlink, and to give Earthlink the right to be Sprint's exclusive provider of consumer Internet access service and to use Sprint's brand and distribution network for at least ten years. See EARTHLINK NETWORK INC., SEC FORM 10-Q, at 8 (Aug. 14, 1998).

^{39.} See CNNfn, Ma Bell to Log On To AOL?, CNNfn, June 17, 1998 (available at http://cnnfn.com/hotstories/deals/980617/index.htm).

^{40.} See AT&T Changes Internet Service, Fees, L.A. TIMES, Dec. 16, 1998.

^{41.} See Associated Press Online—Dec. 9, 1998. "CNBC reported AT&T and Time Warner had nearly agreed on the terms of a joint venture, of which AT&T would control 75 percent and Time Warner 25 percent. AT&T would pay three-quarters of the cost of upgrading Time Warner's cable systems to handle voice transmissions. AT&T, in turn, would get three-quarters of the revenues from selling the local phone service. A Time Warner Inc. pact would cap a unprecedented deal-making spree by AT&T Corp., including an agreement Tuesday to buy IBM's data-networking business for \$5 billion. This fall, AT&T agreed to buy cable giant Tele-Communications Inc., for \$31.7 billion, but TCI's cable TV lines are able to reach only about one-third of U.S. homes."

added by an ISP served by a CLEC. 42 Moreover, the customer probably orders a second line only for Internet traffic (which therefore does not recover its loop and switching costs assigned to the interstate jurisdiction, as it does not generate interLATA access charges). Consequently, if the opportunity and incentive for discrimination were truly to exist, one would expect them to be relatively stronger concerning dial-up service to ISP-CLEC combinations.

The evidence, however, all points in the opposite direction. To our knowledge, no regulatory body or court has found discrimination by Bell Atlantic or GTE against ISP-CLEC combinations. The market for ISPs in the Bell Atlantic and GTE territories is vibrant, with 180 ISPs operating in Maryland's 301 area code alone. ⁴³ If anything, the efforts of some Bell operating companies, including Bell Atlantic, in Internet service provision "seem to be faltering" despite "high-profile marketing campaigns." ⁴⁴ Industry observers note that "oligopoly is not on the horizon," and that "BOCs should buy up regional ISPs as a means to gain expertise and [market] share. ⁴⁵ Such evidence indicates an *absence* of discrimination.

E. Allegations of Potential Discrimination Have Never Risen Above Sheer Speculation

51. It is worth reviewing the long-run evidence surrounding previous allegations that the Bell operating companies would interfere with a new and emerging market. The experience in information services is particularly illustrative because it is the predecessor of today's ISP

^{42.} See Sidak & Spulber, supra note 24, at 379-80.

^{43.} See http://boardwatch.internet.com/isp/ac/ac301.html (Dec. 1, 1998).

^{44.} See Online Services Reach 20.3M Users, MULTIMEDIA DAILY, Apr. 25, 1997.

^{45.} See Forrester Research, Consolidation in the Business ISP Marketplace, Press Release, July 16, 1997 (downloaded Dec. 2, 1998, http://www.forrester.com/press/pressrel/970716TS.htm).

service. Eight years ago, Professor Carl Shapiro (a former expert witness for Sprint before the FCC and founder of the Tilden Group, with whom Sprint's experts in this proceeding—Katz. Farrell, and Hayes—are affiliated) predicted dire consequences if the Modification of Final Judgment were amended to allow the BOCs to enter the information services arena. 6 Shapiro alleged at that time many of the arguments now being alleged by the IXCs' experts in this proceeding. He argued that the risk of discrimination was too great to allow the BOCs to participate in information services. In particular, Shapiro alleged that the BOCs would engage in the familiar litany of bad acts, including raising the price, reducing the quality, and restricting the availability of essential inputs to competing information services providers. 7 Shapiro also alleged that the BOCs would have the incentive to bias their systems in their own favor and against their most threatening rivals. 8 "Lifting the information services restriction at this time," he concluded in 1990, "would predictably result in anticompetitive consequences. 49 Eight years later, it is clear that Shapiro's predictions were demonstrably wrong. As has been observed repeatedly, after the BOCs were given limited permission in 1988 to offer consumers voice mail as an information service, the price of such services fell dramatically and the demand for voice mail equipment grew

^{46.} Affidavit of Carl Shapiro, attached to Joint Opposition to Motions for Removal of the Section II(D)(1) Restriction on the Provision of Information Services in *United States* v. Western Elec. Co., Civil Action No. 82-0192 (HHG), (D.D.C. Oct. 17, 1990), submitted by Commerce Clearing House, Inc., Dialog Information Services, Inc., Dun & Bradstreet Corporation, Knight-Ridder, Inc., MacMillan, Inc., Times Mirror, the Washington Post Company, and West Publishing Company.

^{47.} Id. at ¶¶ 33-41.

^{48.} Id. at ¶ 39.

^{49.} Id. at ¶ 103.

threefold.⁵⁰ And, of course, since 1990 the Bell operating companies have hardly succeeded in monopolizing information services.

- 52. Now, nearly a decade after Shapiro's faulty prediction about information services, Baseman and Kelley similarly allege that the potential for ILEC discrimination will be enhanced by the introduction of new technologies and non-standard interfaces. 51 They are wrong for at least five reasons, just as Shapiro was wrong.
- 53. First, to the extent that ISPs and their customers wish to use the ILEC's plant in lieu of the ILEC's dial-up service, they can and will simply unbundle the loop and install their own CPE and collocated equipment. Attempts to degrade such interconnection are easy to detect, remedy, and punish. 52
- 54. Second, Baseman and Kelley concede that the problems they identify, "of course, are likely to occur with or without the merger." ⁵³ By itself, this admission renders the entire Baseman-Kelley declaration irrelevant to this proceeding.
- 55. Third, Baseman and Kelley concede that "[t]he problem is ameliorated if other technologies emerge to provide broadband access for ISPs," 54 such as cable modem access, which

^{50.} See WILLIAM J. BAUMOL & J. GREGORY SIDAK, TOWARD COMPETITION IN LOCAL TELEPHONY 132 (MIT Press & AEI Press 1994).

^{51.} Baseman-Kelley Declaration at ¶ 88.

^{52.} These observations about detection, punishment, and deterrence have been well understood for years. See Affidavit of Michael K. Block, attached to Motion of Bell Atlantic Corp., BellSouth Corp., NYNEX Corp., and Southwestern Bell Corp. to Vacate the Consent Decree, United States v. Western Electric Co., Civil Action No. 82-0192 (May 23, 1994; filed D.D.C. July 6, 1994).

^{53.} Baseman-Kelley Declaration at ¶ 94 (emphasis added).

^{54.} Id. at ¶ 54.

is rapidly being deployed today and is, as noted earlier, the centerpiece of AT&T's high-profile investment strategy encompassing its acquisition of TCI.

- 56. Fourth, Baseman and Kelley acknowledge "that the Commission is addressing these issues in its Broadband Rulemaking" 55 and has the ability in that separate proceeding to address those concerns fully.
- 57. Fifth, the notion that the merger of Bell Atlantic and GTE can somehow "tip" the ISP market is truly fanciful. Unlike the case of Internet backbone services, ILEC access is fully subject to FCC oversight and regulation. The ISP market is atomized and fully competitive with thousands of participants. ⁵⁶ Unlike backbones, ISPs do not generally interconnect directly with each other. Rather, they interconnect through backbones, although direct connections exist in some cases. ⁵⁷ Each ISP is a paying customer of one or more backbones for Internet transport service. The ISP access marketplace therefore does not operate on the basis of the same delicate system of competitive peering that exists between rival, unregulated backbone networks. Moreover, Bell Atlantic's share of the ISP access market is minuscule. ⁵⁸
- 58. Seen in that light, the Baseman-Kelley allegations of potential discrimination by Bell Atlantic-GTE against unaffiliated ISPs are nothing more than a reprise of the erroneous predictions that Shapiro offered nearly a decade ago. Since then, the facts have compelled any

^{55.} Id. ¶¶ 56-57.

^{56.} See BOARDWATCH, 1998 ISP DIRECTORY, which lists over 5,000 ISPs.

^{57.} See Internet Affidavit of Robert G. Harris on behalf of GTE Corp. in WorldCom Inc. and MCI Communications Corp. Proposed Transfer of Control, CC Dkt. No. 97-211, ¶¶ 17-25 (filed March 13, 1998); Internet Affidavit of Robert G. Harris on behalf of GTE Corp. in WorldCom Inc. and MCI Communications Corp. Proposed Transfer of Control, CC Dkt. No. 97-211, ¶¶ 2-4 (filed June 8, 1998).

^{58.} See Forrester Research, Consolidation in the Business ISP Marketplace, supra note 45.

objective observer to reject as false the prediction by Shapiro and others that the Bell operating companies would monopolize information services. The Commission should reject the use of that same flawed logic here to predict that the merger of Bell Atlantic and GTE would dominate unaffiliated ISPs.

CONCLUSION

59. The arguments advanced by the IXCs' economic experts are unpersuasive. They allege that integrated ILECs have the incentive and ability to employ a variety of discriminatory tactics and price squeezes to harm IXCs and CLECs, yet the IXCs' experts thoroughly fail to demonstrate that the factual assumptions necessary for their theories to hold are indeed realistic. The IXCs' experts are no more believable when they predict monopolization of Internet services. Moreover, the IXCs' experts fail to provide any credible argument that the merger of Bell Atlantic and GTE would increase the likelihood that these predictions of anticompetitive doom would actually occur. The Commission should evaluate this merger on the basis of logic and fact, not on the basis of far-fetched theoretical predictions that bear no relationship to observed market conditions.

I hereby swear, under penalty of perjury, that the foregoing is true and correct.

Gregory Steak

Executed on this <u>Ust</u> day of December, 1998.

I hereby swear, under penalty of perjury, that the foregoing is true and correct.

Robert W. Crandall

Executed on this 21st day of December, 1998.

J. GREGORY SIDAK

American Enterprise Institute for Public Policy Research 1150 Seventeenth Street, N.W. Washington, D.C. 20036 (202) 862-5892, igsidak@aei.org

EDUCATION

STANFORD UNIVERSITY, J.D., 1981; A.M. (Economics), 1981; A.B. with honors and distinction (Economics), 1977. Associate Editor, Stanford Law Review. Myers Prize in Economics, 1977.

CURRENT EMPLOYMENT

AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH, Washington, D.C.: F. K. Weyerhaeuser Fellow in Law and Economics, 1995-present. Resident Scholar, 1992-95.

YALE SCHOOL OF MANAGEMENT, New Haven, Connecticut: Senior Lecturer, 1993-present.

LECG, INC., Washington, D.C.: Principal, 1998-present.

EMPLOYMENT HISTORY

COVINGTON & BURLING, Washington, D.C.: Associate, 1989-92.

FEDERAL COMMUNICATIONS COMMISSION, Washington, D.C.: Deputy General Counsel, 1987-89.

COUNCIL OF ECONOMIC ADVISERS, EXECUTIVE OFFICE OF THE PRESIDENT, Washington, D.C.: Senior Counsel and Economist, 1986-87.

THE BOSTON CONSULTING GROUP, INC., Los Angeles: Management Consultant, 1984-86.

O'MELVENY & MYERS, Los Angeles: Associate, 1982-84.

UNITED STATES COURT OF APPEALS FOR THE SEVENTH CIRCUIT, Chicago: Law Clerk to Judge Richard A. Posner, 1981-82.

BOOKS

Competition in International Telecommunications (J. Gregory Sidak, editor, AEI Press forthcoming 1999).

Is the Telecommunications Act of 1996 Broken? (If So, How Can We Fix It?) (J. Gregory Sidak, editor, AEI Press forthcoming 1999).

Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States (Cambridge University Press 1997), co-authored with Daniel F. Spulber.

Foreign Investment in American Telecommunications (University of Chicago Press 1997).

Protecting Competition from the Postal Monopoly (AEI Press 1996), co-authored with Daniel F. Spulber.

Transmission Pricing and Stranded Costs in the Electric Power Industry (AEI Press 1995), co-authored with William J. Baumol.

Toward Competition in Local Telephony (MIT Press & AEI Press 1994), co-authored with William J. Baumol. Korean translation: Korea Information Society Development Institute 1996.

Governing the Postal Service (J. Gregory Sidak, editor, AEI Press 1994).

JOURNAL ARTICLES

Essential Facilities, 51 STANFORD LAW REVIEW (forthcoming 1999), co-authored with Abbott B. Lipsky, Jr.

The Petty Larceny of the Police Power, 86 CALIFORNIA LAW REVIEW 655 (1998) (review essay).

Deregulation and Managed Competition in Network Industries, 15 YALE JOURNAL ON REGULATION 117 (1998), co-authored with Daniel F. Spulber.

Cyberjam: The Law and Economics of Internet Congestion of the Telephone Network, 21 HARVARD JOURNAL OF LAW & PUBLIC POLICY 337 (1998), co-authored with Daniel F. Spulber.

Network Access Pricing and Deregulation, 6 INDUSTRIAL AND CORPORATE CHANGE 757 (1997), co-authored with Daniel F. Spulber.

Givings, Takings, and the Fallacy of Forward-Looking Costs, 72 NEW YORK UNIVERSITY LAW REVIEW 1068 (1997), co-authored with Daniel F. Spulber.

The Tragedy of the Telecommons: Government Pricing of Unbundled Network Elements Under the Telecommunications Act of 1996, 97 COLUMBIA LAW REVIEW 1081 (1997), co-authored with Daniel F. Spulber.

Monopoly and the Mandate of Canada Post, 14 YALE JOURNAL ON REGULATION 1 (1997), co-authored with Daniel F. Spulber.

Deregulatory Takings and Breach of the Regulatory Contract, 71 NEW YORK UNIVERSITY LAW REVIEW 851 (1996), co-authored with Daniel F. Spulber.

Pricing of Services Provided to Competitors by the Regulated Firm, 3 HUME PAPERS ON PUBLIC POLICY, No. 3, at 15 (1995), co-authored with William J. Baumol.

Stranded Costs, 18 HARVARD JOURNAL OF LAW & PUBLIC POLICY 835 (1995), co-authored with William J. Baumol.

The Line-Item Veto Amendment, 80 CORNELL LAW REVIEW 1498 (1995).

Competition and Regulatory Policies for Interactive Broadband Networks, 68 SOUTHERN CALIFORNIA LAW REVIEW 1203 (1995), co-authored with Robert W. Crandall.

The Pricing of Inputs Sold to Competitors: Rejoinder and Epilogue, 12 YALE JOURNAL ON REGULATION 177 (1995), co-authored with William J. Baumol.

The Pricing of Inputs Sold to Competitors, 11 YALE JOURNAL ON REGULATION 171 (1994), co-authored with William J. Baumol.

Telecommunications in Jericho, 81 CALIFORNIA LAW REVIEW 1209 (1993) (review essay).

War, Liberty, and Enemy Aliens, 67 NEW YORK UNIVERSITY LAW REVIEW 1402 (1992).

Why Did President Bush Repudiate the "Inherent" Line-Item Veto?, 9 JOURNAL OF LAW & POLITICS 39 (1992), co-authored with Thomas A. Smith.

The Inverse Coase Theorem and Declarations of War, 41 DUKE LAW JOURNAL 325 (1991).

To Declare War, 41 DUKE LAW JOURNAL 27 (1991).

Takeover Premiums, Appraisal Rights, and the Price Elasticity of a Firm's Publicly Traded Stock, 25 GEORGIA LAW REVIEW 783 (1991), co-authored with Susan E. Woodward.

Corporate Takeovers, the Commerce Clause, and the Efficient Anonymity of Shareholders, 84 NORTHWESTERN UNIVERSITY LAW REVIEW 1092 (1990), co-authored with Susan E. Woodward.

Four Faces of the Item Veto: A Reply to Tribe and Kurland, 84 NORTHWESTERN UNIVERSITY LAW REVIEW 437 (1990), co-authored with Thomas A. Smith.

The President's Power of the Purse, 1989 DUKE LAW JOURNAL 1162.

The Recommendation Clause, 77 GEORGETOWN LAW JOURNAL 2079 (1989).

The "New Payola" and the American Record Industry: Transactions Costs and Precautionary Ignorance in Contracts for Illicit Services, 10 HARVARD JOURNAL OF LAW & PUBLIC POLICY 521 (1987), co-authored with David E. Kronemyer.

Debunking Predatory Innovation, 83 COLUMBIA LAW REVIEW 1121 (1983).

A Framework for Administering the 1916 Antidumping Act: Lessons from Antitrust Economics, 18 STANFORD JOURNAL OF INTERNATIONAL LAW 377 (1982).

Antitrust Preliminary Injunctions in Hostile Tender Offers, 30 KANSAS LAW REVIEW 491 (1982).

The Deterrent Effect of Antitrust Enforcement, 89 JOURNAL OF POLITICAL ECONOMY 429 (1981), co-authored with Michael K. Block and Frederick C. Nold.

Rethinking Antitrust Damages, 33 STANFORD LAW REVIEW 329 (1981) (student note).

The Cost of Antitrust Deterrence: Why Not Hang a Price Fixer Now and Then?, 68 GEORGETOWN LAW JOURNAL 1131 (1980), co-authored with Michael K. Block.

CHAPTERS IN BOOKS

The Dismal Science of Law, 1992 Public Interest Law Review 121 (book review of Daniel A. Farber & Philip P. Frickey, Law and Public Choice: A Critical Introduction (1991)).

The Economic Perspective on Broadcasting Regulation, in THE NATIONAL ECONOMISTS CLUB READER 15 (Richard T. Gill ed. 1991).

Two Factors That Reduce Record Company Profitability, 1987 ENTERTAINMENT, PUBLISHING AND THE ARTS HANDBOOK 371, co-authored with David E. Kronemyer.

Risk and Responsibility, in 1987 ECONOMIC REPORT OF THE PRESIDENT 179, co-authored with Stephen J. DeCanio, Arlene S. Holen, and Susan E. Woodward.

The Structure and Performance of the U.S. Record Industry, 1986 ENTERTAINMENT, PUBLISHING AND THE ARTS HANDBOOK 263, co-authored with David E. Kronemyer.

NEWSPAPER AND MAGAZINE ARTICLES

Should Consumers Pay the "Stranded Costs" of Utility Companies?, INSIGHT, Nov. 9, 1998, at 24.

Voters Should Back State's Besieged Law on Retail Competition, BOSTON SUNDAY HERALD, May 24, 1998, at 25.

Avoiding America's Regulatory Mistakes in Hong Kong's Telecoms Market, HONG KONG ECONOMIC JOURNAL, Aug. 29, 1997 (in Cantonese).

Telecommunications: America's Investment Xenophobia, JOURNAL OF COMMERCE, Aug. 22 1997, at 8A

The line-item veto: two views; Next stop: Supreme Court, JOURNAL OF COMMERCE, Aug. 20, 1997, at 9A.

Antitrust and the Federal Software Commission, JOBS & CAPITAL, vol. 6, at 18 (winter 1997).

Stranded Cost Recovery Benefits Consumers, REGULATION, 1996 no. 2, at 12 (1996), co-authored with William J. Baumol.

Let Utilities Recover Stranded Costs, WALL STREET JOURNAL, June 17, 1996, at A15, co-authored with William J. Baumol.

Competition and the Postal Service, THE AMERICAN ENTERPRISE, vol. 7, no. 3, at 74 (May/June 1996).

When Competition Amounts to Taking, NATIONAL LAW JOURNAL, Apr. 1, 1996, at A19.

Post Office Monopoly: Unfair Market Practice, NATIONAL LAW JOURNAL, Oct. 23, 1995, at A23.

The Unregulated Infobahn, JOBS & CAPITAL, vol. 4, at 28 (summer 1995), co-authored with Robert W. Crandall, reprinted in Australia in POLICY, vol. 11, no. 2, at 9 (winter 1995).

Stranded Cost Recovery: Fair and Reasonable, Public Utilities Fortnightly, May 15, 1995, at 20, co-authored with William J. Baumol.

Telecommunications: Unleashing the Industry, THE AMERICAN ENTERPRISE, vol. 5, no. 5, at 42 (September/October 1994).

Don't Stifle Global Merger Mania, WALL STREET JOURNAL, July 6, 1994, at A18.

Telecommunications: The Big Picture, ROLL CALL, June 27, 1994, at 4 (supp.).

Broadcast News, THE AMERICAN ENTERPRISE, vol. 3, no. 2, at 70 (March/April 1992).

The Veto Power: How Free Is the President's Hand?, THE AMERICAN ENTERPRISE 58, vol. 2, no. 2 (March/April 1991), co-authored with Thomas A. Smith.

Spending Riders Would Unhorse the Executive, WALL STREET JOURNAL, November 2, 1989, at A18, col. 3.

How Congress Erodes the Power of the Presidency: The Appropriations Muzzle, WALL STREET JOURNAL, February 6, 1989, at A8, col. 3.

Marketplace Solution to Midair Collisions, WALL STREET JOURNAL, March 2, 1987, at 20, col. 3.

MISCELLANEOUS PUBLICATIONS

The Economics of Mail Delivery: A Comment, in GOVERNING THE POSTAL SERVICE 14 (J. Gregory Sidak, ed., AEI Press 1994).

The Appropriations Power and the Necessary and Proper Clause, 68 WASHINGTON UNIVERSITY LAW QUARTERLY 651 (1990) (questioner for symposium panel discussion).

TESTIMONY, GOVERNMENT REPORTS, AND BRIEFS AMICUS CURIAE

Direct Testimony and Cross Examination Testimony of J. Gregory Sidak on behalf of Public Service Company of New Mexico, Application of and Complaint by Residential Electric, Inc. v. Public Service Company of New Mexico, Case No. 2867, Application of Residential Electric, Inc. for a Certificate of Public Convenience and Necessity, Case No. 2868, New Mexico Public Utility Commission (Nov. 17, 1998).

Affidavit of J. Gregory Sidak on behalf of Public Service Company of New Mexico, Application of and Complaint by Residential Electric, Inc. v. Public Service Company of New Mexico, Case No. 2867, Application of Residential Electric, Inc. for a Certificate of Public Convenience and Necessity, Case No. 2868, New Mexico Public Utility Commission (filed Nov. 9, 1998).

Affidavit of Joseph Gregory Sidak on behalf of Hong Kong Telephone Company Limited, Hong Kong Telephone Company Limited v. Office of the Telecommunications Authority, High Court of the Hong Kong Special Administrative Region, Court of First Instance (filed Sept. 22, 1998).

Cross Examination Testimony of J. Gregory Sidak on behalf of the Edison Electric Institute in *Public Service Company of New Hampshire* v. New Hampshire Electric Cooperative, Inc., Federal Energy Regulatory Commission, Dkt. No. EL96-53-002 (Sept. 10, 1998).

Prefiled Direct Testimony of J. Gregory Sidak on behalf of the Edison Electric Institute in *Public Service Company of New Hampshire v. New Hampshire Electric Cooperative, Inc.*, Federal Energy Regulatory Commission, Dkt. No. EL96-53-002 (filed Aug. 27, 1998).

Affidavit of J. Gregory Sidak on behalf of PECO Energy Company, Omnipoint Corporation v. PECO Energy Company, Federal Communications Commission, No. PA 97-002 (filed Aug. 5, 1998).

Affidavit of J. Gregory Sidak, appended to comments of the Newspaper Association of America, in 1998 Biennial Regulatory Review—Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, Notice of Inquiry, Federal Communications Commission, MM Docket No. 98-35 (filed July 21, 1998).

A Report to the Minister for Communications, the Information Economy, and the Arts on the State of Competition in Australian Telecommunications Services One Year after Deregulation (June 30, 1998) (prepared for Telstra Corporation Ltd.)

Affidavit of J. Gregory Sidak, appended to Comments of Telstra Corporation Ltd. in Declaration of Local Telecommunications Services, Australian Competition and Consumer Commission (May 21, 1998).

Opinion of Law Concerning the Commission's Authority to Permit the Acquisition by CanWest Global Communications Corporation of More Than 25 Percent of the Stock of an American Broadcast Licensee, Letter to William E. Kennard, Chairman, Federal Communications Commission (May 11, 1998).

Testimony of J. Gregory Sidak, *Bell Atlantic* v. *United States*, Case No. 96CV-8657 (E.D. Pa.) (Mar. 18, 1998) (investment tax credit refund litigation).

Deposition of J. Gregory Sidak, *Bell Atlantic* v. *United States*, Case No. 96CV-8657 (E.D. Pa.) (Mar. 3, 1998) (investment tax credit refund litigation).

Affidavit of J. Gregory Sidak, appended to Comments of the United States Telephone Association in Jurisdictional Separations Reform and Referral to the Federal-State Joint Board, Notice of Proposed Rulemaking, Federal Communications Commission, CC Docket No. 80-286 (filed Dec. 10, 1997), and in Amendment to Uniform System of Accounts for Interconnection, Notice of Proposed Rulemaking, Federal Communications Commission, CC Docket No. 97-212 (filed Dec. 10, 1997).

Cross Examination Testimony of J. Gregory Sidak on behalf of PECO Energy Company, Application of PECO Energy Company for Approval of Its Restructuring Plan Under Section 2806 of the Public Utility Code, Regarding the Enron Choice Plan, Pennsylvania Public Utility Commission, Dkt. Nos. R-00973953, P-00971265 (Nov. 17, 1997).

Prefiled Testimony of J. Gregory Sidak, Application of PECO Energy Company for Approval of Its Restructuring Plan Under Section 2806 of the Public Utility Code, Regarding the Enron Choice Plan, Pennsylvania Public Utility Commission, Dkt. Nos. R-00973953, P-00971265 (filed Nov. 7, 1997).

Prefiled Testimony of J. Gregory Sidak on behalf of El Paso Electric Company, City of Las Cruces, New Mexico, Federal Energy Regulatory Commission, Dkt. No. SC97-2-000 (filed Oct. 3, 1997).

Reply Comments of J. Gregory Sidak, Rules and Policies on Foreign Participation in the U.S. Telecommunications Market, Order and Notice of Proposed Rulemaking, Federal Communications Commission, IB Dkt. No. 97-142 (filed Aug. 11, 1997).

Prefiled Rebuttal Testimony of J. Gregory Sidak, Regarding an Economic Analysis of the Appropriate Standard of Conduct That Should Govern the Relationship Between PECO's Regulated Wire Business and Its Competitive, Unregulated Generation and Other Businesses and An Economic and Constitutional Analysis of the Justness and Reasonableness of PECO's Full Recovery of Its Stranded Costs, Application of PECO Energy Company for Approval of Its Restructuring Plan Under Section 2806 of the Public Utility Code, Dkt. No. R-00973953, Pennsylvania Public Utility Commission (filed July 18, 1997).

Statement of J. Gregory Sidak on behalf of Hong Kong Telephone Company Concerning Interconnect Access Charging Principles, Submission on the Hong Kong Local Interconnect Charging Regime, OFTA Review of Statement No. 7, Carrier-to-Carrier Charging, Office of Telecommunications Authority, Hong Kong (filed May 13, 1997).

Hearings on H.R. 22, The Postal Reform Act of 1997, Subcommittee on the Postal Service of the House Committee on Government Reform and Oversight, 105th Congress, 1st Session (Apr. 16, 1997).

Prefiled Testimony of J. Gregory Sidak, Regarding an Economic and Constitutional Analysis of the Justness and Reasonableness of PECO's Full Recovery of Its Stranded Costs, Application of PECO Energy Company for Approval of Its Restructuring Plan Under Section 2806 of the Public Utility Code, Dkt. No. R-00973953, Pennsylvania Public Utility Commission (filed Mar. 26, 1997).

Affidavit of J. Gregory Sidak and Daniel F. Spulber, appended to Comments of the United States Telephone Association in Usage of the Public Switched Network by Information Service and Internet Access Providers, Notice of Inquiry, Federal Communications Commission, CC Dkt. No. 96-263 (filed Mar. 24, 1997).

Reply Affidavit of J. Gregory Sidak and Daniel F. Spulber, appended to Reply Comments of the United States Telephone Association in Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; Usage of the Public Switched Network by Information Service and Internet Access Providers, Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry, Federal Communications Commission, CC Dkt. Nos. 96-262, 94-1, 91-213, 96-263 (filed Feb. 14, 1997).

Affidavit of J. Gregory Sidak and Daniel F. Spulber, appended to Comments of the United States Telephone Association in Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Transport Rate Structure and Pricing; Usage of the Public Switched Network by Information Service and Internet Access Providers, Notice of Proposed Rulemaking, Third Report and Order, and Notice of Inquiry, Federal Communications Commission, CC Dkt. Nos. 96-262, 94-1, 91-213, 96-263 (filed Jan. 29, 1997).

Testimony of J. Gregory Sidak on behalf of GTE South Inc., Petition of AT&T Communications of the South Central States, Inc., for Arbitration of Certain Terms and Conditions of a Proposed Agreement with GTE South Inc. Concerning Interconnection and Resale Under the Telecommunications Act of 1996, Case No. 96-478, Public Service Commission of Kentucky (Jan. 14, 1997).

Cross Examination Testimony of J. Gregory Sidak on behalf of GTE North Inc., In the Matter of Sprint Communications Company L.P.'s Petition for Arbitration of Interconnection Rates, Terms, Conditions and Related Arrangements with GTE North Inc., Case No. 96-10210-TP-ARB, Public Utilities Commission of Ohio (Nov. 21, 1996).

Testimony of J. Gregory Sidak on behalf of GTE South Inc., Petition of MCI, Public Service Commission of Kentucky (Nov. 12, 1996).

Direct Testimony of J. Gregory Sidak on behalf of GTE North Inc., Petition of Sprint, Public Utilities Commission of Pemisylvania (Nov. 7, 1996).

Direct Testimony of J. Gregory Sidak on behalf of GTE Midwest Inc., Petition of MCI, Public Utilities Commission of Indiana (Nov. 1, 1996).

Direct Testimony of J. Gregory Sidak on behalf of GTE Midwest Inc., AT&T Communications of the Midwest Inc. v. GTE Midwest Inc., Iowa Utilities Board, Dkt. No. ARB-96-3 (Oct. 15, 1996).

Direct Testimony of J. Gregory Sidak on behalf of GTE North Inc., Petition of AT&T, Public Utilities Commission of Pennsylvania (filed Sept. 9, 1996).

Affidavit of J. Gregory Sidak, appended to Memorandum of Law in Support of Petition of the Energy Association of New York State in *Energy Association of New York State* v. *Public Service Commission of the State of New York*, Index No. 5830-96 (filed Supreme Ct. N.Y., County of Albany, Sept. 18, 1996).

Rebuttal Testimony of J. Gregory Sidak on behalf of Central Power and Light Company in Application of Central Power and Light Company for Authority to Change Rates, Competitive Issues Phase, Public Utility Commission of Texas, SOAH Dkt. No. 473-95-1563, PUCT Dkt No. 14965 (filed Aug. 1, 1996).

Reply Affidavit of J. Gregory Sidak, appended to Reply Comments of the United States Telephone Association in Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, Federal Communications Commission, CC Dkt. No. 96-112 (filed June 12, 1996).

Affidavit of J. Gregory Sidak, appended to Comments of the United States Telephone Association in Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services, Federal Communications Commission, CC Dkt. No. 96-112 (filed May 31, 1996).

Affidavit of Michael J. Doane, J. Gregory Sidak, and Daniel F. Spulber, appended to Reply Comments of GTE Service Corporation in Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Federal Communications Commission, CC Dkt. No. 96-98 (filed May 30, 1996).

An Empirical Analysis of the Efficient Component-Pricing Rule and Sections 251 and 252 of the Telecommunications Act of 1996, appended to Comments of GTE Service Corporation in Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Federal Communications Commission, CC Dkt. No. 96-98 (filed May 16, 1996), co-authored with Michael J. Doane and Daniel F. Spulber.

Technological, Environmental and Financial Issues Raised by Increasingly Competitive Electricity Markets, Hearings before the Subcommittee on Energy and Power of the House Committee on Commerce, 104th Congress, 2d Session (Mar. 28, 1996).

Monopoly and the Mandate of Canada Post, in Submission of the Director of Investigation and Research, Competition Bureau, to Canada Post Corporation Mandate Review Committee (Ottawa, Feb. 15, 1996).

Reply Comments of J. Gregory Sidak, Market Entry and Regulation of Foreign-affiliated Entities, Notice of Proposed Rulemaking, Federal Communications Commission, IB Dkt. No. 95-22 (filed May 12, 1995).

Comments of J. Gregory Sidak, Market Entry and Regulation of Foreign-affiliated Entities, Notice of Proposed Rulemaking, Federal Communications Commission, IB Dkt. No. 95-22 (filed Apr. 11, 1995).

The Line-Item Veto Amendment: Hearings before the Subcommittee on the Constitution of the Senate Judiciary Committee, 104th Congress, 1st Session (Jan. 24, 1995).

Competition and Regulatory Policies for Interactive Broadband Networks, in Competition Policy, Regulation and the Information Economy: Submission of the Director of Investigation and Research, Bureau of Competition Policy, to the Canadian Radio-television and Telecommunications Commission, Public Notice CRTC 1994-130, Order in Council P.C. 1994-1689 (Ottawa, Jan. 16, 1995), co-authored with Robert W. Crandall.

Line Item Veto: The President's Constitutional Authority: Hearing before the Subcommittee on the Constitution of the Senate Judiciary Committee, 103d Congress, 2d Session (June 15, 1994).

Brief of Amicus Curiae J. Gregory Sidak, Association of American Physicians and Surgeons, Inc. v. Hillary Rodham Clinton, 997 F.2d 898 (D.C. Cir. 1993), filed Apr. 5, 1993.

BAR ADMISSIONS

California (1982); District of Columbia (1989); Supreme Court of the United States (1989).

December 1998

ROBERT W. CRANDALL

CURRENT POSITION:

Senior Fellow, The Brookings Institution, 1978 - Present

ADDRESS:

1775 Massachusetts Ave., NW Washington, DC 20036

Phone No: 202-797-6291 Fax. No.: 202-797-6181 e-mail: rcrandall@brook.edu

FIELDS OF SPECIALIZATION:

Industrial Organization, Antitrust Policy, Regulation

PREVIOUS POSITIONS:

Adjunct Professor, School of Public Affairs, University of Maryland, 1987 - 1993
Deputy Director, Council on Wage and Price Stability, 1977 - 1978
Acting Director, Council on Wage and Price Stability, 1977
Adjunct Associate Professor of Economics, George Washington University, 1975 - 1977
Associate Professor of Economics, M.I.T., 1972 - 1974
Associate Professor of Economics, M.I.T., 1966 - 1972
Johnson Research Fellow, The Brookings Institution, 1965 - 1966
Instructor, Northwestern University, 1964 - 1965
Consultant to Environmental Protection Agency, Antitrust Division Federal Trade
Commission, Treasury Department, various years

EDUCATION:

Ph.D., Economics, Northwestern University, 1968 M.A., Economics, Northwestern University, 1965 A.B., Economics, University of Cincinnati, 1962

HONORS and AWARDS:

Phi Beta Kappa

MEMBERSHIPS:

American Economic Association Board of Directors, Baltimore Life Insurance Company Board of Directors, Economists Incorporated

PERSONAL DATA:

Place and Date of Birth: Akron, Ohio; February 28, 1940

Home Address:

5100 - 38th Street, NW Washington, DC 20016

PUBLICATIONS:

Books:

<u>Cable TV: Regulation or Competition</u>? (with Harold Furchtgott-Roth), Washington: The Brookings Institution, 1996.

<u>Talk is Cheap: The Promise Of Regulatory Reform in North American Telecommunications</u>. (with Leonard Waverman) Washington: The Brookings Institution, 1996.

The Extra Mile: Rethinking Energy Policy for Automotive Transportation. (with Pietro S. Nivola) Washington, DC: The Brookings Institution/Twentieth Century Fund, 1995.

Manufacturing on the Move. Washington, DC: The Brookings Institution, 1993.

After the Breakup: The U.S. Telecommunications Industry in a More Competitive Era. Washington, DC: The Brookings Institution, 1991.

<u>Changing the Rules: Technological Change, International Competition and Regulation in Communications.</u> (Edited with Kenneth Flamm), Washington, DC: The Brookings Institution, 1989.

<u>Up from the Ashes: The U.S. Minimill Steel Industry.</u> (With Donald F. Barnett), Washington, DC: The Brookings Institution, 1986.

Regulating the Automobile. (With Howard K. Gruenspecht, Theodore E. Keeler, and Lester B. Lave), Washington, DC: The Brookings Institution, 1986.

Controlling Industrial Pollution: The Economics and Politics of Clean Air. Washington, DC: The Brookings Institution, 1983.

The Scientific Basis of Health and Safety Regulation. (Ed. with Lester Lave), Washington, DC: The Brookings Institution, 1981.

The U.S. Steel Industry in Recurrent Crisis. Washington, DC: The Brookings Institution, 1981.

Articles, Reports, and Contributions to Edited Volumes:

"Telephone Subsidies, Income Redistribution, and Economic Welfare," in Roger G. Noll and Monroe E. Price, <u>A Communications Cornucopia: Markle Foundation Essays on Information Policy</u>. Washington: The Brookings Institution, 1998.

"Electric Restructuring and Consumer Interests: Lessons from Other Industries," The Electricity Journal, Volume 11, No. 1, January/February 1998.

"Is it Time to Eliminate Telephone Regulation?" in Donald L. Alexander (ed.), <u>Telecommunications Policy: Have Regulators Dialed the Wrong Number?</u>, Westport, CT: Praeger, 1997, pp. 17-30.

"Competition and Regulation in the U.S. Video Market," <u>Telecommunications Policy</u>, Vol. 21, No. 7, 1997, pp. 649-660.

"Are We Deregulating Telephone Services? Think Again." <u>Brookings Policy Brief</u>, Number 13, March 1997

"Are Telecommunications Facilities 'Infrastructure?' If They Are, So What? Regional Science and Urban Economics, 27 (1997), pp. 161-79.

"Economic Deregulation and Customer Choice: Lessons for the Electric Utility Industry," (with Jerry Ellig), Center for Market Processes, George Mason University, 1997.

"From Competitiveness to Competition: The Threat of Minimills to Large National Steel Companies," Resources Policy, Vol. 22, Nos. 1/2, March/June 1996, pp.107-118.

"Clearing the Air: EPA's Self-Assessment of Clean-Air Policy," (with Frederick H. Rueter and Wilbur A. Steger), Regulation, 1996, Number 4, pp. 35-46.

"Competition and Regulatory Policies for Interactive Broadband Networks," (with J. Greory Sidak), Southern California Law Review, July 1995.

"The Unregulated Infobahn," (with J. Gregory Sidak), Policy (New Zealand), Winter 1995.

"Managing the Transition to Deregulation in Telecommunications," in Steven Globerman, W.T. Stanbury, and Thomas A. Wilson (eds.), <u>The Future of Telecommunications Policy in Canada</u>. University of British Columbia and the University of Toronto, 1995.

"Productivity Growth in the Telephone Industry Since 1984," (with Jonathan Galst) in Patrick Harker (ed.), <u>The Service Productivity and Quality Challenge</u>, Dodrecht: Kluwer Academic Publishers, 1995, Chapter 14.

"Cable Television: Reinventing Regulation," The Brookings Review, Winter 1994, pp. 12-15.

"Explaining Regulatory Policy" (with Clifford Winston), <u>Brookings Papers on Economic Activity</u>, <u>Microeconomics</u>, 1994, pp. 1-31.

"Pricing Issues in Telecommunications," Maine Policy Review, Vol. 3, No. 1, May 1994.

"Regulatiuon and the "Rights" Revolution: Can (Should) We Rescue the New Deal?" <u>Critical Review</u>, Vol. 7 Nos. 2-3, 1993, pp. 193-204.

"Comment: Transactions Prices," <u>Price Measurement and Their Uses</u>, (Murray F. Foss, Marilyn E. Manser, and Allan H. Young, eds.), University of Chicago Press, 1993.

"Pollution Controls" in David R. Henderson (ed.), <u>The Fortune Encyclopedia of Economics</u>, New York: Warner Books, 1993.

"Relaxing the Regulatory Stranglehold on Communications," <u>Regulation</u>, Summer 1992, pp. 26-35.

"Regulating Communications: Creating Monopoly While Protecting Us From It," <u>The Brookings Review</u>, Summer 1992, Volume 10, No. 3, pp. 34-39.

"Policy Watch: Corporate Average Fuel Economy Standards," <u>Journal of Economic Perspectives</u>, Spring 1992, pp. 171-80.

"Why Is the Cost of Environmental Regulation So High?" Center for the Study of American Business. St. Louis: Washington University, Policy Study No. 110, February 1992.

- "Liberalization Without Deregulation: Telecommunications Policy During the 1980s," <u>Contemporary Policy Issues</u>, October 1991.
- "Halfway Home: U.S. Telecommunications (De)Regulation in the 1970s and 1980s," in Jack High (ed.), Regulation: Economic Theory and History. Ann Arbor: The University of Michigan Press, 1991.
- "Efficiency and Productivity," in Barry G. Cole (ed.), <u>After the Breakup: Assessing the New Post-AT&T Divestiture Era</u>. New York: Columbia University Press, 1991.
- "The Politics of Energy: New Fuel Economy Standards?" (with John D. Graham), <u>The American Enterprise</u>, March/April 1991.
- "The Clean Air Act at Twenty," Journal of Regulation and Social Costs, September 1990.
- "Fragmentation of the Telephone Network" in Paula Newberg (ed.), <u>New Directions in</u> Telecommunications Policy. Durham, NC: Duke University Press, 1989.
- "The Effect of Fuel Economy Standards on Automobile Safety," (with John D. Graham), Journal of Law and Economics, April 1989.
- "Surprises from Telephone Deregulation and the AT&T Divestiture," <u>American Economic Review</u>, May 1988, pp. 323-327.
- "The Regional Shift of U.S. Economic Activity" in Robert E. Litan, et al., American Living Standards, Washington, DC: The Brookings Institution, 1988.
- "Deregulation and Divestiture in the U.S. Telecommunications Sector" in <u>Economic</u> <u>Deregulation</u>: <u>Promise and Performance</u>. Proceedings of the 1987 Donald S. MacNaughton Symposium, Syracuse University, 1988.
- "Whatever Happened to Deregulation?" in David Boaz (ed.), <u>Assessing the Reagan Years</u>. Washington, DC: The CATO Institute, 1988.
- "Regulatory Reform: Are We Ready for the Next Phase?" in <u>The Brookings Review</u>, The Brookings Institution, Winter 1988/89.
- "Telecommunications Policy in the Reagan Era," Regulation, Washington, DC: American Enterprise Institute, 1988, Number 3, pp. 18-19.
- "A Sectoral Perspective: Steel" in Robert M. Stern, et.al. (eds.), Perspectives on a U.S.-Canadian Free Trade Agreement, Washington, DC: The Brookings Institution, 1987.

- "The Effects of U.S. Trade Protection for Autos and Steel," <u>Brookings Papers on Economic Activity</u>, 1987:2, The Brookings Institution.
- "Has the AT&T Breakup Raised Telephone Rates?" in The Brookings Review, Winter 1987.
- "Public Policy and the Private Auto," (with Theodore E. Keeler) in Gordon, et.al. (eds.), Energy: Markets and Regulation, Essays in Honor of M.A. Adelman. Cambridge, MA: MIT Press, 1986
- "Materials Economics, Policy, and Management: An Overview," with Michael B. Bever, in Encyclopedia of Materials Science and Engineering, Pergamon Press, 1986.
- "Metals Industries: International Structure," in <u>Encyclopedia of Materials Science and Engineering</u>, Pergamon Press, 1986.
- "The Steel Industry in Transition," <u>Materials and Society</u>, Pergamon Journals Ltd., Vol. 10, No. 2, 1986.
- "The Public Interest in Metals Policy," in David A. Gulley and Paul Duby (eds.), <u>The Changing World Metals Industries</u>. New York: Gordon and Breach, 1986.
- "Economic Rents as a Barrier to Deregulation," The CATO Journal, Spring/Summer 1986.
- "The Transformation of U.S. Manufacturing," <u>Industrial Relations</u>, Spring 1986."Investment and Productivity Growth in the Steel Industry: Some Implications for Industrial Policy," in Walter H. Goldberg, <u>Ailing Steel: The Transoceanic Quarrel</u>, Gower, 1986.
- "The EC-US Steel Trade Crisis," in Loukas Tsoukalis (ed.), <u>Europe</u>, <u>America</u>, and the World Economy, Oxford: Basil Blackwell, 1986.
- "Why Should We Regulate Fuel Economy at All?" in The Brookings Review, Spring 1985.
- "An Acid Test for Congress," Regulation, September/December 1984.
- "Import Quotas and the Automobile Industry: The Costs of Protectionism," <u>The Brookings</u> Review, Summer 1984.
- "Automobile Safety Regulation and Offsetting Behavior: Some New Empirical Estimates," (with John D. Graham), American Economic Review, Papers and Proceedings, May 1984.
- "The Political Economy of Clean Air: Practical Constraints on White House Review," in V. Kerry Smith, Environmental Policy Under Reagan's Executive Order: The Role of Benefit-Cost Analysis, University of North Carolina Press, 1984.

"The Marketplace: Economic Implications of Divestiture," (with Bruce M. Owen), in Harry M. Shooshan III, <u>Discounting Bell: The Impact of the AT&T Divestiture</u>, Pergamon Press, 1984.

"Environmental Policy in the Reagan Administration," (with Paul R. Portney), in Paul R. Portney (ed.), Natural Resources and the Environment: The Reagan Approach, The Urban Institute and Resources for the Future, 1984.

"The Emerging Competition in the U.S. Telecommunications Market" in <u>New_Opportunities</u> for <u>Entrepreneurship</u>, The Kiel Institute, 1984.

"Deregulation: The U.S. Experience," Zeitschrift für die gesamte Staatswissenshaft, October 1983, pp. 419 - 434.

Review of John Zysman and Laura Tyson, <u>American Industry in International Competition</u>, Science, Vol. 222, October 21, 1983.

"Air Pollution, Environmentalists, and Coal Lobby," in Roger G. Noll and Bruce M. Owen (eds.), The Political Economy of Deregulation, American Enterprise Institute, 1983.

"The Use of Environmental Policy to Reduce Economic Growth in the Sun Belt: The Role of Electric-Utility Rates" in Michael A. Crew (ed.), <u>Regulatory Reform and Public Utilities</u>, Lexington Books, 1982.

"The Cost of Automobile Safety and Emissions Regulation to the Consumer: Some Preliminary Results," (with Theodore E. Keeler and Lester B. Lave), <u>American Economic Review</u>, May 1982.

"Environmental Policy," Regulation, March/April 1982.

"Has Reagan Dropped the Ball?" in Regulation, November/December 1981.

"The Use of Cost-Benefit Analysis in Regulatory Decision-Making," Annals New York Academy of Sciences, 1981."The Deregulation of Cable Television," (with Stanley M. Besen), Law and Contemporary Problems, Duke University School of Law, Vol. 44, No. 1, Winter 1981.

"The Impossibility of Finding a Mechanism to Ration Health Care Resources Efficiently" in A New Approach to the Economics of Health Care, Mancur Olson (ed.), American Enterprise Institute for Public Policy Research, 1981.

"Pollution Controls and Productivity Growth in Basic Industries" in <u>Productivity Measurement in Regulated Industries</u>, Academic Press, 1981.

"Where is the Public Interest in Broadcasting Regulation?" in Regulation and the Future Economic Environment-Air to Ground, Charles F. Phillips, Jr. (ed.), December 1980.

"The Environmental Protection Agency," (On Saving the Kingdom: Advice for the President-Elect), Regulation, November/December 1980.

"Steel Imports: Dumping or Competition?" in Regulation, July/August 1980.

"Regulation and Productivity Growth" in <u>Proceedings: Conference on Productivity</u>, Federal Reserve Bank of Boston, Martha's Vineyard, June 1980.

"The Prospects for Regulatory Reform," <u>Government Regulation: New Perspectives</u>, Andrew Blair, ed., Pittsburgh: University of Pittsburgh, 1980.

"The Economics of the Current Steel Crisis in OECD Member Countries" in Steel in the 80's, Organisation for Economic Co-operation and Development, Paris, 1980.

"Environmental Control Is Out of Control," <u>Chemical and Engineering News</u>, Vol. 57, April 23, 1979.

"Paying for Government Policy Through the Price Level" in Clarence C. Walton (ed:), Inflation and National Survival, 1979.

"Is Government Regulation Crippling Business?" in Saturday Review, January 20, 1979.

"Federal Government Initiatives to Reduce the Price Level," <u>Brookings Papers on Economic Activity</u>, 1978:2.

"Competition and 'Dumping' in the U.S. Steel Market," Challenge, July/August 1978.

"Regulation of Television Broadcasting: How Costly is the 'Public Interest'?" in <u>Regulation</u>, January/February 1978.

"Placing a Value on the Electromagnetic Spectrum: A Suggested Approach for FCC Decision-Making," <u>Proceedings of the Conference on Telecommunications Policy Research</u>, Airlie House, 1977.

"Theoretical Issues in the Regulation of Communications Common Carriage" in <u>Rate of Return Regulation</u>, FCC Future Planning Conference, July 1976.

"The Postwar Performance of the Motion Picture Industry," <u>The Antitrust Bulletin</u>, Spring 1975.

"An Econometric Model of the Low-Skill Labor Market," (with C.D. MacRae and Lorene Y.L. Yap), The Journal of Human Resources, Winter 1975.

"The Economic Case for a Fourth Commercial Television Network," <u>Public Policy</u>, Harvard University Press, Fall 1974.

"The Profitability of Cable Television: An Analysis of Acquisition Prices," <u>The Journal of Business</u>, University of Chicago, October 1974.

"A Reexamination of the Prophecy of Doom for Cable Television," (with Lionel L. Fray), The Bell Journal of Economics and Management Science, Spring 1974.

"Monopoly," The Dictionary of American History, Charles Scribner's & Sons, 1973.

"FCC Regulation, Monopsony, and Network Television Program Costs," <u>The Bell Journal of Economics and Management Science</u>, Autumn 1972.

Study Guide for Basic Economics (with R.S. Eckaus), Little, Brown and Company, 1972.

Contemporary Issues in Economics: Selected Readings (with R.S. Eckaus), Little, Brown and Company, 1972.

"Economic Subsidies in the Urban Ghetto," (with C.D. MacRae), Social Science Quarterly, December 1971.

"The Economic Effect of Television-Network Program 'Ownership'," The Journal of Law and Economics, Vol. XIV, October 1971.

"The Decline of the Franchised Dealer in the Automobile Industry," <u>The Journal of Business</u>, University of Chicago, January 1970.

"Motor Vehicle Repair, Repair-Parts Production, and the Franchised Vehicle Dealer," <u>Hearings: The Automobile Industry</u>, U.S. Senate Antitrust Subcommittee of the Committee on the Judiciary, 1969.

"Vertical Integration and the Market for Repair Parts in the United States Automobile Industry," The Journal of Industrial Economics, Oxford: Basil Blackwell, July 1968.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

In the Matter of

GTE CORPORATION, Transferor

And

CC Docket No. 98-184

BELL ATLANTIC CORPORATION, Transferee

For Consent to Transfer of Control

DECLARATION OF JACQUES CRÉMER AND JEAN-JACQUES LAFFONT

ON BEHALF OF

GTE CORPORATION AND BELL ATLANTIC CORPORATION

DECEMBER 15, 1998

TABLE OF CONTENTS

I.	Introduction	1
II.	Exclusionary behavior – case unproven.	5
III.	Asking the right questions	11
IV.	There is no spillover effect in price exclusionary behavior.	12
V.	Non-price exclusionary behavior for competitive advantage does not induce any spillover effect.	16
VI.	The externality argument of Katz and Salop that spillover effects will increase the incentives to prevent entry is not convincing	20
VII.	There is no evidence that mergers between major ILECs will have a negative impact on the Internet.	24
3/111	Conclusion	26

I. INTRODUCTION

A. Purpose of Declaration

- 1. The large interexchange carriers ("IXCs") have filed numerous expert declarations in support of their allegations that the merger of GTE and Bell Atlantic will be counter to the public interest. In particular, the bulk of these allegations can be found in the Declaration of Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury, which relies on a declaration previously submitted by Michael L. Katz and Steven C. Salop in opposition to the SBC-Ameritech merger proceeding before this Commission.²
- 2. In our declaration, we show that the Katz-Salop analysis—which concludes that a merger between incumbent local exchange carriers ("ILECs") will induce the parties to engage in increased exclusionary behavior—is incomplete and misleading on theoretical grounds and rests on shaky empirical evidence. The allegations in the Besen-Srinagesh-Woodbury Declaration are therefore irrelevant, based as they are on an insufficient theoretical foundation. Likewise, the Commission should give little weight to other submissions that rely on arguments similar to those proposed by Katz and Salop, including the Declaration of Kenneth C. Baseman and A. Daniel Kelley,³ and the Affidavit by David L. Kaserman and John W. Mayo.⁴ We also address

Declaration of Stanley M. Besen, Padmanabhan Srinagesh, and John R. Woodbury: An Economic Analysis of the Proposed Bell Atlantic/GTE Merger (filed on behalf of Sprint Communications Company L.P., Nov. 23. 1998), hereinafter Besen-Srinagesh-Woodbury Declaration.

Declaration of Michael L. Katz and Steven C. Salop: Using a Big Footprint to Step on Competition: Exclusionary Behavior and the SBC-Ameritech Merger, Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Ameritech Corporation, Transferor, to SBC Communications Inc., Transferee, CC Dkt. No. 98-141 (filed on behalf of Sprint Communications Company L.P., Oct. 14, 1998), hereinafter Katz-Salop Declaration.

Declaration of Kenneth C. Baseman and A. Daniel Kelley (filed on behalf of MCI WorldCom, Inc., Nov. 23, 1998), hereinafter Baseman-Kelley Declaration.

⁴ Affidavit of David L. Kaserman and John W. Mayo (filed on behalf of AT&T Corp., Nov. 23, 1998), hereinafter Kaserman-Mayo Affidavit, specifically referring to its similarity with the Katz-Salop declaration at note 21, p. 21.

miscellaneous allegations made in these other declarations, which are based on an improper understanding of the literature or on erroneous facts. We conclude that, as the Katz-Salop hypothesis is deficient in both fact and theory, the Commission should dismiss the notion that this merger would lead to increased exclusionary behavior by Bell Atlantic and GTE.

B. Summary

- 3. In their declaration, Katz and Salop speculate the possible existence of a spillover effect of exclusionary behavior across markets. In particular, they argue that exclusionary behavior is prevalent among ILECs, and that this behavior generates artificial competitive advantages for incumbents and thwarts entry by competitors. Further, they argue that the merger would increase the incentives of the constituent firms to engage in exclusionary behavior because of a so-called "externality effect." We find the analysis wanting on two counts.
- 4. First, Katz and Salop do not provide empirical evidence of exclusionary behavior with a spillover effect. Moreover, the spillover itself cannot exist unless a single firm has the capacity and incentives to engage in exclusionary behavior on its own. We review the alleged evidence to this effect and, in light of the facts we have seen, find it lacking.
- 5. Second, we demonstrate the weakness of Katz and Salop's crucial theoretical allegation that the merger would increase the level of exclusionary behavior. Their analysis is incomplete, as they do not attempt to define precisely the exclusionary behavior that would lead to the spillover effect they hypothesize. We complete their analysis in two directions, discussing possible alleged, yet unproven, exclusionary tactics and a more precise analysis of the actions of different players in the "entry game." This more precise analysis shows that there is no convincing argument that the merger will increase exclusionary behavior.

6. Finally, we review miscellaneous allegations by other commenters that are based on erroneous facts, theory and analysis. We focus particularly on the allegations that the transaction will somehow allow the combined entity to dominate the Internet, demonstrating how this transaction is substantially different from the MCI WorldCom transaction and therefore does not present substantive competitive concerns in the market for Internet services.

C. Statements of Qualifications

1. Jacques Crémer

- 7. My name is Jacques Crémer. I am Professor of Economics at the École Polytechnique, specializing in industrial organization and regulation, and Directeur de Recherche au Centre National de la Recherche Scientifique (CNRS) at the University of Toulouse, where I am also Director of the Graduate Program in Economics. I was formerly Professor of Economics at Virginia Polytechnic Institute & State University, as well as Assistant Professor of Economics at the University of Pennsylvania.
- 8. I have been an Associate Editor of Rand Journal of Economics, International Journal of Industrial Economics, and the European Economics Review. I have published a number of books and articles, including: "Incentives and the Existence of Pareto-Optimal Revelation Mechanisms" (with Claude d'Aspremont and Louis-André Gérard-Varet), "Manipulation by Coalition Under Asymmetric Information: The Case of Groves Mechanisms", and "Unique Implementation in Auctions and in Public Goods Problems" (with Claude d'Aspremont and Louis-André Gérard-Varet).
- 9. I have consulted on regulatory issues for France Telecom, the World Bank, the OECD, and for the European Commission, contributing to a major survey of regulatory practices

for Directorate-General II. On behalf of GTE in the recent merger of MCI and WorldCom, I prepared a submission to the European Commission's Competition Directorate.⁵ I have an Ingénieur diplômé from the École Polytechnique in 1970, and have a M.S. in Management from the Massachusetts Institute of Technology in 1973, and a Ph.D. in Economics from the Massachusetts Institute of Technology in 1978. A copy of my curriculum vitae is attached as Attachment 1.

2. Jean-Jacques Laffont

- 10. My name is Jean-Jacques Laffont. I am Professor of Economics at the University of Toulouse, specializing in industrial organization and regulation, and a Professor at the Institut Universitaire of France. Former academic appointments include Taussig Research Professorship at Harvard University, and a Sherman Fairschild Fellowship at the California Institute of Technology. I have been president of the Econometric Society and president of the European Economic Association.
- I have been an Associate Editor of the Journal of Mathematical Economics, Journal of Economic Theory, European Economic Review, Social Choice and Welfare, and the Journal of Public Economy Theory. I have published a number of books and articles in scholarly journals, including: Incentives in Public Decision Making (with J. Green), Fundamentals of Public Economics, Economics of Uncertainty and Information, A Theory of Incentives in Procurement and Regulation (with J. Tirole), "Reciprocal Supervision, Collusion and Organizational Design" (with M. Meleu), "Collusion Under Asymmetric Information" (with D. Martimort), "Creating Competition Through Interconnection," "Access Pricing and Competition," and "Network Competition: I & II" (with P. Rey and J. Tirole).

See Jacques Crémer, Patrick Rey, and Jean Tirole, "The Degradation of Quality and the Domination of the Internet."

12. I have consulted on regulatory issues for France Telecom, Electricité de France, the World Bank, and the European Commission, contributing to a major survey of regulatory practices for Directorate-General II. I am also currently a member of the Council of Economic Analysis to the Prime Minister of France and the founder and director of l'Institut d'Economie Industrielle (Institute for Industrial Economics) in Toulouse, one of the premier academic economic research institutes in Europe. I received a degree in Engineering from the Ecole National de la Statistique et de l'Administration Economique in 1970, and a Ph.D. in Economics from Harvard University in 1975. A copy of my curriculum vitae is attached as Attachment 2.

II. EXCLUSIONARY BEHAVIOR – CASE UNPROVEN

A. Technical Considerations

- 13. Before plunging into a review of the evidence on exclusionary behavior, we consider it instructive to examine how an incumbent local exchange carrier (ILEC) might implement non-price exclusionary behavior. As we are not telecommunications engineers, we rely on the regulatory record, which is nonetheless highly instructive.
- 14. ILECs have already demonstrated through previous filings with this Commission that they cannot selectively degrade the quality of traffic transmitted to rival long distance or local operations while leaving traffic transmitted to their own affiliates unaffected. To take the most common example of alleged quality degradation, it has been shown that ILECs do not have the ability, with current technology, to add "noise" to a subscriber line only when it is being used to provide terminating access to an unaffiliated interexchange carrier (IXC).6

See Affidavit of Daniel J. Kocher on behalf of Ameritech Michigan, CC Docket No. 97-137, filed July 2, 1997, hereinafter Kocher Affidavit, and Reply Affidavit of William C. Deere on behalf of SBC Corp. And Ameritech Corp., CC Docket 98-141, filed November 12, 1998, hereinafter Deere Affidavit.

- 15. Another commonly alleged form of exclusionary behavior is "slow-rolling"—failure to provide in a timely manner interconnection, unbundled network elements ("UNEs"), or wholesale services for resale to their competitors. However, a large array of FCC regulations and provisions in the 1996 Telecommunications Act are aimed at preventing ILECs from foreclosing access to rival competitive services carriers ("CSCs").7 The U.S. regulatory framework comprehensively prohibits exclusionary behavior on the part of ILECs in the provision of required inputs to their competitors. In addition, any ILEC wanting to attempt exclusionary behavior would also have to find a way around technical obstacles and monitoring by competitors and regulators.
- 16. The buyers of inputs from ILECs are not passive consumers. Instead, they actively audit the quality of services to ensure that they are not subject to discrimination. AT&T, for instance, monitors the quality of ILEC-provided services through its Access Supplier Assessments ("ASAs").8 In its ASAs, AT&T evaluates the performance of its access vendors, including Bell Atlantic, GTE and the other Bell Companies across a wide variety of services, using pre-established "expected performance" figures to evaluate the vendor's performance.
- 17. The unbundling and local service resale mandated by the 1996 Act have significantly improved the ease of entry into local exchange markets and decreased entry-deterring sunk costs. Not only do these provisions provide further safeguards against foreclosure by ILECs, but they can also allow an entrant to counteract discrimination by self-supplying certain elements and combining them with ILEC-supplied UNEs. For example, a competitor dissatisfied with the quality of switched access could respond by unbundling the customers'

See Communications Act of 1934 (47 U.S.C. 151 et seq.)., as amended by the Telecommunications Act of 1996, Public Law 104-104—Feb. 8, 1996, 110 STAT. 56., hereinafter 1996 Telecommunications Act. The Act's safeguards require that all local exchange carriers not discriminate on the resale of their telecommunications services (251.b.1); provide number portability, dialing parity, and nondiscriminatory access to ancillary services, poles, ducts, conduits, and rights-of-way to competing providers of telephone service (251.b.2-4); and that incumbent LECs negotiate in good faith (§251.c-1); provide interconnection and nondiscriminatory access to UNEs at any technically feasible point at least equal in quality to that provided to itself (§251.c.2-3); and provide nondiscriminatory physical collocation for interconnection or access to unbundled network elements (§251.c.6).

⁸ MCI operates a similar program.

loops and combining those loops with self-supplied switching and transport. The Act specifically requires very granular unbundling of the ILECs' network.

18. UNEs and interconnection services are provided by ILECs to their competitors (CLECs, IXCs, ISPs and CSCs) pursuant to state and federally regulated tariffs, which usually specify the quality level and the timeframes within which these services must be provided. 9-10 Interconnection contracts between ILECs and their competitors can contain additional commitments on performance standards such as quality and timeliness, with direct quantitative measurements of quality, as well as private arbitration procedures to resolve disputes and determine potential damages.

B. Evidence of ILEC Discrimination and Integration

19. The behavior of ILECs that are vertically integrated into long distance suggests that there is little likelihood of the alleged discrimination, cross-subsidization, and non-cooperation. If these risks were as great as alleged by commenters, we would expect to see the harmful effects of integration on competitors of these firms. However, no such evidence exists. GTE owned the third largest IXC (Sprint) between 1983 and 1986. Starting in 1986 GTE gradually divested Sprint to United Telephone (which then renamed itself Sprint to form an integrated local/long-distance carrier). An empirical test by McChesney of interstate long distance quantities and prices did not find any evidence of discrimination resulting from GTE's ownership of Sprint.¹¹ The DOJ came to a similar conclusion in its 1986 review of the GTE-United joint-ownership of Sprint:

⁹ For example, in the Bell Atlantic South region, cages for physical collocation must be made available to entrants within 120 business days of the request (60 business days for virtual collocation). See Bell Atlantic Network Services FCC Tariff #1 Sec. 19, pp. 945-947, 13th Rev., transmitted Dec. 3, 1998.

As specified by the Telecommunications Act, Bell Atlantic (or any other ILEC) has to provide physical collocation unless it demonstrates to state authorities that these requests cannot be granted because of technical reasons or space limitations. See 1996 Telecommunications Act, 47 U.S.C. § 251.(c)(6).

¹¹ Specifically, McChesney found that GTE's ownership of Sprint did not lead to a statistically significant increase in the price of interstate long distance, as measured by the Message Telephone Service Consumer Price Index, nor did it lead to a statistically significant decrease in the quantity of interstate long distance, as measured by the

"We found no evidence, however, of any pattern of discrimination (by Sprint)

Perhaps most significant to our assessment of the consent decree's efficacy is that none of the interexchange carriers have complained to either the Department or the FCC concerning the GTOCs' provision of exchange access to them, even in response to our solicitation of such complaints."¹²

- 20. Other local exchange carriers, such as Frontier and SNET, have expanded *de novo* into long distance service, and the evidence to date does not indicate that these ILECs have acted to manipulate quality to reduce competition in the long distance market.¹³
- 21. ILECs compete with other firms, primarily CSCs, in a number of other markets, such as intraLATA (or local) toll service, high-capacity transport, ISP service and wireless. The indications from these markets strongly suggest that ILECs have not excluded their competitors. We find the experience in intraLATA toll particularly probative, as intraLATA toll service is provided in essentially the same way as interLATA interexchange service, except that the Bell Operating Companies are allowed to compete in intraLATA service. One might expect that if quality discrimination against the IXCs were possible, it would occur for the provision of competitive intraLATA service.

total quarterly interstate switched access minutes. See Fred McChesney, "Empirical Tests of the Cross-subsidy and Discriminatory-access Hypotheses in Vertically Integrated Telephony," Managerial and Decision Economics, Vol. 16, 493-505, 1995. See also Affidavit of Fred S. McChesney in Support of the Motion of Bell Atlantic Corp., BellSouth Corp., Nynex Corp., and Southwestern Bell Corp., to Vacate the Decree, Civil Action No. 82-0192 (HHG), July 6, 1994. Also see Affidavit of Robert G. Harris and Carl Shapiro in support of Pacific Telesis Group's Request for a Waiver to Permit It to Provide Interexchange Services to Customers in California, January 26, 1995, and Reply Affidavit of Robert G. Harris and Carl Shapiro, May 24, 1995, in U.S. v. Western Electric & AT&T, Civil Action No. 82-0192 (HHG), p. 4.

See Report to the Court of the Approval by the US Department of Justice, Pursuant to Paragraph VI(A) of the Final Judgment in United States v. GTE Corporation, of the Proposed Joint Venture Between GTE Corporation and United Telecommunications Inc., Civil Action No. 83-1298, June 30, 1986, p. 10.

A limited survey of the New York and Connecticut public utility commissions carried out by Gilbert and Panzar in 1997 found that no complaints had been filed by IXCs alleging quality discrimination on the part of Frontier or SNET in the provision of access. See Affidavit of Richard J. Gilbert and John C. Panzar on behalf of Ameritech Michigan, CC Docket No. 97-137, at ¶ 45, hereinafter Gilbert and Panzar Affidavit.

22. Both Bell Atlantic and GTE have lost a substantial share of intraLATA carriage to competitors, ¹⁴ especially with the implementation in certain exchanges of intraLATA toll dialing parity, which suggests an absence of effective discrimination in intraLATA toll. ¹⁵ As discussed by Crandall and Sidak, ¹⁶ an analysis of competition in the provision of voice-mail, wireless or ISP service indicates that competitors have not been excluded. They find that wireless operators affiliated with Bell Atlantic do not have higher market shares than unaffiliated competitors, and that the GTE and Bell Atlantic have rather small shares in the provision of Internet service. These findings are difficult to reconcile with a pattern of widespread and successful exclusionary behavior by ILECs.

C. Katz and Salop do not provide evidence that non-price discrimination is pervasive

- 23. Not only is there evidence that discrimination would be very difficult, but commenters fail to provide persuasive evidence to support their claim that ILEC non-price discrimination is pervasive.
- 24. For instance, Katz and Salop claim that "there is considerable evidence of exclusionary behavior" provided by Besen, Srinagesh, and Woodbury, while closer reading shows that this evidence is not at all convincing. Besen, Srinagesh and Woodbury argue that discrimination is established by the fact that Bell Operating Companies have not yet succeeded in obtaining approval for a Section 271 application. This fact is in no way a proof that exclusionary behavior is taking place, as most of the delays of Section 271 approval can be

¹⁴ See Crandall-Sidak Declaration at ¶ 32.

¹⁵ See P.S. Brandon and R. Schmalensee, "The Benefits of Releasing the Bell Companies from the Interexchange Restrictions," 15 Managerial and Decision Economics, pp. 349-364, for further discussion of the lack of evidence of anticompetitive behavior by Bell Operating Companies in intraLATA toll.

¹⁶ See Crandall-Sidak Declaration at ¶ 51, ¶ 31, ¶¶ 38-50, respectively.

¹⁷ See Katz-Salop Declaration at note 27.

¹⁸ See Besen-Srinagesh-Woodbury Declaration at p. 15

traced to the requirement that Bell Companies allow competitors seamless electronic ordering of unbundled network elements, and these electronic interfaces have proved difficult to implement. Besen-Srinagesh-Woodbury have presented no evidence that the slower than hoped Section 271 approval is due to exclusionary behavior by ILECs.¹⁹

Atlantic has proposed UNE tariffs that are not TELRIC compliant.²⁰ This evidence is hardly persuasive, because complaints by competitors can in no case be taken as persuasive evidence of discrimination, and furthermore, because Besen et. al. fail to recognize that the 1996 Act does not require UNE prices to be TELRIC compliant, but merely cost-based. And even if the allegation were true, the 1996 Act specifically set up an arbitration process with fixed timelines to assure that UNE prices would be cost-based. Finally, Besen et. al. discuss some hypothetical examples of non-price exclusionary behavior.²¹ These do not amount to evidence that this behavior exists in practice, and, as we will demonstrate below, the theory behind these hypothetical examples is likewise not convincing.

D. Conclusion: Evidence of ILEC exclusionary behavior is lacking

26. Our review indicates that there is good reason to believe that it is very difficult for ILECs to engage in exclusionary behavior, and that there is no evidence in the literature that such behavior is occurring. We conclude that the so-called "evidence" cited by Katz and Salop is devoid of any empirical foundation, and is not persuasive as to the ability of ILECs to engage in exclusionary behavior. That on its own should be sufficient to dispose of the Katz-Salop hypothesis. Nevertheless, we now show that its theoretical justification is flawed too.

¹⁹ See Peter W. Huber, Local Exchange Competition Under the 1996 Telecom Act: Red-Lining the Local Exchange Customer, November 4, 1997. Report prepared for BellSouth and SBC Corp.

See Besen-Srinagesh-Woodbury Declaration at pp. 16-17.

²¹ See Besen-Srinagesh-Woodbury Declaration at pp. 17-19.

III. ASKING THE RIGHT QUESTIONS

A. Statement of the Katz-Salop argument

- 27. Katz and Salop examine potential exclusionary behavior that an ILEC might exercise to disadvantage a CSC. The CSC may offer a wide array of services, including local or long-distance, fixed or wireless, and voice or data communications. Katz and Salop hypothesize that a spill-over effect between markets may exist, that is, assuming a CSC operates in markets A and B, if the ILEC discriminates against the CSC in market A, then the CSC is competitively disadvantaged in market B. They argue that as a result of this discrimination, the CSC would be prevented from entering both markets by the merged ILEC, whereas it would enter absent the merger.
- 28. As we have shown above, there is little or no evidence that exclusionary behavior exists at all in the present U.S. regulatory climate. Nevertheless, we will assume for purposes of argument that exclusionary behavior is possible, and show that even under this assumption the merger is not likely to increase the incentives of the parties to exclude competitors.

B. The Correct Threshold Question

29. If we accept the working hypothesis that exclusionary behavior is possible, the correct question to ask is whether the merger will increase the likelihood of exclusionary behavior by GTE and Bell Atlantic. Given that none of the commenters has argued that the merger will make new types of exclusionary behavior possible, the threshold question that must be examined is whether the merger would increase the asserted incentives to engage in pre-existing types of exclusionary behavior. We therefore need to analyze the merger's effect on incentives and opportunities for exclusionary behavior, including responses by competitors, regulators, and the excluded party.

30. In their analysis, Katz and Salop do not ask the correct questions. Specifically, they overlook the existence of regulation (state and federal regulation, statutory safeguards under the Telecom Act of 1996, antitrust scrutiny by the U.S. Department of Justice, and the possibility of private antitrust enforcement), the role of expectations, and the presence of sunk costs to entry. Once these factors are considered, a properly completed analysis predicts no change in exclusionary behavior as a result of a merger between two ILECs. In the following section of this declaration, we analyze rigorously the theoretical basis for the Katz-Salop hypothesis.

IV. THERE IS NO SPILLOVER EFFECT IN PRICE EXCLUSIONARY BEHAVIOR.

31. Exclusionary behavior can be categorized as price or non-price. Price exclusionary behavior is behavior that aims either at providing competitive advantage to the incumbent or at preventing entry by selling inputs to competitors at prices that are above cost. We deal with price exclusionary behavior first, as the analysis of this category is straightforward.

A. Regulation constrains price exclusionary behavior

1. Statutory Requirements

32. Section 251 of the Telecommunications Act requires that ILECs provide competitors access to their networks in two forms.²² Competitors can either buy basic building blocks such as interconnection services and unbundled network elements, or can instead purchase at wholesale rates entire services for resale to end-users. Rather than directly set prices, Congress prescribed a basic default rule that governs when the ILEC and its competitor are unable to reach a negotiated agreement. In such an instance, either the ILEC or the competitor can petition for compulsory arbitration under the provisions of section 252. The arbitration

Additionally, further protection against discrimination targeting long-distance carriers is provided by Sections 251(g) and 272 of the Telecommunications Act, imposing equal access, non-discrimination and access charge imputation requirements.

provisions of the Act prescribe cost-based rates for interconnection services and unbundled elements,²³ and wholesale rates for purchase of wholesale service that are based on the retail rates charged by the ILEC minus the ILEC's avoided marketing, billing, collection, and other costs.²⁴

33. In practice, when arbitration has been required, interconnection and UNEs have been priced by State commissions broadly following the FCC's long-run incremental cost methodology.²⁵ State commissions have commonly priced wholesale services by applying a standard percentage discount to the applicable retail rates (often setting one discount for business rates and another for residential rates). Although there is continuing dispute as to whether the FCC exceeded its statutory powers in its original August 1996 order, it is beyond doubt that the resale, UNE and interconnection prices set by the state commissions are not exclusionary. Local telephone companies have now successfully negotiated over 5,400 interconnection agreements, more than double the number of agreements negotiated just a year ago.²⁶

2. Price regulation is so comprehensive that prices for inputs to competitors may even be below cost

34. The comprehensive price regulation of inputs to competitors introduces the strong possibility that the effective prices of inputs to competitors are actually below cost. Wholesale services are priced at the ILEC's retail rate minus avoided cost, which ensures that wholesale services are provided to entrants below cost if retail rates are unbalanced. Moreover, the entrant can always elect to build facilities. Because the entrant will select the mode of entry which tends to minimize costs (build vs. unbundle vs. resale, or any combination thereof), and wholesale

²³ "[T]he just and reasonable rate for network elements for purposes of [interconnection and UNE pricing] (A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and (ii) nondiscriminatory, and (B) may include a reasonable profit." See Telecommunications Act of 1996, op. cit., at § 252.d.1.

²⁴ See Telecommunications Act of 1996, op. cit., at § 252.d.3.

See FCC Report & Order in the Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 96-325, Aug. 1, 1996.

²⁶ See USTA Local Competition Report, December 9, 1998. Executive Summary, p. 1.

services have serious potential for being underpriced, it is likely that the effective price for the input to the CLEC is often below the ILEC's actual cost. Conversely, it is unlikely that the effective input price to the CLEC will ever significantly exceed the ILEC's actual cost.

3. Even the opponents to the merger do not believe in price exclusionary behavior

35. Katz and Salop implicitly recognize this point by restricting their statement about price exclusionary behavior to unregulated access services. While they claim that "[f]or unregulated access services, SBC and Ameritech will have the ability to raise access prices,"27 the only example that Katz and Salop offer refers to a hypothetical future where some broadband services might not be regulated.²⁸ Furthermore, the externality model that they present is adapted (although, as we show below, misleadingly so) to non-price exclusionary behavior. Similarly, Besen, Srinagesh, Woodbury recognize that regulation essentially reduces the analysis to non-price exclusionary behavior: "Because both the FCC and the states regulate interconnection prices, Bell Atlantic and GTE may also choose to deny, delay or degrade the provisioning of inputs in their downstream rivals."²⁹ We therefore conclude that price exclusionary behavior should not be an issue given the statutory provisions of the 1996 Act and the role of federal and state regulators.

B. The merger is unlikely to increase price exclusionary behavior

36. Even if regulation were not able to lower prices to the level of costs, the merger would still not lead to an increase in any supposed price exclusionary behavior. Indeed, there is no disagreement with the fact that prices are regulated at levels far below monopoly price, and that the ILECs are therefore constrained by the prices set by regulators. The merger does nothing

²⁷ See Katz-Salop Declaration at p. 21.

²⁸ See Katz-Salop Declaration at note 29.

²⁹ See Besen-Srinagesh-Woodbury Declaration at pp. 11.

to lift this constraint, and a merged entity would also set prices at the level imposed by regulators. Price exclusionary behavior is therefore not a concern in this merger. The Commission reached this very same conclusion in the *Bell Atlantic/Nynex Order*:

"[W]e believe that price squeeze tactics are likely to fail under the circumstances presented here as a predatory tactic aimed at eliminating competition among interexchange competitor...MCI has not explained how the combined entity will reap a greater share of the benefits of a price squeeze than would the two firms separately."³⁰

- 37. Furthermore, because of regulatory response, which is overlooked by Katz and Salop, the merger could lead to *lower* interconnection prices. Regulators are more likely to examine carefully the prices set by a larger firm. Furthermore, prior to the merger, a firm that wants to enter a location in GTE's territory and complains about interconnection rates will obtain, if it prevails, a reduction in GTE rates. Given that any revision in GTE rates will likely affect its rates in other locations, it provides a positive externality to all other entrants in GTE's territory. After the merger, this effect will also extend to locations where Bell Atlantic is the incumbent. Because the incentives to enter regulatory proceedings will not have decreased, and will have increased for firms interested in entering locations where GTE is the incumbent and locations where Bell Atlantic is the incumbent, the merger can actually reduce any price exclusionary behavior, under the unproved hypothesis that such behavior can exist.
- 38. All this discussion points out a major flaw in the "formal" model of Katz and Salop. They present an equation (eqn. 7) that summarizes the gain from exclusionary behavior by the incumbent.³¹ The regulatory cost is represented by the term S(d), which represents "the expected sanctions when the ILEC engages in amount d of exclusionary behavior." In their model, this regulatory cost is the same for the merged firm as it would have been for either of the

³⁰ See Bell Ailantic NYNEX Memorandum Opinion and Order, Aug. 14, 1997, ¶ 117-118.

³¹ See Katz-Salop Declaration at p. 82.

component ILECs. One would expect it to be higher, if only because the changes in practices ordered by the regulator would be more extensive.

V. NON-PRICE EXCLUSIONARY BEHAVIOR FOR COMPETITIVE ADVANTAGE DOES NOT INDUCE ANY SPILLOVER EFFECT.

39. We now turn to a discussion of non-price exclusionary behavior, and first examine its use to acquire or reinforce competitive advantage against competitors who have already entered. We will show that the merger will not increase the prevalence of such conduct. To do so, we begin by classifying the type of exclusionary behavior along two dimensions: its verifiability and the type of communications to which it applies.

A. Classification

- 40. Some exclusionary behavior would be detectable, allowing regulators and the courts to take appropriate remedial action. On the other hand, Katz and Salop speculate that there may be some exclusionary behavior, which would not be detectable by regulators.³² It seems implausible that exclusionary behavior that cannot be detected by regulators (or reported to regulators by competitors) could be detected by consumers and thus have a meaningful impact on their purchase decisions. As discussed above, the paucity of hard evidence provided by the merger's opponents suggests that regulation handles verifiable exclusionary behavior well, and that any possible remaining exclusionary behavior must be non-verifiable.
- 41. For simplicity, consider a situation where ILEC A is present in market A. Its potential merger partner, ILEC B, is present in market B, and the CSC operates or plans to operate in both markets A and B. We will examine the exclusionary behavior that ILEC A may

³² See Katz-Salop Declaration at ¶ 52.

theoretically practice against the CSC in market A. Exclusionary behavior could (1) degrade the interconnection for communications that go from A to B through the CSC ('outbound' exclusionary behavior); (2) degrade at the same time the interconnection for communications that go from A to B and those that go from B to A through the CSC ('two way' exclusionary behavior); or (3) degrade the interconnection for communications that go from B to A through the CSC ('inbound' exclusionary behavior).³³ In the case where the CSC does not carry traffic between the two markets, but simply competes head-to-head with the ILEC in both markets for local service, the alleged exclusionary behavior could theoretically affect the CSC in (1) market A only; (2) both markets A and B; or (3) market B only.

A. Theoretical Analysis

42. Where exclusionary behavior is verifiable, any increase would lead to an increased detection rate by regulators. Regulators could then respond appropriately. Preempting this type of asserted exclusionary behavior does not require any advance action; a regulator could simply announce that it would not tolerate any increase in detected exclusionary behavior. This is precisely the approach taken by the FCC when restructuring access charges³⁴ and removing affiliate transaction requirements,³⁵ to mention just two examples, and by Judge Greene when allowing the Bell Operating Companies to enter a number of vertically related product markets,

Other communications could be considered: for instance some calls are done from consumers in market A to other consumers in market A through the CSC (for instance intraLATA long distance), or again some calls coming from or going out to third markets can be made through the CSC. It should be clear that in none of these cases the merger would have any effect.

³⁴ See Access Charge Reform Order, FCC 97-158 280-82.

³⁵ See Order In the Matter of Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services, WT Docket No. 96-162, rel. October 3, 1997.

such as information services.³⁶ Note that all that is required is a credible threat of action by the regulator.

- 43. If neither ILEC A nor ILEC B provides the type of communications that the CSC provides, then there are no incentives for exclusionary behavior, verifiable or not, before or after the merger. If ILEC A competes with the CSC before the merger on this type of communications, and ILEC B does not, then ILEC A would already have incentives to engage in the hypothetical exclusionary behavior to the maximum possible amount, as this behavior cannot be detected by the regulator. Thus, the merger would not change anything.
- 44. Thus, the only case according to the Katz-Salop theory when the merger may create an additional incentive for outbound or two-way exclusionary behavior clearly does not apply. That would be in the case where ILEC B is competing with the CSC and ILEC A is not competing with the CSC, nor is planning to compete with the CSC in the future. Both GTE and Bell Atlantic clearly have plans to compete with CSCs across all product markets. Accordingly, the merger will not provide any such additional incentives. We also point out that the hypothesis we make for the sake of argument—that ILECs have the ability and incentive to degrade outbound calls—has been rejected by the Commission:

"[C]ommenters argue that the incumbent LEC will be able to ... degrade the service of IXC competitors, by blocking calls at its own switch. Based on this record, we conclude that these concerns are not well-founded ... incumbent LECs have compelling incentives to deliver interstate calls to an IXC's POP." 37

³⁶ See Removal of Section II(D)1 Restrictions on the Provision of Information Services, United States v. Western Electric Co., Civil Action No. 82-0192 (HHG), (D.D.C. Oct. 17, 1990).

³⁷ See FCC First Report and Order, In the Matter of Access Charge Reform, Price Cap Performance Review, Transport Rate Structure, End-User Common Line Charges, Dockets No. CC 96-262, CC 94-1, CC 91-213, CC 95-72, May 7, 1997, at ¶142.

45. In the case of non-verifiable inbound exclusionary behavior ILEC A would not benefit directly from the degradation of interconnection, because the communications to which this behavior applies are communications initiated by customers of ILEC B, not customers of ILEC A. Hence, before the merger, ILEC A would not engage in any such exclusionary behavior. If ILEC B does not compete with the CSC, ILEC A will also have no incentives for exclusionary behavior after the merger. On the other hand, if ILEC B does compete with the CSC, the merger is unlikely to increase exclusionary behavior by ILEC A, as ILEC A has again, by itself, incentives for maximizing its exclusionary behavior in cases where ILEC A operates or plans to operate a service that can be accessed by customers of ILEC B. In this case, the merger would not change anything.

B. Conclusion: Non-Price Exclusionary Behavior and Spillovers

- A6. This theoretical analysis thus shows that the incentives hypothesized by Katz and Salop could only arise in the very restricted case where the exclusionary behavior practiced by ILEC A is both non-verifiable and benefits only ILEC B, not ILEC A. We note that Congress has already examined the question of whether ILECs have standalone incentives to discriminate against inbound calls, and found it wanting, thus authorizing Bell Operating Companies to provide interLATA service originating out-of-region but terminating in-region.³⁸ Similarly, we find that the commenters have not specifically identified any form of exclusionary behavior that would benefit the 'other' ILEC while not benefiting the perpetrator.
- 47. We therefore do not find that there exists—in reality—an exclusionary practice that conforms to the requirements of the Katz-Salop hypothesis. The burden is on the commenters to identify cogently a type of exclusionary practice for which this merger might realistically make a difference, a burden they have not met.

³⁸ See 1996 Telecommunications Act, 47 U.S.C. § 271 (b)(2) and (4).

VI. THE EXTERNALITY ARGUMENT OF KATZ AND SALOP THAT SPILLOVER EFFECTS WILL INCREASE THE INCENTIVES TO PREVENT ENTRY IS NOT CONVINCING.

48. We have demonstrated so far that the analysis of exclusionary behavior for competitive advantage is not costly to incumbents. We now examine the case for costly price exclusionary behavior that might be undertaken to prevent entry.

A. The Katz-Salop argument

- 49. Katz and Salop argue that the merged ILECs will have greater incentives to engage in exclusionary behavior to prevent entry by competitors. To explain their argument, we will again consider a situation in which ILEC A is the incumbent in market A, while its potential merger partner, ILEC B, is the incumbent in market B. A CSC is a potential entrant in both markets. Katz and Salop argue that exclusionary behavior by ILEC A would reduce the incentives of the CSC to enter and hence would generate "positive externalities" toward ILEC B. Before the merger, ILEC A would not take into account in its computations of profits the benefits its exclusionary behavior would generate for ILEC B. On the other hand, after the merger, it would take these benefits into account, Katz and Salop assert, and therefore would have incentives to conduct more exclusionary behavior, even if it is costly. Therefore the merger, according to Katz and Salop, would increase the equilibrium level of exclusionary behavior.
- 50. Although the argument looks convincing a priori, it does not withstand a closer analysis. The essence of their "externality argument" is that exclusionary behavior by firm A will profit firm B and vice versa. When they are owned separately, they will each decide whether or not to engage in exclusionary behavior without taking into account the benefit provided to the other. Once they have merged, they will take into account these external benefits, and therefore will supposedly have an increased incentive to exclude.

- 51. As we have shown above, there is no compelling evidence that ILECs can engage in exclusionary behavior. Even if there were compelling evidence, though, it would be extremely difficult to determine the empirical validity of an argument like the one made above. One would need to measure the cost of exclusionary behavior, and its benefits to the incumbent firms, as well as to the potential entrant. This would clearly be a formidable task. However, such a difficult empirical undertaking is not necessary because a detailed examination of the Katz and Salop theory shows that it is not robust, exaggerating the risks of exclusionary behavior because its description of the "entry game" is flawed, and not applicable to most cases of entry. Entry is an all or nothing decision. There is no such thing as a little bit of entry; either the CSC enters or it does not. In reality, although a new firm could choose different strategies for entering into a market, there is still a fixed investment that it must make to enter, and it will have to make the decision to invest or not. This is actually stressed by Katz and Salop: "[E]ven if the multiple local markets are distinct, there may be common research, product development, supporting software development, and promotional costs for a CLEC entrant." 39
- 52. Katz and Salop's analysis assumes that the incumbent firms in their theoretical model can commit to exclusionary behavior before the CSC has made the decision to enter. It is not the threat of exclusionary behavior that scares away the entrant, but the fact that exclusionary behavior has already occurred. On the other hand, in their institutional descriptions of entry, as the quote above shows, Katz and Salop stress sunk common costs. These costs are not linked to entry into a single market, and once they have been expanded, the CSC can enter both markets A and B. Therefore, the fact that these costs are incurred is a necessary condition to enter even one market and a sufficient condition to enter all.

³⁹ See Katz-Salop Declaration at p. 43.

- 53. To see this, let us be more explicit about the hypothetical sequence of events:
- (a) The CSC decides whether or not to make the investment needed to enter.
- (b) ILECs A and B decide whether or not to engage in exclusionary behavior.
- (c) The CSC decides whether or not to actually enter in the market.
- 54. The outcome of this sequence of decisions will be the same with or without merger. Consider first the situation without a merger. At the third stage, the CSC will decide to enter a market only if the profits from so doing are positive, taking into account the fact that the investment done at the first stage cannot be recovered. At the second stage, each ILEC will independently choose to engage in exclusionary behavior only if a) this makes the profits from entry negative (which implies that exclusionary behavior indeed prevents entry) and b) the costs of exclusionary behavior are less than the benefits of preventing entry (which implies that preventing entry is worthwhile). If for each ILECs at least of these conditions is not true, the CSC knows that it need not fear exclusionary behavior and will choose to enter in the first stage of the game.
- 55. Assume now that the ILECs have merged. At the third stage, the CSC will use the same criterion than without merger to decide whether to enter each of markets A and B. Indeed, at this point, given that the joint costs have already been incurred, the profit from entering one market is independent of the decision to enter or not to enter the other market. The merged entity will find it worthwhile to engage in exclusionary behavior on, say, market A if and only if a) this makes the profits from entry in market A negative and b) the costs of this exclusionary behavior are less that the benefits from preventing entry in market A. These are the same conditions under which ILEC A would have engage in exclusionary behavior absent the merger. Therefore, the CSC will know in the first stage of the game that it will face exclusionary behavior under the same conditions than without the merger, and will take the same decision.

- 56. The crucial point in the reasoning is the assumption, made by Katz and Salop, that the main impediment to entry is the necessity to recover important sunk common costs. After these costs are sunk, the link between the different markets is broken, and even a merged firm will decide whether or not to let the CSC enter a particular market by looking only at the situation in that market.
- 57. It is easy to see that in the framework we are using, the result is very general: if we keep the same structure but let the different costs and profits vary, we find in the model that there would be exclusion by a merged firm if and only if there would be exclusion when the firms act independently.
- 58. It should be stressed that the Katz-Salop hypothesis is very dependent on the assumption that the hypothetical exclusionary behavior takes place before any entry decision is taken. We have already seen that if such behavior took place afterwards, then there would be exclusion with the merger if and only if there would be exclusion without the merger. The same result holds true if exclusionary behavior and entry were to happen "at the same time." This would be the relevant framework if the CSC were preparing for entry at the same time that firms A and B were preparing exclusionary behavior, with none of these parties able to commit to any action before the others.⁴⁰
- 59. To see why the above argument holds true, assume that the profits of ILEC A depended on the actions that it takes and the actions taken by the CSC in market A. Similarly, assume that the profits of ILEC B depended on the actions that it takes and on the actions taken by the CSC in market B. The profits of the CSC would depend on the actions that it takes in

For an analysis of entry that stresses the fact that firms make simultaneous decisions in entry games, see Luís M. B. Cabral, "Entry Mistakes," CEPR Discussion Paper 1729, November 1997.

both markets as well as the actions taken by both of its competitors, with no restrictions on the way in which these actions interact with each other in its profit function.

60. Consider now an equilibrium of the game without the merger. The three firms in theory will choose optimal actions given the actions taken by the two other firms. Assume now that ILECs A and B merge, and that the CSC does not change its behavior. Because the profits of firms A and B would not depend directly on the actions taken by the other ILEC (they are in separate markets), the merged ILEC would have no incentive to change the actions taken by its two component firms. Hence, the CSC also would have no incentive to change its behavior, and the equilibrium would not be affected. 41

VII. THERE IS NO EVIDENCE THAT MERGERS BETWEEN MAJOR ILECS WILL HAVE A NEGATIVE IMPACT ON THE INTERNET.

61. Baseman et al. argue that the merger would create a risk to competition in the Internet. Their analysis is not convincing. Most of Baseman et al.'s discussion focuses on the negative consequences that would result if two ISPs owned by two ILECs succeeded in dominating the market for dial-up connections. There is very little explanation about the way in which these two ISPs would come to dominate the market, except for unsubstantiated allegations that the introduction of xDSL would exacerbate the problem of discrimination against ISPs that are not owned by ILECs. All these hypotheses are clearly at odds with the current structure of the market for dial-up connections. As shown in the Crandall-Sidak Declaration, the combination of GTE and Bell Atlantic would not form a dominant ISP,⁴² and it is extremely unlikely that the combined company could come to dominate this segment, given the existence of

Formally, we assume that the profits of the CSC are of the form $\pi^{C}(x_{A}, x_{B}, y_{A}, y_{B})$, the profits of firm A of the form $\pi^{A}(x_{A}, y_{A})$ and the profits of firm B of the form $\pi^{B}(x_{B}, y_{B})$, where x_{A} and x_{B} are the actions taken by the CSC in markets A and B respectively and y_{A} and y_{B} are the actions taken by firms A and B (these actions could be multidimensional). In the absence of the merger each, of the firms maximizes its profits.

⁴² See Crandall-Sidak Declaration at ¶¶46-48.

other ISPs which are several times larger and the numerous regulatory protections currently in place.

- 62. The analogy that Baseman et al. draw between the MCI WorldCom merger and the proposed Bell Atlantic-GTE merger is also fundamentally misleading. First, the MCI WorldCom merger yielded instantaneously a share of the backbone market of approximately 50%.⁴³ In the case of the GTE-Bell Atlantic merger, Baseman et al. can only imagine that the merger will enable the combined firm to reach market dominance over an undetermined horizon. Second, the type of network externalities is very different in the two cases, and even in the unlikely case where GTE-Bell Atlantic succeeds in dominating a large proportion of dial-up connections, the threat to interconnectivity would be limited. Dial-up customers do not connect mainly to communicate with each other. They connect to communicate with Web sites owned and managed by corporations, governments and non-profit organizations. Degrading the connection between its dial-up customers and these sites will not improve the competitive advantage of the merged firm.
- 63. If a large ISP were to pursue this targeted degradation, dial-up customers of small ISPs would not benefit from switching to the large ISP, as traffic exchanged between dial-up customers consists mainly of e-mail messages, for which the quality of interconnection will always be satisfactory. Therefore, the Crémer, Rey and Tirole selective degradation argument does not apply to ISPs, as larger ISPs would not gain a competitive advantage by degrading their own customers' connections to the Internet. Thus, even if Bell Atlantic and GTE were to dominate ISP service (which they will not), it would not be rational for them to pursue a targeted ISP degradation strategy.

⁴³ See Internet Affidavit of Robert G. Harris on Behalf of GTE in the MCI WorldCom merger, CC Docket No. 97-211, March 13, 1998, Figure 3, p. 21.

VIII. CONCLUSION

64. In this declaration, we have shown that exclusionary behavior is more difficult to implement than Katz and Salop claim. We have also shown that even if exclusionary behavior existed, the merger between two ILECs would not provide strong incentives for the combined company to engage in more exclusionary behavior. This conclusion holds both for exclusionary behavior aimed at increasing competitive advantage and preventing entry. We conclude that there is no serious evidence that the merger will lead to an increase in exclusionary behavior, and that the arguments of Katz and Salop do not present a sufficient reason to deny the application for transfer of control.

Attachment 1

Jacques Crémer Curriculum Vitae

Mailing Addresses

IDEI

Université des Sciences Sociales Place Anatole France 31042 Toulouse cedex

France

+ 33 (0)5 61 12 85 89 Fax + 33 (0)5 61 12 86 37 jcremer@cict.fr 45 Route de Pibrac 31700 Cornebarrieu France

+ 33 (0)5 61 85 89 44

Personal Data

Born in Hyères, France, May 18, 1949 French citizen, US permanent resident Social Security Number 013-48-0072 Married, three children

Education

Ingénieur diplômé de l'Ecole Polytechnique, 1970 M.S. Management, Massachussets Institute of Technology, 1973 Ph. D. Economics, Massachussets Institute of Technology, 1978

Regular Positions

Stagiaire de Recherche, Ecole Polytechnique, 1976-1978
Assistant Professor of Economics, University of Pennsylvania, 1978-1984
Associate Professor of Economics, V.P.I. & S.U., 1983-1985
Professor of Economics, V.P.I. & S.U., 1988-1989
(Director of Graduate Studies, V.P.I. & S.U., 1984-1989)
Director of Research, GREMAQ, Université des Sciences Sociales de Toulouse, 1991-present.
Professor, Ecole Polytechnique, 1996 -present.

Other Positions

Research Associate, Center for Policy Alternatives, MIT, 1973-1975 Consultant, World Bank, 1976 Chercheur visitant, Ecole Polytechnique, Paris, 1985-1986 Visiting Professor, ESSEC, 1985 Visiting Professor, Université Paris I (Sorbonne), 1986 Visiting Professor, Université Paris IX (Dauphine), 1986 Visiting Professor, Université de Toulouse, 1990-1991

Visiting Professor, Université d'Aix-Marseille, 1991

Adjunct Professor of Economics, Virginia Polytechnic Institute & State University, 1992-1995

Adjunct Director of the GREMAQ, Université des Sciences Sociales de Toulouse, 199?-

Director of the Ecole Doctorale de Sciences Economiques, Université des Sciences Sociales de Toulouse, 1995-

Director of Research, Institut d'Economie Industrielle, Toulouse, 1991-Visiting Professor, University of Southampton, 1995-

Editorial Positions

Member, Editorial Board, Journal of Comparative Economics, 1989-1991
Associate Editor, International Journal of Industrial Economics, 1993Membre du Comité de Rédaction, Annales d'Economie et de Statistiques, 1993Membre du Comité de Rédaction, Mathematical Social Sciences, 1996Associate Editor, Rand Journal of Economics, 1995Associate Editor, European Economic Review, 1997-

Grants and Awards

Summer Research Fellowship, University of Pennsylvania, Summer 1979.

Principal Investigator, National Science Foundation Grant # SES-8408942, « Two Frameworks for the Theory of Organizations: Overlapping Games & Multiparty Contrat », 15/11/84-30/4/87.

Principal Investigator, National Science Foundation Grant # SES-8722014, « Economic Theory and Corporate Culture », 15/2 88-31/7/90.

Excellence in Teaching Award 1988-89, Virginia Tech Economics Club.

« 1991 Scholar Award in Economics », Virginia Social Sciences Association.

Research Fellow of the Centre for Economic Policy Research (January 1, 1993-December 31, 1994).

Fellow of the Econometric Society (1992).

Refereeing

At least one referee report for the following journals: American Economic Review, Annales de l'INSEE, Bell Journal of Economics, Econometrica, Economic Journal, European Economic Review, International Economic Review, Journal of Comparative Economics, Journal of Economics and Business, Journal of Economic Behavior and Organization, Journal of Economic Theory, Journal of Industrial Economics, Journal of Law, Economics and Organization, Journal of Policy Modeling, Journal of Public Economics, Management Science, Mathematical Social Sciences, Quarterly Journal of Economics, Rand Journal of Economics, Review of Economic Studies; as well as proposal

reviews for the NSF and the World Bank and pre-publication book reviews for a number of publishers.

Seminars

Seminars presented in the following universities: Boston University, California Institute of Technology, CenTER (Tilburg), CEPREMAP (Paris), Columbia University (New York), CORE (Louvain la Neuve), GREQE (Marseille), London School of Economics, MIT, Northeastern University, Princeton University, Rutgers University (New Brunswick), Stanford University, Tulane University (New Orleans), University College London, University of Florida, Université de Namur, Université Laval, Université Paris IX Dauphine, Universitat Autonoma de Barcelona, University of Florida, University of Illinois at Champaign, University of Indiana, University of Michigan, University of North Carolina, University of Pennsylvania, University of Southampton, University of Texas, University of Virginia, University of Washington, University of Western Ontario, Virginia Polytechnique Institute & State University, Wesleyan University, Yale University, ainsi que dans de nombreuses conférences internationales.

Publications

« Planning with Non-Decreasing Returns to Scale », unpublished Ph. D. dissertation, MIT, 1975.

Principal Contributor, « National Support for Science and Technology, an Examination of Foreign Experience », Center for Policy Alternatives, MIT, 1975.

- « OPEC and the Monopoly Price of Oil » (with Martin L. Weitzman), European Economic Review, 8, 2, August 1976, 155-164.
- « A Quantity-Quantity Algorithm for Planning Under Increasing Returns to Scale », *Econometrica*, 45, 6, September 1977, 1339-1348.
- « Properties of the Solution Procedure » (avec Larry E. Westphal), annex to Chapter 17 « The Allocation Consequences of Interdependence under Increasing Returns to Scale » in *Industrial Investment Analysis under Increasing Returns to Scale*, Soutjesdijk A. and L.E. Westphal, eds., Oxford University Press (for the World Bank).
- « Une Analyse Econométrique de l'Effort de Recherche et Développement de l'Industrie Française » (avec Marvin Sirbu), Revue Economique, 29, 5, September 1978, 940-957.
- « A Comment on « Decentralized Planning and Increasing Returns », *Journal of Economic Theory*, 19, 1, October 1978, 217-221.
- « On Hotelling's Formula and the Use of Permanent Equipment in the Extraction of Natural Resources », International Economic Review, 20, 2, June 1979, 317-324.
- « A Partial Theory of the Optimal Organization of a Bureaucracy », Bell Journal of Economics, Autumn1980, 11, 2, 683-693.

- « Prices vs. Quantities in Economics Planning: A Survey », in *Mathematical Programming* and its Economics Applications, G. Castellani and P. Mazzolini, eds., Angeli, Milano, 1981.
- « On the Efficiency of a Chinese-type Point System », Journal of Comparative Economics, 6, 4, December 1982, 343-352.
- « A Simple Proof of Blackwell's « Comparison of Experiments » Theorem », Journal of Economic Theory, 27, 2, August 1982, 439-443.
- « The Discrete Heal Process with Intermediate Goods », Review of Economic Studies, L, 2, April 1983, 383-391.
- « The Interdependence of Investment Decisions' Revisited » (avec Larry E. Westphal), in *Economic Structure and Performance, Essays in Honor of Hollis B. Chenery*, M. Syrquin, L. Taylor, and L. Westphal, eds., Academic Press, 1984, 543-572.
- « The Economics of Repeat Buying », Rand Journal of Economics, 15, 3, Autumn 1984, 396-403.
- « A Sequential Solution to the Public Goods Problem » (with Mike Riordan), Econometrica, 53, 1, January 1985, 345-362.
- « Optimal Selling Strategies under Uncertainty for a Discriminating Monopolist when Demands are Interdependent » (with Richard P. McLean), *Econometrica*, 53, 2, March 1985.
- Review of «Tinbergen Lectures on Organizational Theory» by Martin J. Beckmann, *Journal of Economic Literature*, XXIII, 3, September 1985, 1235-1236.
- « Cooperation in Ongoing Organizations », Quarterly Journal of Economics, 101, 1, February 1986, 33-49.
- « Halte aux Manipulations Rhétoriques! », Annales des Mines, série Gérer et Comprendre, number 4, September 1986, 63-64.
- « On Governing Multilateral Transactions with Bilateral Contracts » (with Mike Riordan), The Rand Journal of Economics, 18, 3, Automne 1987, 436-451.
- « Review of « Multicountry Investment Analysis » by B.M. Mennes and A. Stoutjesdijk », *Journal of Development Economics*, 26, 2, August 1987, 419-422.
- « Auctions with Contingent Payments: A Comment », American Economic Review, 77, 4, September 1987, 746.
- «Full Extraction of the Surplus in Bayesian and Dominant Strategy Auctions» (with Richard P. McLean), Econometrica, 56, 6, November 1988, 1247-1258.
- « Deux Procédures de Planification pour Toutes Economies » in Mélanges en l'honneur d'Edmond Malinvaud, Economica, Paris, 1988, English transaltion: « Two Planning

- Procedures for all Economies » in Essays in Honor of Edmond Malinvaud, vol 1, Microeconomics, Champsaur et al, eds., MIT Press, Cambridge, 1990.
- « Common knowledge and the coordination of economic activities » in *The Firm as a Nexus of Contracts*, M. Aoki, B. Gustafsoon, and O. Williamson, eds., European Sage, 1989.
- « The Rise and Fall of Oil Prices: A Competitive View » (with Djavad Salehi-Isfahani), Annales d'Economie et de Statistiques, no 15/16, July-December 1989, 427-454.
- « Incentives and the Existence of Pareto-Optimal Revelation Mechanisms » (with Claude d'Aspremont and Louis-André Gérard-Varet), *Journal of Economic Theory*, 51, 2, August 1990, 233-254.
- « Contrats et Marchés » (avec Claude d'Aspremont et Louis-André Gérard-Varet), in Encyclopédie Economique, X. Greffe, J. Mairesse, and J.L. Reiffers, eds., Economica, Paris 1990.
- Models of the Oil Market, with Djaval Salehi-Isfahani, Harwood Academic Publishers, Postrasse, 1991.
- « How should you do Sensitivity Analysis? » in *Theoretical Foundations of Development Planning*, Shri Bhagwan Dahiya, ed., Vedam Books International, New Delhi, 1991.
- « Review of « Microeconomic Theory » by David M. Kreps » Managerial and Decision Economics.
- « Duopoly with Employee Controlled and Profit Maximizing Firms: Some General Results » (with Helmuth Cremer), *Journal of Comparative Economics*, 16, 1, March 1992, 241-258.
- « Gathering information before signing a contract » (with Fahad Khalil), American Economic Review, 82,3, June 1992, 566-578.
- « Mécanismes Bayésiens incitatifs: un survol informel de quelques résultats récents » (with C. d'Aspremont and L.A. Gérard-Varet), Annales d'Economie et Statistiques, 25/26, January/June 1992, 151-164.
- « Corporate Culture: Cognitive Aspects », Industrial and Corporate Change, 3, 2, 1993, 351-386.
- « Employee Control and Oligopoly in a Free Market Economy » (with Helmuth Cremer), Annales d'Economie et de Statistiques, 33, January/March 1994, 29-50.
- « L'apport des théories économiques récentes à la planification indicative » (with Helmuth Cremer), Revue Economique, numéro hors série, 1994, 57-74.
- Making Sense of Subsidiarity: How much contralization for Europe? (with D. Begg, J.P. Danthine, J. Edwards, V. Grilli, D. Neven, P. Seabright, H.-W. Sinn, A. Venables, C. Wyplosz), Center for Economic Policy Research, Londres, 1993.

- « Gathering information before the contract if offered: The case with two states of nature » (with Fahad Khalil), European Economic Review, 38, 1994, 675-682.
- « The Value of Large Extensive Form Games » Games and Economic Behavior, 7, 1994, 309-317.
- « Integration verticale: vers un guide pour le praticien », Revue d'Economie Industrielle, numéro Hors-Série, « Economie Industrielle: Développements récents », 1995, 193-214.
- « Manipulation by Coalition Under Asymmetric Information: The Case of Groves, Mechanisms », Games and Economic Behavior, 1996, 13, 39-73.
- « Arm's Length Relationships », Quarterly Journal of Economics, CX, 2, 1995, 275-296.
- « Towards an economic theory of incentives in Just in Time manufacturing », European Economic Review, 1995, 39, 432-439.
- « Comment on Edward P. Lazear, « Corporate Culture and the Diffusion of Values » », pp. 134-140, in *Trends in Business Organization: Do Participation and Cooperation Increase Competitiveness*?, Siebert, Horst, ed. J.C.B; Mohr (Paul Siebeck), Tübingen, 1995.
- « In or Out? Centralization by Majority Vote » (with Tom Palfrey), European Economic Review, 1996, 40, 43-60.
- « Decentralizing Public Services: what can we learn from the Theory of the Firm? », Revue d'Economie Politique, 1996, 106, 37-60.
- « L'information dans la théorie des organisations », in « Economie de l'information : les enseignements de la théorie économique », ed. Pascal Petit, La Découverte, Paris, 1998, 277-292.
- « Contracts and productive information gathering » (with Fahad Khalil and Jean-Charles Rochet), forthcoming in *Games and Economic Behavior*.
- « Unique implementation in auctions and in public goods problems » (with Claude d'Aspremont and Louis-André Gérard-Varet », forthcoming in Games and Economic Behavior.
- « Strategic information gathering before a contract is offered » (with Fahad Khalil and Jean-Charles Rochet », forthcoming in *Journal of Economic Theory*.

Working papers

- « A theory of vertical integration based on monitoring costs »
- « Correlation, independence and Bayesian implementation » with Claude d'Aspremont and Louis-André Gérard-Varet.
- « Political Confederation » with Thomas R. Palfrey

Jean-Jacques Laffont

11, Chemin des Tuileries 31770 COLOMIERS

Tel.: 61.78.69.22

EDUCATION

Harvard University Ph. D., Economics; Wells Prize – 1975

University of Paris

Third Cycle of Doctoral Studies in Applied Mathematics – 1972

D.E.A. Mathematical Economics – 1970

Diploma from the National School of Statistics and Economic Administration—1970

D.E.A. Stochastic Analysis – 1969

University of Toulouse - 1968

M.A., Mathematics

B.A., Economic Science

PRESENT POSITION

Université de Toulouse

Position:

Professor

Period:

1979 - present

Position:

Professor in l'Institut Universitaire de France

Period:

1991 - present

Ecole des Hautes Etudes en Sciences Sociales

Position:

Director of Research

Period:

1980 - present

PROFESSIONAL EXPERIENCE

California Institute of Technology

Position:

Sherman Fairschild Fellow

Period:

1987 - 1988

Australian National University

Position:

Visiting Scholar

Period:

Summer 1988

Harvard University

Position:

Taussig Research Professor

Period:

Fall 1988

University of Pennsylvania

Position:

Visiting Professor

Period:

1980

Université de Toulouse

Position:

Lecturer

Period:

1978 - 1979

Université d'Amiens

Position:

Professor

Period:

1977 - 1978

Centre National de la Recherche Scientifique

Position:

Director of Research

Period:

1976 - 1977

Paris, Ecole Polytechnique

Position:

Lecturer

Period:

1975 - 1987

Paris, Université Dauphine

Position:

Teaching Assistant-- Mathematics

Period:

1970 - 1972

Centre National de la Recherche Scientifique

Position:

Associate Researcher

Period:

1975 - 1976

Professional Associations

1978 Fellow of the Econometric Society-

1976 – 1985 Regional Advisor for France and Spain in the Econometric Society

1984 – 1985 President of the European Program Committee of the Econometric Society -

1984 – present Member of the Advisor Counsel of the Econometric Society -

1982 - present Member, Committee of Directors of the French Association of Economic Science

1985 – present Member of the Counsel of the European Economic Association

1990 – 1991 Vice-President of the Econometric Society

1992 President of the Econometric Society

1990-1994 President of the European Committee of the Econometric Society

1996-1997-1998 Vice-President, President Elect, President - European Economic Association - 1996-present Member, Directors Committee of the French Association of Economic Science

Administrative Positions

1981 – 1987	Director of the UA C.N.R.S. 947 -
1983 – 1986	Member of the University Counsel of Superiors -
1984	President of the Board of Qualification in Quantitative Econonomic Methods of the Universities of Tunisia
1981 – 1987	Director of the Center of Economic Research and Statistics at the University of
	Toulouse and the School of Advanced Studies in the Social Sciences
1986 – 1987	Chair of the Department of Economists and Statisticians -
1990 - present	Director of the Institute of Industrial Economics
1993 – present	Vice-President of the Scientific Counsel in Toulouse I
1992 - present	Director of Scientific, Social, Judicial and Economic Research at CCRDT Mid-
-	Pyrenees
1997 - present	Member of the Counsel of Economic Analysis of the Prime Minister, Advisor of
-	Economic Analysis to the Prime Minister, France
Awards	

1990	Silver medal of C.N.R.S.
1991	Chevalier of the Legion of Honor
1991	UAP Scientific Laureate
1991	Honorary Member of the American Economic Association
1993	Foreign Honorary Member of the Academy of Arts and Sciences
1993	Prize Yrjö-Jahnsson of the Association of European Economics
1993	Economist of the Year, Nouvel Economiste
1996	Rossi Prize of the French Institute
1996	Prize of the Academy of the Jeux Floraux de Toulouse
1997	Utility Research Center Distinguished Award, University of Florida

PUBLICATIONS

Books

Translation of Théorie de l'équilibre général J.Quirk and R. Saposnick, Dunod, (with G. Laroque), 1974.

Effets externes et théorie économique Editions du C.N.R.S., 1977.

Incentives in public decision making, (with J. Green), North-Holland, 1979.

Editor, Aggregation and revelation of preferences North-Holland, 1979.

Essays in economics of uncertainty Harvard University Press, 1980.

Fondements de l'économie publique Economica, 198, Spanish Edition, 1982, M.I.T. press revised ed. 1988.

Economie de l'incertain et de l'information Economica, 1985, M.I.T. press revised ed. 1988.

Co-editor, Dynamique, information incomplète et stratégies industrielles Economica, 1988, English Edition Basil-Blackwell.

Co-editor, Microeconometrics, Surveys and Applications Basil-Blackwell, 1990.

Editor, Advances in Economic Theory, Proceedings of the 5th World Congress of the Econometric Society, Barcelona, 2 Volumes, Cambridge University Press, 1992.

A Theory of Incentives in Procurement and Regulation (with Jean Tirole), MIT Press, 1993

Price Controls and the Economics of Institutions in China (with Claudia Senik-Leygonie), Development Centre Studies, Organisation for Economic Cooperation and Development Publications, 1997.

Articles

- "Note sur le concept de noyau dans une économie avec effets externes", Bulletin de Mathématiques Economiques, Université de Paris IX.
- "Effets externes et théorie de l'équilibre général", (with G. LAROQUE),

 Cahiers du Séminaire d'Econométrie, C.N.R.S., Paris.

"Sur la cohésion économique d'une société", l'Actualité Economique, Montréal.

"Une note sur la compatibilité entre rendements croissants et concurrence parfaite", Revue d'Economie Politique, Paris.

- 1973 Commentaire sur "Dualité microéconomique et théorie du second best", Revue Canadienne d'Economique.
- "Efficient estimation of nonlinear simultaneous equations with additive disturbances",
 (with D. JORGENSON),

 Annals of Social and Economic Measurement, N.B.E.R.

1975 "First order certainty equivalent with instrument dependent randomness", Review of Economic Studies.

"On moral hazard in general equilibrium theory", (with E. HELPMAN),

Journal of Economic Theory.

"Optimism and experts against adverse selection in a competitive economy", Journal of Economic Theory.

"Macro-economic constraints, economic efficiency and ethics: an introduction to Kantian economics", *Economica*.

"Information asymétrique et théorie de l'équilibre", Revue d'Economie Politique.

"Une note historique sur les effets externes", L'Actualité Economique, Montréal.

"Existence d'un équilibre général de concurrence imparfaite : une introduction", (with G. LAROQUE), Econometrica.

"La théorie économique de l'auto-protection", La Revue Economique.

"Decentralization with externalities", European Economic Review.

"Collective factors of production under uncertainty", *Journal of Public Economics*.

"Courts against moral hazard", Journal of Mathematical Economics.

"More on price versus quantities", Review of Economic Studies.

"Risk, stochastic preference and the value of information: a comment", Journal of Economic Theory.

"Partial equilibrium approach to the free rider problem", (with J. GREEN and E. KOHLBERG), Journal of Public Economics.

"Méthodes d'estimation pour les modèles d'équilibre avec rationnement",

(with A. MONFORT), Annales de l'I.N.S.E.E.

"Incentive versus information costs in public decision making", (with J. GREEN),

Public Choice.

"On the revelation of preferences for public goods", (with J. GREEN),

Journal of Public Economics.

"Characterization of strongly individually incentive compatible mechanisms for the revelation of preferences for public goods", (with J. GREEN), Econometrica, 45, 427-438.

"Disequilibrium econometrics for loans markets", (with R. GARCIA), *Econometrica*.

"Révélation des préférences pour les biens publics. Première partie. Caractérisation des mécanismes satisfaisants", (with J. GREEN),

Cahiers du Séminaire d'Econometrie.

"A note on the Cramer-Rao bound in non linear systems", Annals of Social and Economic Measurement.

"Advantageous reallocation of initial resources", (with R. GUESNERIE),

Econometrica.

"A new incentive compatible mechanism for the production of public goods", (with J. GREEN), Scandinavian Economic Journal.

"Sampling approach to the free rider problem", in Essays in Public Economics, A Sandmo (ed.) Lexington Books, 95-114.

1979 "Taxing price makers", (with R. GUESNERIE), Journal of Economic Theory, 19, 423-455.

"On coalition incentive compatibility", (with J. GREEN), Review of Economic Studies, 46, 243-254.

"Satisfactory mechanisms for environments with consumption lower bounds", (with J. GREEN),

Journal of Economic Theory.

"A general equilibrium entrepreneurship theory on the firm based on risk aversion", (with R. KIHLSTROM),

Journal of Political Economy.

"Calcul économique de la publicité frauduleuse", (with M. BOYER and R. KIHLSTROM), Actualité Economique.

"A differentiable approach to expected utility maximizing mechanisms", (with E. MASKIN), paru dans "Aggregation and Revelation of Preferences", North-Holland.

"Disequilibrium econometrics in dynamic models", (with A. MONFORT),

Journal of Econometrics.

"Planning with externalities", (with P. SAINT-PIERRE), International Economic Review.

"On the difficulty of attaining distributional goals with imperfect information about consumers",

(with E. MASKIN),

Scandinavian Economic Journal.

"A differentiable approach to dominant strategy mechanisms", (with E. MASKIN),

Econometrica 48, 1507-1520.

"Disequilibrium econometrics in multiple equation systems", (with C. GOURIEROUX and A. MONFORT), *Econometrica*.

"Coherency conditions in simultaneous linear equation models with endogenous regimes",

(with C. GOURIEROUX and A. MONFORT), *Econometrica*.

"On the backward-forward procedure", (with C. GOURIEROUX and A. MONFORT), *Economic Letters*.

"Optimal reservation price in the Vickrey auction", (with E. MASKIN), Economic Letters, 6, 309-313.

"Dynamics of disequilibrium with inventories and anticipatory price setting", (with J. GREEN),

European Economic Review.

"Théorie des incitations : un exemple illustratif", Revue d'Economie Appliquée.

"Economie publique et information imparfaite", Revue Economie.

"Test of the equilibrium versus disequilibrium hypothesis: a comment", (with C. GOURIEROUX and A. MONFORT),

International Economic Review.

"Asymétrie d'information et les trois marchés de l'assurance", The Geneva Papers on Risk and Insurance.

"Modèles linéaires avec anticipations rationnelles", (with C. GOURIEROUX and A. MONFORT), Cahiers du Séminaire d'Econométrie.

1982 "A competitive model of a stock market", (with R. KIHLSTROM), in Economics of Information and Uncertainty, Mc Call ed.

"Nash implementation and dominant strategy implementation", (with E. MASKIN),

Journal of Mathematical Economics.

"Rational expectations in dynamic linear models: analysis of the solutions", (with C. GOURIEROUX and A. MONFORT), Econometrica.

"Theory of incentives: an overview", (with E. MASKIN), in *Advances in Economic Theory*, W. Hildenbrand ed., Cambridge U.P.

"On the robustness of dominant strategy mechanisms", (with R. GUESNERIE),

Journal of Mathematical Economics, 10, 5-15.

"A test of the equilibrium hypothesis based on inventories", (with G. DUCOS and J. GREEN), European Economic Review.

"A characterization of S.L.I.I.C. planning procedures with public goods", (with E. MASKIN),

Review of Economic Studies, 50, 171-186.

"Contractual equilibrium with free entry", (with R. KIHLSTROM),

Ouarterly Journal of Economics.

"The nonexistence of a free entry Cournot equilibrium in labor managed economies", (with M. MOREAUX), *Econometrica*, 51, 455-462.

"Risk taking and taxation", (with R. KIHLSTROM), Journal of Public Economics.

"Tarification au coût marginal ou équilibre budgétaire", (with X. FREIXAS), Annales de l'I.N.S.E.E., 51, 65-88.

"La théorie des incitations", *Skepsis*, Lausanne.

"Révision adaptative des anticipations et convergence vers les anticipations rationnelles", (with C. GOURIEROUX and A. MONFORT),

Economie appliquée.

"A second best approach to incentive compatibility", (with E. MASKIN),

Bayesian Economics, R. Kihlstrom and M. Boyer ed...

"On the irreversibility effect", (with X. FREIXAS), in Bayesian Economics, R. Kihlstrom and M. Boyer ed...

"Misleading advertising", (with R. KIHLSTROM and M. BOYER), Bayesian Economics, R. Kihlstrom and M. Boyer ed..

"Large-market Cournot equilibria in labor managed economies", (with M. MOREAUX), *Economica*, 52, 153-165.

"Indirect public control of self managed monopolies", (with R. GUESNERIE),

Journal of Comparative Economics, 8, 139-158.

"Public control of a labor managed firm under incomplete information", (with R. GUESNERIE), the *Performance of Public Entreprises*.

"Information imparfaite et rationalité collective", Revue Economique, 163-176.

"Econométrie du déséquilibre sur données microéconomiques", (with M.B. BOUISSOU and Q. VUONG), Annales de l'I.N.S.E.E., 55-56, 109-150.

"Participation constraints in the Vickrey auction", (with J. GREEN),

Economic Letters.

"Control of public firms under incomplete information", (with R. GUESNERIE),

Journal of Public Economics.

"Stock et déséquilibre : une analyse comparative et internationale", (with G. DUCOS),

Annales de l'I.N.S.E.E., 55-56, 183-201.

"Fix price models: a survey of recent empirical work", in *Frontiers of Economics*, K. Arrow and S. Honkapohja ed., 328-368.

"On the welfare analysis of rational expectations equilibria", *Econometrica*, 53, 1-29.

"Average cost pricing versus marginal cost pricing under moral hazard", (with X. FREIXAS),

Journal of Public Economics, 26, 135-146.

"Price-quantity duality in planning procedures", (with J. C. ROCHET), Social Choice and Welfare, 2, 311-322.

"Incitations dans les procédures de planification", *Annales de l'I.N.S.E.E.*, 58, 3-36.

1986 "Alternative communication systems: centralization versus interchange of information",

(with J. GREEN),

in Volume in Honor of K. ARROW, Ch. 11, 255-270.

"Partially verifiable information and mechanism design", (with J. GREEN). Review of Economic Studies, 53, 447-456.

"Test of non-causality under Markov assumptions for qualitative panel data". (with M.B. BOUISSOU and O. VUONG). Econometrica, Vol. 54, 395-414.

"Disequilibrium econometrics on micro data", (with M.B. BOUISSOU and Q. VUONG), Review of Economic Studies, Vol. 53, 113-124.

"Incentive theory with data compression", (with J. GREEN), in Volume in Honor of K. ARROW, Ch. 10, 239-253.

"Using cost observability to regulate firms", (with J. TIROLE), Journal of Political Economy, Vol. 94, 614-641.

"Une théorie normative des contrats Etat-Entreprises, (with J. TIROLE), Annales d'Économie et statistique, Vol. 1, 107-132.

"Bordeaux contre gravier: une analyse par les anticipations rationnelles", (with M. MOREAUX), in Ressources Naturelles et Théorie Economique, G. Gaudet and P.Lasserre ed., p. 231-253.

1987 "Posterior implementability", (with J. GREEN), Econometrica, 55, 69-94.

> "Le risque moral dans la relation de mandat", Revue Economique, 38, 5-23.

"Toward a normative theory of incentive contracts between government and private firms",

The Economic Journal, 97, 17-31.

"Symétrie et équilibre concurrentiel", (with L. A. GERARD-VARET), Cahiers de l'ISEA.

"Comparative statics of the optimal dynamic incentive contract", (with J. TIROLE), European Economic Review, 31, 901-926.

"Auctioning incentive contacts", Journal of Political Economy, 95, 921-937.

"Optimal taxation of a discriminating monopolist", Journal of Public Economics, 33, 137-156,

Articles "Externalités" et "Révélation des Préférences" dans Encyclopédie Palgrave.

"Limited communication and incentive compatibility", (with J. GREEN),
Ch. 11, 308-329 in *Volume in Honor of L. Hurwicz*,
T. Groves, R. Radner S. Reiter ed., University of Minnesota Press.

"Incentive compatibility of insurance contracts and the value of information", (with J.P. CRESTA),

The Journal of Risk and Insurance, 54, 520-540.

"Optimal Nonlinear Pricing with Two-Dimensional Characteristics", (with E. MASKIN and J.C. ROCHET), Ch. 8, 256-266 in *Information, Incentives, & Economics Mechanisms, Volume in Honor of L. Hurwicz,*T. Groves, R. Radner, S. Reiter ed. University of Minnesota Press.

"Incentives and the allocation of public goods", Ch. 10 in *Handbook of Public Economics*, Feldstein, M. and A. Auerbach, editeurs, North-Holland.

"Monopoly with asymmetric information about quality", (with E. MASKIN), European Economic Review, 31, 483-489.

"Une analyse économique de l'usage de faux prix réguliers en publicité", (with M. BOYER), Actualité Economique.

"The dynamics of incentives contracts", (with J. TIROLE),

Econometrica, 56, 1153-1175.

"Repeated auctions of incentive contracts, investment, and bidding parity with an application to takeovers", (with J. TIROLE),

Rand Journal of Economics, 19, 516-537.

"Testing the democratic hypothesis in the provision of local public goods", (with Y. ARAGON, J. Le POTTIER), Journal of Public Economics, 36, 139-151.

"Sunspot equilibria in finite horizon models", (with R. GUESNERIE), 117-144, *Volume en l'honneur de Ed. Malinvaud*, Economica and MIT Press.

"Optimal banking contracts and macroeconomics", (with X. FREIXAS), 381-412. Volume en Honneur de Ed. Malinvaud.

"Hidden gaming in hierarchies: Facts and models", *Economic Record*, december, 295-306.

"Test de l'hypothèse démocratique dans les décisions budgétaires communales", (with Y. ARAGON, J. Le POTTIER), Revue Economique, 39, 405-420.

"Equilibre bayésien parfait",

Ch. 3 dans "Dynamique, Information Imparfaite et Stratégies Industrielles", A.A. Gremaq ed. Economica.

"Stratégie de prix limite",

Ch. 9 dans "Dynamique Information Imparfaite et Stratégies Industrielles", A.A. Gremaq éditeur, Economica.

"Stock market portfolios and the segmentation of the insurance market", (with J.C. ROCHET), Scandinavian Journal of Economics, 90(3), 435-447.

"Expanding the informativeness of the price system with law", (with M. BOYER),

Canadian Journal of Economics, 22, 217-227.

[&]quot;Existence of a spatial equilibrium",

(with A. GRIMAUD), Journal of Urban Economics, 25, 213-218.

"A brief overview of the economics of incomplete markets", *Economic Record*, 54-65.

"Rational expectations with imperfect competition : A Bertrand - Edgeworth example",

(with E. MASKIN),

Economic Letters, 30, 269-274.

"The efficient market hypothesis and insider trading on the stock market", (with E. MASKIN),

Journal of Political Economy, 98, 70-93.

"Adverse selection and renegotiation in procurement", (with J. TIROLE), Review of Economic Studies, 57, 597-626.

"Analysis of hidden gaming in hierarchies", Journal of Law, Economics and Organization, 4(2), 301-324.

"The regulation of multiproduct firms: Part I", (with J. TIROLE),

Journal of Public Economics, 43, 1-36.

"The politics of government decision making: Regulatory institutions", (with J. TIROLE),

Journal of Law, Economics and Organization, 6, 1-32.

"Optimal bypass and creamskimming", (with J. TIROLE),

American Economic Review.

"Competition on many fronts: A stackelberg signaling equilibrium", (with J. GREEN),

Games and Economic Behavior, 2, 247-272.

"Auction design and favoritism", (with J. TIROLE), International Journal of Industrial Organization.

"Bypass and creamskimming", (with J. TIROLE), American Economic Review, 80, 1042-1061.

1991 "Privatization and incentives",

(with J. TIROLE), The Journal of Law, Economics and Organization, 7, 84-105.

"The politics of government decision making: A theory of regulatory capture", (with J. TIROLE),

Quarterly Journal of Economics, 106, 1089-1127.

"Provision of quality and power of incentive schemes in regulated industries", (with J. TIROLE),

Volume in Honor of J. Drèze, Chapter 8, in Equilibrium Theory and Applications: Proceedings of the Sixth International Symposium in Economic Theory and Econometrics, ed. W. Barnett, B. Cornet, C. d'Aspremont, J. Gabszewicz and A. Mas-Colell, Cambridge University Press, 161-193.

"Nouvelles formes de réglementation", Communications et Stratégies, n° 4, 15-29.

"Information and regulation", Chapter 11 in K. Arrow, ed., Issues in Contemporary Economics, Vol. 1, Macmillan, p. 186-197.

"Concurrence spatiale et distorsions de localisation en information incomplète", (with M. BOYER, P. MAHENC, M. MOREAUX), Revue Economique, 6, 1047-1088.

"Auction design and favoritism", (with J.TIROLE),
International Journal of Industrial Organization, 9, 9-42.

"Should governments commit", (with J.TIROLE),

European Economic Review, 36, 345-353.

"Cost padding, auditing and collusion", (with J.TIROLE),

Annales d'Economie et Statistique, 25/26, 205-226.

"Renegotiation and the form of efficient contracts", (with J.GREEN),

Annales d'Economie et Statistique, 25/26, 123-150.

"Econometric analysis of collusive behavior", (with F. GASMI and Q. VUONG),

Journal of Economics and Management Strategy, 2, 277-301.

1993 "Regulation by duopoly",

(with E. AURIOL), Journal of Economics and Management Strategy, 3, 507-533.

"Cartelization by regulation", (with J. TIROLE), Journal of Regulatory Economics, 5, 111-130.

"A propos de l'émergence de la théorie des incitations", Revue Française de Gestion, 96, 13-19.

"Structural econometrics analysis of descending auctions", (with Q. VUONG), European Economic Review, 37, 329-341.

"Nouvelles formes de réglementation", L'Actualité Economique, 69, 3-15.

"The new economics of regulation ten years after", *Econometrica*, vol. 62, n° 3, 507-537.

"Environmental policy, compliance and innovation", (with J. TIROLE), European Economic Review, 38, 555-562.

"Regulation of pollution with asymmetric information", in T. Graham-Tomasi and Serguson, ed.

"Rent extraction and incentives for efficiency in recent regulatory proposals", (with F. GASMI and M. IVALDI),

Journal of Regulatory Economics, 6, 151-176.

"Nonverifiability, costly renegotiation and efficiency", (with J. GREEN),

Annales d'Economie et Statistique, 36, 82-95.

"Implementation through sequential unanimity games", (with J. GREEN),
Chapitre 7 in Cooperative Models in International Relations Research,
M. Intrilligator and U. Luterbacher, Kluwer Academic Publishers, Boston.

"Access pricing and competition", (with J. TIROLE), European Economic Review, 38, 1673-1710.

"First-price sealed bid auctions with secret reservation prices", (with B. ELYAKIME, P. LOISEL and Q. VUONG), Annales d'Economie et de Statistique, 34, 115-142.

"Tests génétiques, information et assurance", Hasard et Nécessité, Actes, Marseille.

"Location distortions under incomplete information", (with M. BOYER, P. MAHENC and M. MOREAUX) Regional Science and urban Economics, 24, 409-440.

"Service public et théorie économique", dans l'Europe à l'épreuve de l'intérêt général, C. Stoffaës ed., p. 335-345, Editions Aspe Europe.

"De l'Etat" dans enjeux économique et sociaux, P. Chalmin ed., p. 201-211, *Economica*.

"Moral hazard, financial constraints and sharecropping in El Oulja", (with M.S. MATOUSSI)

Review of Economic Studies, 62, pp. 381-399

"Econometrics of first-price auctions", (with H. OSSARD and Q. VUONG), Econometrica, vol. 63, n° 4, 953-980.

"Libéralisation et charges d'accès", (with J. TIROLE), Annales des Télécommunications, vol. 50, n° 2, 306-314.

1996 "Industrial policy and politics",

International Journal of Industrial Organization, 14, 1-27.

"Privatisation et incitations", Revue Economique, 6, 1239-1251.

"Creating competition through interconnection: Theory and practice" (with J. TIROLE)

Journal of Regulatory Economics, 10, 227-256.

"Environmental protection, producer insolvency and lender liability", (with M. BOYER)

Ch. 1, in *Economic Policy* for the *Environmental and Natural Resources*, A. Xepapadeas, ed. Edward Elgar Publishing Company, Cheltenham.

"Optimal auction with financially constrained buyers" (with M. BOYER)

Economic Letters, 52, 181-186

"Teorie her a empirická ekonomie – pripad dat z aucki" ("Game Theory and Empirical Economics: the Case of Auction Data) Politická Ekonomie, 96/4, 435-464

"Regulation, Privatization, and Incetives in Developing Countries"
Chapter 6, in *Current Issues in Economic Development- an Asian Perspective*Edited by M.G. Quibira and J. Malcolm Dowling, Published for the Asian Development Bank by Oxford University Press.

"Accès, prix et concurrence" (with J. TIROLE)
Chapter 1, of *Politique Economique Fondements Théoriques*P. Arcus, A. Cartapanis and D. Laussel, eds., *Economica*, Paris.

"Competition between Telecommunications Operators" (with P. REY and J. TIROLE)

European Economic Review, 41, 701-711.

"Auctioning and Bargaining: An Econometric Study of Timber Auctions with Secret Reservation Prices" (with B. ELYAKIME, P. LOISEL and Q. VUONG)

Journal of Business & Economic Statistics, 15(2), 209-220.

"Game Theory and Empirical Economics: The Case of Auction Data" European Economic Review, 41, 1-35.

"Collusion Under Asymmetric Information" (with D. MARTIMORT) *Econometrica*, 65(4), 875-911.

"Incentive Regulation and the Cost Structure of the Local Telephone Exchange Network"

(with F. GASMI and W.W. SHARKEY)

Journal of Regulatory Economics, 12, 5-25.

"The Firm as a Multicontract Organization" (with David MARTIMORT)

Journal of Economics & Management Strategy, 6(2), 201-234.

"Environmental Risks and Bank Liability" (with Marcel BOYER)
European Economic Review, 41m 1427-1459.

"Une Analyse Empirique des Décisions en Matière d'Antidumping aux Etats-Unis" (with Farid GASMI and Wendy L. HANSEN)

L'Actualité Economique, vol. 73, no.1,2,3, 423-456.

"Reciprocal Compensation, Collusion and Organizational Design" (with Mathieu MELEU)

Scandinavian Journal of Economics, 99(4), 485-495.

"Collusion et Information Asymétrique" L'Actualité Economique, Revue d'Analyse Economique, 73, no.4, 595-609.

"William Vickrey: A Pioneer in the Economics of Incentives" The Nobel Lectures 1997, The Nobel Foundation.

"Inflexible Rules Against Political Discretion" Nordic Journal of Political Economy, 24(2), 79-87.

"Collusion and Delegation" (with D. MARTIMORT)

The Rand Journal of Economics, 29(2), 280-305.

"Frisch, Hotelling and the Marginal Cost Pricing Controversy" *Econometric Society, Monograph in Honor of R. Frisch*, ed. Ström, Cambridge University Press.

"Network Competition: I. Overview and Nondiscriminatory Pricing" (with P. REY and J. TIROLE)

The Rand Journal of Economics, 29, 1-37.

"Network Competition: II. Price Discrimination" (with P. REY and J. TIROLE)

The Rand Journal of Economics, 29(1), 38-56.

"Transaction Costs, Institutional Design and the Separation of Powers" (with D. MARTIMORT)

European Economic Review, 42, 673-684.

BELL ATLANTIC'S RESPONSES TO SPECIFIC ALLEGATIONS

This appendix sets forth Bell Atlantic's responses to various allegations raised by commenters in this proceeding. These allegations are unrelated to this merger, and, for the most part, merely rehash arguments that competitors have raised elsewhere. Most of these allegations are being or have been addressed in other proceedings before the Commission, before state regulatory agencies, or before federal or state courts. There is no basis for the Commission to consider them in this proceeding. Moreover, as detailed below, these allegations are without merit, and thus do not under any circumstances affect the Commission's analysis of the proposed merger.

Commenters' allegations fall into seven categories: (1) issues relating to the Bell Atlantic/NYNEX conditions; (2) negotiation issues; (3) collocation issues; (4) other interconnection issues; (5) resale issues; (6) OSS issues; and (7) miscellaneous issues.

1. ISSUES RELATING TO THE BELL ATLANTIC/NYNEX CONDITIONS

AT&T and MCI WorldCom's arguments that Bell Atlantic has failed to comply with the conditions imposed by the Commission in connection with the merger of Bell Atlantic and NYNEX are both misplaced and wrong.

These arguments parrot claims already being addressed in separate proceedings.¹ In particular, AT&T and MCI WorldCom claim that Bell Atlantic has not complied with the condition that new interconnection prices must be based on forward-looking economic costs and has not entered into good faith negotiation to establish performance standards -- both claims that these same carriers have raised in previous complaints. The Commission has repeatedly held that claims of this type should be addressed (if at all) in appropriate complaint or enforcement proceedings, rather than in license transfer proceedings.

What is more, the assertion that Bell Atlantic has not complied with the conditions from the Bell Atlantic/NYNEX merger is untrue. Bell Atlantic has spent millions of dollars and tens of thousands of person-hours to comply with those conditions, and has in fact complied with every one -- including the three highlighted by AT&T and MCI WorldCom.

First, AT&T and MCI WorldCom complain that Bell Atlantic has not complied with the condition that, "[t]o the extent that Bell Atlantic/NYNEX proposes rates" for interconnection or unbundled network elements during the 48-month post-merger term of the conditions, "any such proposal shall be based upon the forward-looking economic cost to provide those items." The

¹ Certain other petitioners echo the allegation that Bell Atlantic has not met the merger conditions, but they merely piggyback on the previous complaints filed by AT&T and MCI WorldCom. See, e.g., Supra Telecom at 15.

²See Bell Atlantic/NYNEX Order, App. C, Condition 6 (emphasis added).

prices proposed by Bell Atlantic both before and after the merger were based on forward-looking economic costs. Contrary to the current claims, those proposals were not based on "embedded costs," which are the costs incurred in the past to build the existing network. Rather, those pricing proposals assume the use of efficient forward-looking technologies and procedures.³

Moreover, the pricing condition by its terms does not apply to the *pre-merger* proposals that AT&T and MCI WorldCom have complained about. The Commission did not, as AT&T and MCI WorldCom now maintain, require Bell Atlantic to propose new rates -- and understandably so, because that would have entailed replacing proposals that had been filed and litigated prior to the merger, or abrogating the prices that state commissions already had set.⁴ In any event, AT&T itself has admitted that the rates that have been set in Bell Atlantic's states -- based in whole or in part on the prices proposed by Bell Atlantic -- are in fact based on forward-looking economic costs.⁵

Second, MCI WorldCom also claims that Bell Atlantic has not complied with the condition that it "engage in good faith negotiations . . . in response to reasonable requests" to establish performance standards and enforcement mechanisms. The truth, however, is that Bell Atlantic has negotiated with any carrier that has asked it to, has reached agreements with some, and has gone to arbitration with others to resolve open issues.

³For example, all switches are assumed to be digital, all interoffice cable is assumed to be fiber, loop costs reflect forward-looking fiber deployment, all loops that include fiber assume the use of digital loop carrier equipment, and utilization rates assume substantial improvements over actual utilization in the network today. See, e.g., Motion to Dismiss, AT&T Corp. v. Bell Atlantic Corp., File E-98-05 (filed Dec. 15, 1997); Brief of Bell Atlantic, AT&T Corp. v. Bell Atlantic Corp., File E-98-05 (filed Mr. 13, 1998); Reply Brief of Bell Atlantic, AT&T Corp. v. Bell Atlantic Corp., File E-98-05 (filed April 1, 1998).

⁴The fact that this condition is prospective only is hardly surprising. Prior to the merger, Bell Atlantic and NYNEX each had proposed interconnection prices based on forward-looking costs. The concern raised by the Commission was that, once the merger was completed, the combined new company might somehow restrict local competition in a way that the separate, pre-merger companies would not. See Bell Atlantic/NYNEX Order ¶ 192. The pricing condition addresses this concern by ensuring that any new prices proposed by the combined company will continue to be based on forward-looking costs.

⁵This admission was in an "Arbitration Scorecard" contained in a "Local Competition Handbook" on AT&T's Website (at www.att.com/publicpolicy/handbook). AT&T removed the Handbook when Bell Atlantic cited it in response to AT&T's pricing complaint, but Bell Atlantic filed the full text with the FCC. See Letter from Lydia R. Pulley, Bell Atlantic, to Ms. Diane Griffin Harmon, FCC, File No. E-98-05, dated March 30, 1998.

⁶See Bell Atlantic/NYNEX Merger Order, App. C. Condition 7.

MCI, in contrast, chose not to negotiate. Bell Atlantic made a comprehensive proposal for performance standards and enforcement mechanisms. MCI promised to provide a substantive response, but never did so. Bell Atlantic nevertheless unilaterally offered certain terms to MCI that were incorporated into a final agreement with another carrier at the other carrier's request. At that point, instead of negotiating, MCI chose to file a complaint with the FCC, when it asserted that Bell Atlantic did not negotiate in good faith.⁷

Third, at the FCC's recent en banc hearing, MCI WorldCom added a new complaint to its litany, asserting that Bell Atlantic had not met the requirement to use commercially reasonable efforts to establish uniform interfaces for its operations support systems.⁸ This claim is also unfounded.

At the time of the merger, Bell Atlantic and NYNEX each had deployed different interfaces. As a result, a competitor who wanted to submit resale or unbundled element orders in states served by both companies would have to develop two separate systems of its own -- one system to submit orders in a NYNEX state, such as New York, and another system to submit orders in a Bell Atlantic state, such as Virginia. In the wake of the merger, however, Bell Atlantic has spent millions of dollars to deploy new interfaces throughout its region. As a result, it now has common interfaces available in all its states. Unlike before the merger, a competing carrier can now do business throughout the former NYNEX and Bell Atlantic regions without developing two separate systems.

Moreover, the specific issues raised at the en banc hearing actually have nothing to do with the interfaces themselves, which are the means whereby competitors can connect their systems to Bell Atlantic's systems. Instead, MCI WorldCom's specific grievances relate to the fact that information on the order forms transported over the interfaces sometimes differs. But that is hardly a surprise. While the interfaces are uniform, the Bell Atlantic systems are not. Nor are the products available in each state the same. As a result, the information required on order forms in New York may well differ from the information on order forms in Virginia. These differences are inherent in running local businesses, and do not violate the NYNEX commitments.⁹

⁷See Brief of Bell Atlantic, MCI Telecommunications Corp., et al. v. Bell Atlantic-Delaware, Inc. et al., File No. E-98-32, pp. 2-8 (filed Oct. 2, 1998) (outlining history of negotiations).

⁸See Bell Atlantic/NYNEX Merger Order, App. C. Condition 4.

In any event, competing carriers are not prejudiced by these differences. To the extent different information must be entered on the forms, that requirement will apply whether the form is being filled out by a Bell Atlantic service representative or by a competitor's service representative. In fact, the differences in the information on order forms submitted by competing carriers are actually less than they are for Bell Atlantic's own service representatives, so Bell Atlantic actually is providing competing carriers with superior access to its operating support systems than it provides itself.

Finally, AT&T and MCI WorldCom are wrong to claim that Bell Atlantic has disputed the Commission's authority to enforce the merger conditions. Bell Atlantic has never disputed the Commission's authority to enforce the conditions. It is true, of course, that state commissions retain jurisdiction to set prices and to arbitrate open issues relating to performance standards. But that is different from whether or not the FCC can enforce the merger conditions, for example by requiring Bell Atlantic to propose new prices based on forward-looking costs or to negotiate in good faith.

2. NEGOTIATION ISSUES

a. General Complaints Regarding Negotiations

A few CLECs allege, in mostly non-specific terms, that Bell Atlantic has acted improperly in negotiating interconnection agreements, proposing unreasonable terms, creating unnecessary delays, and acting in bad faith.¹⁰

Response: Bell Atlantic has signed 757 interconnection agreements with competitors, of which 534 have been approved by state commissions to date. In the last year alone, Bell Atlantic has signed over 450 agreements, a 163 percent increase over the previous year.

Moreover, the few specific examples provided by competitors are without merit. For example, though Cablevision claims that Bell Atlantic significantly delayed negotiations, those negotiations were in fact conducted and completed within the timeframes specified by the 1996 Act. (The agreement with Cablevision was approved within 10 months from the time Bell Atlantic received a request to negotiate, not 11 months as Cablevision claims.)

b. Alleged Refusal to Permit Opt-In

A few commenters claim that Bell Atlantic has impeded their efforts to opt-in to pre-existing interconnection agreements, and has insisted upon relitigating certain issues, primarily the issue of whether reciprocal compensation applies to Internet traffic.¹² Some commenters further assert that Bell Atlantic improperly has required carriers seeking to adopt a pre-existing agreement to accept any subsequent modifications to such agreement.¹³

Response: Bell Atlantic has permitted carriers to obtain pre-existing interconnection agreements under section 252(i), and scores of agreements have been signed with competing carriers

¹⁰ Hyperion at 11-13; Cablevision at NY PUC Attachment p. 4.

¹¹ Cablevision at NY PUC Attachment pp. 2-5.

¹² Sprint at 27 n. 52; BayRing at 14; Hyperion at 17; PaeTec at 2.

¹³ CoreComm at 14; CTC at 22; BayRing at 14-15; Hyperion at 16-19; PaeTec at 3; RCN at 7C.

who chose to opt-in to existing agreements. Moreover, while Bell Atlantic (like competing carriers) has litigated certain issues where necessary to preserve its legal rights, including the issue of whether reciprocal compensation applies to Internet traffic, Bell Atlantic has complied with all applicable state decisions on this and other issues.

Some commenters also complain that Bell Atlantic requires CLECs that adopt a pre-existing agreement to accept subsequent modifications to such agreement. Of course, an existing agreement necessarily includes any changes that the original parties agreed to through the date that another carrier asks to opt in. Nevertheless, in response to requests from competitors, Bell Atlantic has agreed that competing carriers may opt in to agreements without accepting all the modifications agreed to after the original contract is signed.

c. Rate Schedules

Some commenters allege that, although they sought to opt in to Bell Atlantic's agreements with other carriers signed shortly after the Act, the agreement they received contained different rates for than the prior agreements.¹⁴ They also claim that some states have rejected Bell Atlantic's understanding that the rates adopted by those commissions should be used rather than the rates contained in earlier agreements.¹⁵

Response: The rates that Bell Atlantic provided to these carriers were the final rates set by the relevant state commission, and the rates for transport and termination that they complain about were actually <u>lower</u> than the rates in the previous agreements. Moreover, these state-set rates generally supersede all previous rates agreed to or arbitrated, and were based on detailed cost studies that were not available when the prior agreement was signed. The carriers that want the higher rates typically have no interest in providing competitive local telephone service, but instead merely hope to skim off large cash payments in the form of reciprocal compensation for one-way calls to the Internet. Nevertheless, where state commissions have ruled that Bell Atlantic must provide CLECs with the higher rates contained in previous agreements, Bell Atlantic has done so. For example, in Maryland, contrary to Focal's claims, Bell Atlantic on October 2, 1998 signed an agreement with Focal that contains the same terms and conditions as the interconnection agreement between Bell Atlantic and MFS. Bell Atlantic did the same with Starpower in Maryland on September 4, 1998.

¹⁴ Focal at 12-13; Hyperion at 31.

¹⁵ Focal at 12-13; Hyperion at 31.

¹⁶ See IMO Investigation re: Local Exchange Competition for Telecommunications Services, New Jersey BPU Docket No. TX9512631 (Dec. 2, 1997).

d. Reciprocal Compensation for Internet Traffic

Some commenters allege that Bell Atlantic improperly has refused to provide CLECs with pre-existing interconnection agreements that provide for the payment of reciprocal compensation for Internet traffic.¹⁷ They complain that Bell Atlantic has added language in its interconnection agreements reiterating that it does not agree that calls to the Internet are subject to reciprocal compensation.¹⁸

Response: None of the contracts that Bell Atlantic has signed agree to pay reciprocal compensation on Internet calls. These contracts expressly provide that reciprocal compensation applies only to "local" calls. Some state commissions nevertheless have required Bell Atlantic to pay reciprocal compensation on Internet traffic, but have done so based on a mistaken interpretation of prior FCC decisions. Bell Atlantic believes these decisions are incorrect, but is complying with state commission orders directing it to pay compensation on this traffic. Bell Atlantic also has allowed CLECs in such states to opt-in to existing agreements and to collect reciprocal compensation under the outstanding state orders subject to the inclusion of language reiterating Bell Atlantic's legal position. Finally, the FCC has confirmed that dedicated traffic to the Internet is not local, and a similar decision confirming that switched traffic is not local is expected any day.

e. Agreement to Serve Residential Subscribers

Hyperion alleges that, in Vermont, it tried to opt in to the terms of a pre-existing agreement, but that Bell Atlantic attempted to impose a condition that Hyperion agree to provide service to residential subscribers.¹⁹

Response: The FCC previously has emphasized that Bell operating companies are entitled to require a competing carrier to agree to an implementation schedule indicating when it will meet the residential service commitment.²⁰ That is all that Bell Atlantic sought to do in this case. Specifically, Bell Atlantic's initial interconnection agreement with Hyperion (signed in 1996) provided (in Section 3.0) that Hyperion was a provider of telephone exchange service to residential subscribers. During the term of that agreement, however, Hyperion did not provide service to residence customers. In negotiations over a successor agreement, Hyperion sought to adopt a pre-existing agreement (with KMC Telecom) that also provides that it "intends to be a [facilities-based]

¹⁷ PaeTec at 5; CoreComm at 14-15; CTC at 22-23; BayRing at 14-15; RCN at 7.

¹⁸ Hyperion at 17-18; CoreComm at 14-15.

¹⁹ Hyperion at 19.

²⁰ Application of SBC Communications Inc., Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Oklahoma, Memorandum Opinion and Order, 12 FCC Rcd 8685, 8706 n.109 (1997) (BOCs are free to negotiate implementation schedules for their interconnection agreements.).

provider of telephone exchange service to residential [subscribers]." Bell Atlantic merely asked it to provide a more specific implementation schedule.

3. COLLOCATION ISSUES

a. Space Availability

AT&T and Sprint allege that Bell Atlantic improperly has refused to make space available for collocation.²¹

Response: As of October 1998, CLECs had installed 653 collocation nodes (including 175 virtual notes) in Bell Atlantic central offices, a 63 percent increase from the previous year. In addition, Bell Atlantic is in the process of fulfilling approximately 700 additional collocation requests. Because of the large number of collocation sites that already exist or are in progress, collocation space is limited in some offices. Where space is limited, Bell Atlantic provides virtual collocation as provided in the Act. Bell Atlantic also conducts searches to make additional space available, and has accepted various proposals for how to create additional space. In addition, Bell Atlantic has agreed to permit state commissions to conduct "walk-throughs" of Bell Atlantic's central offices where space availability is the subject of contention. Bell Atlantic also offers various alternatives to a full collocation cage to address space constraints, such as smaller cages and sharing of cages.

b. Rates

Some commenters claim either that Bell Atlantic charges excessive rates for physical and virtual collocation,²² or complain that Bell Atlantic has imposed special construction charges for collocation.²³

Response: The rates that Bell Atlantic charges for collocation are cost-based and are reflected in collocation tariffs filed with state commissions and the FCC. Any construction charges are simply a pass-through of what it costs Bell Atlantic to construct a cage at the other carrier's request; other carriers have the option of doing the work themselves (through an approved contractor) if they do not wish to pay the charge. Other carriers also have the option of going to a smaller cage, of sharing cages with other carriers or of forgoing a cage.

²¹ AT&T at 17-19; AT&T Boyle Aff. App. C; Sprint Bauer Aff. at 23.

²² Sprint Brauer Aff. Att. E at 25-26.

²³ Hyperion at 31; BayRing at 24; Focal at 23; PaeTec at 9; CTC at 30; CoreComm at 30; RCN at 3.

c. Cage Restrictions

Some commenters allege that Bell Atlantic improperly has refused to provide collocation cages smaller than 100 square feet; that Bell Atlantic refuses to permit "cageless" collocation; and that Bell Atlantic restricts the kind of equipment that carriers may collocate.²⁴

Response: These allegations are unfounded. First, Bell Atlantic does in fact provide cages smaller than 100 square feet, and even filed a tariff with the FCC to make 25 square-feet cages available throughout its region. In addition, Bell Atlantic permits carriers to share cages, to use Assembly Room/Assembly Point arrangements, and to forgo use of a cage. Likewise, Bell Atlantic does provide a form of cageless collocation under its Shared Collocation Open Environment offering. Finally, Bell Atlantic has permitted carriers to collocate any kind of transmission equipment that is used for interconnection and access to UNES, which is what the 1996 Act requires. In addition, Bell Atlantic has complied, and will continue to comply, with state decisions requiring Bell Atlantic to permit collocation of remote switching modules.

4. OTHER INTERCONNECTION ISSUES

a. Alleged Trunk Provisioning Delays

BayRing claims that Bell Atlantic has not provisioned trunks in a timely manner, and that Bell Atlantic refused to provide it with routing diversity, causing service outages for BayRing's customers.²⁵ RCN, in turn, complains that Bell Atlantic has refused to allow RCN to interconnect through its electrical vaults.

Response: As an initial matter, Bell Atlantic has a strong record with respect to providing competitors access to interconnection trunks, having provided nearly 500,000 interconnection trunks to competitors (over which it has exchanged over 21 billion minutes of traffic).

In Bay Ring's case, Bell Atlantic has made every effort to support BayRing in establishing interconnection with Bell Atlantic's network, including multiple meetings in which Bell Atlantic's subject matter experts assisted BayRing with the interconnection process and attempted to accelerate trunk service dates. BayRing, however, repeatedly submitted incorrect Access Service Requests (ASRs), which are the industry-standard method for defining a CLEC's network requirements and for ordering interconnection trunks. Although Bellcore provides training to CLECs on how properly to complete ASRs, it is unclear whether BayRing ever sought or obtained such training. Nevertheless, Bell Atlantic has offered BayRing extensive assistance with ASRs.

²⁴ Hyperion at 34; BayRing at 27; Focal at 25; PaeTec at 9; RCN at 24.

²⁵ BayRing at 7-8.

Moreover, Bell Atlantic has not refused to provide routing diversity. Bell Atlantic has indeed provided routing diversity to BayRing in the two central offices about which it complains – Portsmouth and Manchester. Moreover, since the service outage that affected BayRing (which BayRing admits could not have been "totally avoided"), Bell Atlantic has fulfilled BayRing's request for additional trunks to further enhance its routing diversity.

RCN claims that Bell Atlantic refused to interconnect with RCN in Massachusetts via the electrical manhole serving its central offices. Specifically, RCN sought to interconnect through electrical vaults (owned and operated by Boston Edison Co. (BECO)), rather than through Bell Atlantic's telecommunications vaults. Although this proposal raised severe safety concerns, Bell Atlantic worked extensively to determine whether there was a reasonable way it could accommodate the request. But, after numerous exchanges, RCN withdrew its request when it became apparent that BECO was unwilling to proceed due to its safety concerns.

b. Alleged Pole and Conduit Delays

RCN alleges that Bell Atlantic delayed providing RCN access to conduits in Manhattan.²⁷ RCN and BayRing claim that Bell Atlantic has not provided pole attachments in a timely manner.²⁸

Response: RCN's complaints about delays in constructing conduit space in Manhattan are unfounded. The records of Empire City Subway -- the entity franchised by the City of New York to build and manage conduit space in New York -- indicate that the average conduit construction time for RCN in 1998 through November is 112 calendar days. This is slightly less than the average for all entities, and below the average for Bell Atlantic itself. It takes time to find or create space in crowded conduits under the streets of Manhattan, but this affects all carriers equally.

Bell Atlantic has worked diligently to fulfill BayRing's and RCN's orders for pole attachments. This process is not, however, entirely within Bell Atlantic's control. Before fulfilling an order for a pole attachments, it is first necessary to coordinate with other pole attachers, including other CLECs and electric utilities. Moreover, it is necessary to complete "make ready" work prior to attachment. Bell Atlantic regularly apprises CLECs of the status of their pending pole attachment applications and associated issues.

²⁶ RCN at 4.

²⁷ RCN at 6.

²⁸ BayRing at 9.

c. Other Alleged Provisioning Delays

Sprint asserts, based largely on pleadings submitted by AT&T to the New York PSC, that it takes longer for Bell Atlantic to provision interconnection to CLECs than for Bell Atlantic to provision its own retail services.²⁹

Response: Under the strict supervision of the NYPSC, Bell Atlantic already has agreed to go well beyond the requirements of the Act, and the New York local exchange market is the most competitive in the country. Moreover, the specific claims that AT&T made in New York are wrong. For example, AT&T complained in New York that Bell Atlantic was taking longer, on average, than the agreed upon standard interval to fill certain UNE orders. But it turned out that the average AT&T relied upon included a number of orders that it had asked not to be filled until roughly double the standard interval, skewing the results. In any event, these claims already are being addressed by the New York commission.

d. Number Portability

Hyperion alleges that Bell Atlantic has not provided remote call forwarding in a timely and accurate manner.³⁰

Response: Hyperion's claim is based on data that is significantly out of date and inconsistent with Bell Atlantic's performance record in providing number portability on a timely basis, as reflected in the performance reports submitted to state regulators and the FCC. In addition, Bell Atlantic was the first Bell Company to offer local number portability. It made number portability available in Maryland and Philadelphia since October 1997 and in New York City since December 1997,³¹ and is offering number portability ahead of the schedule mandated by the FCC.³²

²⁹ Sprint Brauer Aff. Att. E at 16.

³⁰ Hyperion at 11-13.

³¹ Speech by Bell Atlantic CEO Raymond Smith, Federal Communications Bar Association, Feb. 26, 1998.

³² Bell Atlantic, Competition Update: A Regular Report on the State of Competition, July 1998, .

e. Access to SS7 and Databases

BayRing and RCN allege that Bell Atlantic did not provide routing diversity for its SS7 network.³³ RCN further asserts that Bell Atlantic (1) refused to provide RCN with STPS-1 interconnection and D8ZS level connectivity pursuant to their interconnection agreement, and (2) that Bell Atlantic did not provide RCN access to the customer name data base in a timely manner.³⁴

Response: The delays in providing BayRing SS7 interconnection were attributable to BayRing's own actions. First, BayRing did not obtain SS7 certification before submitting its request for SS7 interconnection. Second, once BayRing obtained such certification, it informed Bell Atlantic that its switch was not operational, precluding any opportunity for SS7 testing.

RCN's claims are likewise unjustified. First, Bell Atlantic timely provided RCN with the requested SS7 route diversity in the summer of 1998; however, due to a communication breakdown, RCN did not recognize until November 1998 that it had been furnished with the documentation it requested to demonstrate that such route diversity was in effect. Second, Bell Atlantic has provided RCN access to the calling name database in a timely fashion. Finally, Bell Atlantic did not agree to provide STS-1 interconnection in the interconnection agreement with RCN. Bell Atlantic is, however, developing a tariffed product per RCN's request. With respect to D8ZS, which is a type of transmission needed for trunks to carry 64 kilobit clear channel signaling, there are many Bell Atlantic central offices that do not support trunk facilities with D8ZS. Bell Atlantic is providing D8ZS-capable trunks where they can be supported.

f. Access to xDSL Services

AT&T, MCI WorldCom, Sprint, and RCN, allege that Bell Atlantic has acted improperly with respect to the provision of xDSL services.³⁵ They claim that Bell Atlantic has not provided in a timely and nondiscriminatory manner unbundled access to xDSL-capable loops (including those served by digital loop carrier), collocation, and resale of xDSL services.

Response: Bell Atlantic is not currently offering xDSL services on a retail basis throughout much of its service territory, and therefore cannot make such services available for resale or unbundling. The FCC recently clarified the rules that will apply to ADSL in its Advanced Services Docket, and Bell Atlantic will comply with those rules. Furthermore, Bell Atlantic has provided xDSL capable loops in conformance with the terms of its interconnection agreements with competitors.

³³ RCN at 4; BayRing at 8-9.

³⁴ RCN at 4

³⁵ AT&T at 18-19; MCI WorldCom at 43-44; RCN at 4; Sprint Brauer Aff. Att. E at 6.

g. Enhanced Extended Link

RCN claims that Bell Atlantic attempted to restrict RCN's use of Enhanced Extended Link offerings in New York to instances where the offerings are used predominantly to provide switched local exchange and associated switched exchange access services.³⁶

Response: Bell Atlantic's Enhanced Extended Link is a service that it voluntarily offers to allow competitors to avoid the need to collocate in every central office where they serve customers. This service is not required by the 1996 Act, and is not subject to the Act's pricing standards. Moreover, at its December 16 sunshine meeting, the New York commission announced that it has decided that the bulk of these limitations are appropriate and will be upheld. These limitations are necessary to ensure that the service is used to provide competing local services, and not solely to displace Bell Atlantic's exchange access services.

5. RESALE ISSUES

a. General Resale Issues

Some commenters allege that Bell Atlantic has not provided resale services in a timely and appropriate manner, and CTC claims that it has been forced to file an antitrust suit as a result.³⁷

Response: This allegation is refuted by the large number of resale lines in Bell Atlantic's territory, and their steep and steady growth over time. Bell Atlantic already has provided over 534,000 lines to resellers. According to its own figures, CTC has obtained over 47,000 resold lines in its less than one year of operation as a reseller.³⁸ Moreover, the mere fact that CTC filed an antitrust claim -- the merits of which have not been adjudicated -- in no way establishes that Bell Atlantic is guilty of misconduct.

b. Resale of Voice Mail Services

A number of commenters complain that Bell Atlantic refuses to resell voicemail services, and assert that there is a tying arrangement between Bell Atlantic's local exchange service and its voicemail service.³⁹

³⁶ RCN at 5.

³⁷ CTC at 13.

³⁸ CTC Communications News Release, CTC Communications Corp. Reports Record Revenues, Aug. 10, 1998.

³⁹ Hyperion at 35; Focal at 26, BayRing at 28, CTC at 28; CoreComm at 32; State Comm. at 22.

Response: The Commission has held that voice mail and other voice messaging services are not "telecommunications services," and therefore ILECs are not required to offer these services for resale under section 251.⁴⁰ Moreover, the voice mail market is highly competitive and CLECs are free to obtain voice mail services from third parties and bundle them with resold Bell Atlantic services; indeed, many CLECs in Bell Atlantic's region are doing so. In light of these facts, RCN, the chief proponent of this complaint, recently withdrew the complaint it had filed with the FCC on this subject.

c. Contract Service Agreements (CSAs)

Several CLECs represented by the law firm of Swidler Berlin Shereff Friedman allege that Bell Atlantic improperly has refused to "assign" customers with contract service agreements (CSAs) to resellers, and that Bell Atlantic imposes contracted-for termination liabilities on customers who terminate service with Bell Atlantic.⁴¹

Response: Bell Atlantic fully complies with its obligations under the Act: All CSAs are available for resale; all CSAs are available to resellers at a wholesale discount; and all customers that want to terminate a CSA and switch to a reseller are free to do so. If a customer decides to switch, Bell Atlantic will provide to the reseller at a wholesale discount the same services offered under the CSA. Under these circumstances, however, the initial CSA agreement is terminated, and, to the extent the CSA contains a liability provision for early termination, this provision is triggered. As the FCC and several state commissions have recognized, the assessment of reasonable termination liabilities is not anticompetitive. Rather, it often is procompetitive, since it allows carriers to charge lower rates to begin with.

Some competitors, however, have demanded that Bell Atlantic simply assign its existing contracts and customers to them. The Act contains no such requirement. Nonetheless, some state commissions have held that CSAs are assignable under state contract law unless they expressly provide otherwise. Bell Atlantic will, of course, comply with these decisions.

⁴⁰ Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order ¶ 314, CC Dkt. No. 98-121 (rel. Oct. 13, 1998) (citations omitted).

⁴¹ BayRing at 23; CTC at 13-16, 28; Focal at 22; Hyperion at 29; KMC at 14, 27; RCN at 27.

6. OSS ISSUES

a. OSS Performance and Parity

Sprint and a number of other commenters allege that Bell Atlantic has not provided competitors with access to its OSS in parity with the access that Bell Atlantic provides to itself.⁴² Sprint also asserts that Bell Atlantic has not provided certain OSS performance measurements.⁴³ Finally, Sprint claims that ILECs in general do not have adequate OSS systems in place to serve larger, more complex customers, which are the target for Sprint's new ION network.⁴⁴

Response: Bell Atlantic provides industry-standard interfaces to its OSS throughout its region. Bell Atlantic has worked extensively with CLECs to refine these interfaces and to address CLECs' concerns. At present, Bell Atlantic's OSS interfaces are handling several thousand orders per day. Moreover, Bell Atlantic is conducting tests to demonstrate that these interfaces are capable of handling even greater numbers. Sprint's claim that Bell Atlantic has not provided performance measurements for its OSS is without merit: Bell Atlantic tracks and reports on a state-by-state basis the performance of its OSS interfaces, and provides these results to the FCC, state commissions, and CLECs. Finally, with regard to Sprint's claims regarding large customers, Bell Atlantic is already successfully serving large customers using application-to-application interfaces that IXCs including Sprint have requested.

b. OSS Cost Recovery

Several commenters complain that Bell Atlantic has proposed in many states that the cost of providing CLECs with access to its OSS be borne by CLECs.⁴⁵

Response: The rates that Bell Atlantic charges for access to its OSS are cost-based and non-discriminatory, and have been approved by state commissions throughout Bell Atlantic's region. The claim that CLECs should not be required to bear the costs of establishing OSS interfaces for their use is inconsistent with the FCC's own decisions, given that the sole reason that Bell Atlantic has incurred these significant costs is to benefit CLECs.⁴⁶

⁴² Sprint Brauer Aff. Att. E at 10-11; Hyperion at 34; BayRing at 26-27; Focal at 25.

⁴³ Sprint Brauer Aff. Att. E at 15.

⁴⁴ Sprint Brauer Aff. Att. E at 27.

⁴⁵ Hyperion at 34; BayRing p. 27; Focal p. 25; State Comm. at 22.

⁴⁶ See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, 11 FCC Rcd 15499, 16162 & 1375 (1996) ("If a requesting carrier, which may be a small entity, seeks access to an incumbent LEC's unbundled elements, the requesting carrier is required to compensate the incumbent LEC for any costs incurred to provide such

7. MISCELLANEOUS ISSUES

a. UNE Combinations

Several commenters complain about Bell Atlantic's refusal to provide UNE combinations.⁴⁷ In addition, Cablevision and Sprint claim that, following the Eighth Circuit's decision in *Iowa Utilities Board*, Bell Atlantic improperly refused to provide them with UNE combinations even though their interconnection agreements allegedly provided for it.⁴⁸

Response: The Eighth Circuit has held that requiring local exchange carriers to provide a platform of pre-combined network elements would be contrary to the Act.⁴⁹ Moreover, the claim that Bell Atlantic voluntarily agreed to provide UNE combinations as part of its interconnection agreements is inaccurate. In "agreeing" to provide UNE combinations, Bell Atlantic made clear that it was doing so only because the FCC had required it, and would do so only to the extent required by law. Its contracts also anticipated that individual provisions would need to be modified in response to changes in governing law. In any event, requiring LECs to recombine unbundled elements would be inconsistent with congressional intent, for it would undermine any incentive a competing carrier might have to invest in network facilities of its own.

b. Opportunity New Jersey Service Commitments

The New Jersey Coalition (an organization funded primarily by AT&T and MCI) alleges that Bell Atlantic has failed to live up to its service commitments to invest in new technology to benefit New Jersey consumers, including the Opportunity New Jersey (ONJ) proposal to deploy broadband facilities.⁵⁰

Response: The New Jersey BPU recently held an inquiry into Bell Atlantic's progress and compliance with ONJ and concluded that Bell Atlantic's current ONJ deployment schedule (originally proposed in 1992) continues to reflect "accelerated" deployment beyond what Bell Atlantic - NJ would be expected to deploy under a "business as usual" schedule. Bell Atlantic nevertheless agreed to a stipulation with the BPU and the state Ratepayer Advocate to further accelerate ONJ commitments.

access.").

⁴⁷ Focal at 25; PaeTec at 8; BayRing at 26; RCN at 23; PaeTec at 8.

⁴⁸ Cablevision at 2-3; Sprint at 89.

⁴⁹ Iowa Utils. Bd. v. FCC, 120 F.3d 753, 813 (8th Cir. 1997), cert. granted sub nom. AT&T Corp. v. Iowa Utils. Bd., 118 S. Ct. 879 (1998).

⁵⁰ NJ Coalition at 2.

c. Consumer Complaints

The New Jersey Coalition claims that, according to the FCC Common Carrier Bureau, consumer complaints against Bell Atlantic have risen in the past year.⁵¹ Sprint claims that customer complaints in Vermont are up 9 percent since the Bell Atlantic/NYNEX merger.⁵²

Response: The merger of Bell Atlantic and NYNEX has allowed the combined company to significantly increase service quality. According to the FCC's own Quality of Service reports, residential complaints against Bell Atlantic decreased over 17 percent from 1996 to 1997. In New York, for example, complaints decreased 30 percent in 1997, and decreased further in 1998. Indeed, Bell Atlantic has received commendations from the New York PSC for its service. A NYPSC spokesman stated: "They've made a lot of progress, and that's been evidenced in the last several service quality reports the commission has reviewed." At the Commission's recent en banc hearing, moreover, the New York consumer advocate testified that as a result of synergies from the Bell Atlantic/NYNEX merger, Bell Atlantic has invested an additional \$1 billion in New York, and has improved service quality in the state. Sprint's claims regarding customer complaints in Vermont are incorrect. Complaints decreased considerably from 1996 to 1997 (by 23 percent) and have increased less than 1 percent in 1998 (from 342 to 345 complaints).

d. IntraLATA Toll Dialing Parity

Some commenters complain about IntraLATA Toll Dialing Parity and assert that Bell Atlantic has litigated and lost on the position that it is not required to implement toll dialing parity by February 8, 1999.⁵⁵

Response: Section 272(e)(2) provides that states may mandate intraLATA toll dialing parity by this time, but does not require that states do so. Two states that have addressed the issue -- Virginia and Maryland -- have agreed.

⁵¹ NJ Coalition at 3.

⁵² Sprint at 89-90.

⁵³ J. Kraushaar, FCC, Industry Analysis Division, Quality of Service for the Local Operating Companies Aggregated to the Holding Company Level, Tables 2(a) and 3(a).

⁵⁴ At Deadline, Crain's New York Business, Feb. 23, 1998, at 1.

⁵⁵ Hyperion at 32; Focal Comm. at 23; BayRing at 24; State Comm. at 21.

e. Marketing/Customer Winback

Some commenters suggest that Bell Atlantic has improperly used customer winback programs, and has improperly shared information between its retail and wholesale operations.⁵⁶

Response: There is no merit to this claim. When a customer switches from Bell Atlantic to a competitor, or vice versa, the carrier that lost the customer is notified (to ensure that, among other things, the carrier knows to stop billing the customer). This notification is identical regardless of whether the customer is going to or from Bell Atlantic as its local carrier, however. Moreover, Bell Atlantic has not improperly shared information between its retail and wholesale operations.

f. Cellular

Triton PCS claims that Bell Atlantic Mobile filed a baseless lawsuit and engaged in anticompetitive roaming negotiations. ⁵⁷ Sprint PCS also complains about Bell Atlantic Mobile's roaming negotiations. The Commonwealth of the Northern Mariana Islands asserts that Bell Atlantic affiliates have opposed the policy of "rate integration" as it relates to CMRS carriers, and proposes that the Commission require Bell Atlantic/GTE to maintain rate integration across all subsidiaries and services, including wireless services. ⁵⁸

Response: Bell Atlantic Mobile filed suit to protect against disclosure of confidential competitive information by former high-level Bell Atlantic Mobile employees that Triton hired.⁵⁹ This case is in the discovery stage. Pending trial, however, the court has placed Triton and the former employees under a temporary restraining order prohibiting misuse of Bell Atlantic Mobile confidential information; the court also has sanctioned Triton and ordered it to pay attorneys' fees for refusing to comply with discovery obligations. As to roaming, the roaming negotiations between Triton and Bell Atlantic Mobile have resulted in an agreement on roaming rates. Roaming negotiations, like those involving Triton and Sprint, are private contractual negotiations that are irrelevant to this proceeding. Furthermore, the FCC is currently considering in a separate docket whether any action is necessary with respect to automatic roaming agreements between PCS and cellular carriers.⁶⁰

⁵⁶ Hyperion at 32; Focal at 24; BayRing at 25; CTC at 30; RCN at 23; PaeTec at 9.

⁵⁷ Triton PCS at 13-17; Sprint at 48.

⁵⁸ Commonwealth of Northern Mariana Islands at 15.

⁵⁹ Cellco Partnership d/b/a Bell Atlantic Mobile v. Triton Communications, Inc. et al, Docket No. ESX-C-283-98 (Superior Ct. NJ).

⁶⁰ Interconnection and Resale Obligations Pertaining to Commercial Radio Services, Second Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 9462 (1996).

The complaints raised by the Northern Mariana Islands are likewise misplaced, and are the subject of other proceedings pending before the Commission. The Commission has not yet decided whether to forbear from or reconsider rate integration for CMRS carriers. Bell Atlantic has requested reconsideration and forbearance both on legal grounds, because CMRS rate integration was imposed without lawful notice and without record evidence, and on policy grounds, because the free competition within the wireless industry has produced pricing results such as SingleRate and One Rate pricing that achieve the social goals behind prescriptive rate integration.

⁶¹ Policy and Rules Concerning the Interstate, Interexchange Marketplace, Order, 12 FCC Rcd 15739 (1997); Memorandum Opinion and Order, DA 98-1763 (released Sept. 1, 1998).

GTE's RESPONSES TO SPECIFIC ALLEGATIONS

Opponents of the merger – predominantly AT&T, MCI, Sprint, and a dozen or so CLECs represented by Swidler Berlin Shereff Friedman ("the Swidler Group") – have raised a number of allegations of unfairness by GTE. The Commission should decline to consider these allegations for four simple reasons.

First, all of the allegations are irrelevant to the merger application. It is well established that, in evaluating the public interest effects of a proposed merger, the Commission is to compare the status quo with the prospective post-merger world.¹ None of the subjects of petitioners' complaints – regarding negotiating positions, contract performance, service quality, or other matters – is in any way caused by or related to the merger. Indeed, almost all of them pre-date the merger by months or years.

Second, the Commission should not delve into issues that are or could be the subject of other FCC, state or judicial proceedings, as is true of virtually every complaint raised by petitioners. "The Commission has regularly declined to consider in merger proceedings matters that are the subject of other proceedings before the Commission because the public interest would be better served by addressing the matter in the broader proceedings of general applicability." Similarly, the Commission has recognized that state public utility commissions

Applications of NYNEX Corporation, Transferor, and Bell Atlantic Corporation, Transferee, 12 FCC Rcd 19985, 20063-64, 20066-67 (1997) ("BA/NYNEX Order").

Applications for Consent to the Transfer of Control of Licenses and Section 214
Authorizations from Southern New England Telecommunications Corporation, Transferor to
SBC Communications, Inc., Transferee, FCC 98-276 (Oct. 23, 1998) ("SNET/SBC Order"); see
also BA/NYNEX Order, 12 FCC Rcd at 20083, 20087-88; Applications of Craig O. McCaw,
Transferor, and American Telephone and Telegraph Company, Transferee, 9 FCC Rcd 5836,

(Continued...)

have considerable tools "at their disposal to protect their ratepayers from unlawful anticompetitive abuses" that may arise. Moreover, here Congress has specifically left these interconnection-related issues to the states (and, if necessary, to federal district courts).

Third, the Commission should reject petitioners' efforts to have the Commission punish GTE for exercising its legal rights in the interconnection process. The Commission has consistently refused to penalize licensees for engaging in vigorous advocacy and appellate review. As the Commission has recognized, such activities "consist[] of either constitutionally protected free speech or business conduct that is legally permissible" that should not be penalized.⁵

Finally, as we detail in the remainder of this Appendix, the vast majority of petitioners' allegations either are unsupported or mischaracterize the record. The record shows that, in fact:

GTE's efforts have resulted in hundreds of successful interconnection agreements and extensive

^{(...}Continued) 5877-78, 5887 (1994).

Applications of Pacific Telesis Group Transferor, and SBC Communications, Inc., Transferee, 12 FCC Rcd 2624, 2643 (1997) ("Pactel/SBC Order"); SNET/SBC Order, ¶ 42.

⁴ 47 U.S.C. § 252; see also Iowa Utilities Board v. FCC, 120 F.3d 753 (8th Cir. 1997), cert. granted, 188 S.Ct. 879 (1998); Louisiana Public Utilities Commission v. FCC, 476 U.S. 355 (1986).

PacTel/SBC Order, 12 FCC Rcd at 2642; see also General Communications Inc., 4 FCC Rcd 7447, 7450 (1988) ("As a general principle of law, antitrust liability does not arise from a party's exercise of its right to participate in legislative, judicial, or administrative proceedings and to petition its government for support or relief."). For example, in Warrensburg Cable, Inc., 67 FCC 2d 662, 671-72 (1978) (internal citations omitted), the Commission declined to penalize a licensee's efforts to convince local authorities to grant a cable franchise because these efforts "appear[] to have constituted a legitimate attempt to induce government action, and to predicate sanctions thereupon would raise serious Constitutional questions."

progress in opening local markets to competitors (Section I); GTE's interconnection negotiation procedures and positions have been and continue to be wholly reasonable (Section II); GTE is fulfilling its contractual obligations and cooperatively addressing any problems that arise (Section III); and GTE continues to upgrade the overall quality of its service (Section IV).

I. DISPARATE LEVELS OF COMPETITION IN THE GTE AND BELL ATLANTIC REGIONS REFLECT DIFFERING ECONOMIC REALITIES, NOT A COORDINATED EFFORT BY GTE TO IMPEDE COMPETITION.

Allegation: The Swidler Group commenters, relying on data reported to the Common Carrier Bureau, state that GTE has lost many fewer lines to competition than has Bell Atlantic, and contend that this statistical discrepancy shows that GTE has engaged in a "coordinated national strategy of delay and intransigence" aimed at "closing its markets to CLECs." See, e.g., BayRing Communications at 10, Hyperion at 5, Focal at 5, US Xchange at 5-6, CoreComm at 8-9.

Response: The allegation is groundless. GTE has spent approximately \$281 million and opened three local wholesale ordering centers employing more than 500 people to implement the market-opening requirements of the 1996 Act. As a result of these efforts, GTE has entered into 552 approved interconnection agreements. In addition, GTE has filed another 126 agreements for which approval is pending and continues to negotiate with dozens of competitors. GTE has provided 143,275 interconnection trunks to competitors, has exchanged 3.25 billion minutes of traffic, and has lost more than 110,000 lines to resale.⁶

At bottom, the numbers in the Common Carrier Bureau's report simply confirm what the Commission has long recognized: competition will come first to urban areas with high concentrations of business customers (such as those served by Bell Atlantic) and will be relatively slow to develop in more rural and residential areas (such as those served by GTE).⁷ Thus, while GTE in fact faces significant competition (particularly in its few urban markets), it is no surprise that Bell Atlantic, region-wide, has experienced greater entry to date.

Indeed, as the following chart demonstrates, GTE's entry statistics compare very favorably with those of Sprint, which serves very similar territories.

See Common Carrier Bureau, Local Competition Report (Dec. 1998).

See, e.g., Remarks by Chairman Kennard to the Organization for the Promotion and Advancement of Small Telephone Companies (January 12, 1998) (transcript available at http://www.fcc.gov/Speeches/Kennard/spwek801.html (stating that "there is no immediate prospect of broad based competitive entry" in small and rural communities); Commissioner Furchtgott-Roth, Address to the International Telecard Association (July 17, 1998) (transcript available at http://www.fcc.gov/Speeches/Furchtgott_Roth/sphfr813.html (pointing out that "[t]here were some members of Congress who believed that competition would never come to rural America").

Carrier	Total Switched Lines	Resale Lines Provided	Unbundled Loops Provided	Switching Centers with Collocation Arrangements
GTE	18,301,0768	113,487	14,088	168
Sprint	7,352,889	27,593	0	13

II. GTE'S INTERCONNECTION POSITIONS AND NEGOTIATING PROCEDURES ARE CONSISTENT WITH THE ACT AND WHOLLY REASONABLE.

A number of CLECs suggest that the procedures GTE employed during the course of interconnection negotiations were unreasonable and designed to delay the negotiation process. GTE's conduct during and procedures used in interconnection negotiations are wholly irrelevant to the issue of whether the merger should be approved. The parties raising these issues have had ample opportunity in other forums to raise specific complaints about GTE's conduct or procedures for completing interconnection negotiations. Notwithstanding the fact that these issues should be addressed in other forums and not in the context of the proposed merger, GTE briefly addresses the allegations below.

"Opting In"

Allegation: KMC and Hyperion claim that GTE refused to make arbitrated terms available to third-party CLECs and created other procedural roadblocks to force CLECs to renegotiate agreements. KMC at 15-16; Hyperion at 15.

Response: This is an unfair comparison. While GTE has been willing to make arbitrated terms from other contracts available to third-party CLECs in the negotiation process, it simply did not agree to the universal application of the terms of one contract from one state for use in other states. Because GTE's capabilities vary from state to state, changes in the terms included in various state-specific contracts are often necessary. In addition, decisions in one state

⁸ 1997 ARMIS Report, 43-08, Table III, Column DJ.

Of course, GTE also has provided entire agreements to third-party CLECs under § 252(i), as required by the Act. When CLECs invoke § 252(i) but then seek to change substantive or price terms of the contract, GTE treats such requests as new negotiations.

regarding various arbitrated interconnection terms differ considerably and may not be applicable in other states. It was not, and would not be today, practical or wise to take the results of specific proceedings in one state and attempt to use them on a blanket basis in a negotiation in another state that has its own requirements and nuances.

To the extent the allegation concerns the use of GTE's prototype contracts, the claim is also baseless. Those contracts evolved throughout months of negotiations. It was not unreasonable to ask a requesting CLEC to use GTE's latest terms and conditions as the starting point when negotiating a new contract.

Raising New Issues

Allegation: Parties allege that GTE attempted to raise new issues after the 160-day negotiation period ended. Hyperion at 16; RCN at 10; BayRing at 12.

Response: GTE is aware of only one occasion where it attempted to raise a new issue (a change in its environmental terms) after 160-day negotiation period ended without concurrence by the CLEC. In that particular case involving KMC Telecom, Inc., GTE admitted that its failure to raise the issue sooner was a mistake. Moreover, the arbitrator decided against GTE on this issue, a fact that negates any possible claim of injury or prejudice to a third party. No other party cites specific attempts to raise issues after the end of the negotiation period.

OSS Electronic Interfacing

Allegation: Parties allege that, prior to the FCC's Local Competition Order, GTE did not provide electronic access to its OSS in a timely manner. AT&T, Beasley Affidavit at 3.

Response: GTE was not obligated to offer such access until the FCC's August 1996 Local Competition Order. Nonetheless, GTE has always believed that electronic access to OSS is preferable to manual access where feasible. GTE continues to make this access available to CLECs that wish to use electronic access, and is working with industry groups to develop additional standards and methods of access.

Negotiating Pricing Issues

Allegation: AT&T claims that GTE insisted that price be negotiated before GTE would agree to negotiate any other issue. AT&T, Beasley Affidavit at 6-8.

Response: This allegation is incorrect. GTE did not insist that price be negotiated first. Rather, it stated its preference to negotiate items in a particular order. Given the importance of rates in any agreement, GTE's preference was to discuss these matters first before going to the minutiae of operational terms and conditions. GTE was free to adopt its negotiating strategy just

as AT&T was free to pursue a different strategy. AT&T also has been free to raise such issues in other more appropriate forums (e.g., state commission proceedings) and has done so.

Draft Interconnection Contracts

Allegation: AT&T alleges that GTE refused to make its draft interconnection agreement available to AT&T in a timely manner, and that this refusal prejudiced AT&T. AT&T, Beasley Affidavit at 9.

Response: AT&T is wrong. In reality, AT&T insisted from the outset that the parties work from the AT&T draft agreement notwithstanding the fact that GTE had already shared a proposed agreement with AT&T (as it did with all other CLECs seeking interconnection agreements).

Eighth Circuit Decision

Allegation: AT&T contends that after the Eighth Circuit decision was released, GTE required it to renegotiate interconnection issues. AT&T, Beasley Affidavit 12-16.

Response: The contracts at issue expressly provided for renegotiation in the event of agency or judicial decisions that changed the parties' obligations, as the *Iowa Utilities Board* decision did. More fundamentally, these contracts were still in the negotiation/arbitration process and had not been signed or approved by state commissions. GTE therefore was well within its rights in seeking to renegotiate with AT&T.

Interim Agreement

Allegation: AT&T alleges that GTE refused to negotiate an interim agreement. AT&T, Beasley Affidavit at 14-15.

Response: Contrary to AT&T's allegation, just prior to a negotiating meeting scheduled for September 30, 1997, GTE offered to make available to AT&T an interim interconnection agreement based the same terms and conditions agreed to by other major carriers. AT&T refused to accept this interim agreement because it did not include AT&T's contract language and was not organized in the same way as AT&T's template contract. In fact, AT&T wanted to negotiate an interim and permanent contract simultaneously. Subsequently, the parties abandoned the idea of an interim agreement and decided to continue negotiating a permanent interconnection agreement.

Honoring Arbitrated Rates

Allegation: State Communications claims that GTE has refused to credit State for the difference between rates in State's contract and rates subsequently arbitrated before the state commission. State also protests that GTE delays the effectiveness of arbitrated rates until the interconnection agreement is approved. Finally, State asserts that GTE has required retroactive payment if lower arbitrated rates are later stayed, enjoined, or modified by the state commission or a court. State Communications at 6-7.

Response: GTE's positions are reasonable and consistent with the Act. GTE generally allows CLECs to take advantage of rates arbitrated by another CLEC under its "opt-in" policy explained above. However, to protect its legal rights, GTE requires any CLEC taking advantage of the results of a separate arbitration to abide by the terms of that arbitration. Thus, if a CLEC chooses to use rates determined in a GTE arbitration with another CLEC, it may obtain those rates when they become effective for the parties in the arbitration. If GTE were to agree to the rates outside the context of the underlying arbitration, it could be deemed to have agreed to them "voluntarily" and be unable to seek judicial review. Thus, State is not entitled to a "refund" for amounts paid before the rates of the arbitrated agreement become effective. Similarly, if the arbitrated rates are later changed by the state commission or a court, the "opting-in" CLEC must also agree to be subject to the changed terms.

Reservation of Capacity on Poles, Conduits, and Pathways

Allegation: As an example of GTE's alleged "unreasonable positions," AT&T cites GTE's statement that it "was reserving for itself the capacity it needed to meet its projected needs for 5 years..." AT&T, Beasley Affidavit at 3.

Response: GTE's reservation reflected its good-faith belief, prior to release of the Local Competition Order, that allowing ILECs to reserve capacity on poles, conduits, and pathways is critical since ILECs continue to be subject to carrier-of-last-resort obligations. At the time, GTE's position reflected current law and practice. Following the August 1996 release of the Commission's Local Competition Order, which limited ILECs' rights to reserve capacity, ¹⁰ GTE modified its position in the negotiations to be consistent with the Commission's decision.

Allegation: AT&T asserts that when GTE was asked what capacity was available in its poles, conduits, and pathways, "GTE responded only that it was more than 5%, but less than 95%." AT&T, Beasley Affidavit at 3.

Response: This allegation is incorrect. GTE explained to AT&T during the negotiations that the available capacity differs throughout each area from 5 percent to 95 percent. GTE urged

Local Competition Order, ¶ 1170.

AT&T to identify the specific areas in which AT&T was interested so that GTE could determine the capacity available in that area. In fact, GTE offered to allow AT&T to study GTE's maps showing the usage of poles, conduits, and pathways in the specific areas in which AT&T was interested.

Contract Language Preserving Legal Rights

Allegation: AT&T objects to GTE's proposals to include in the interconnection agreements statements that GTE does not voluntarily agree to the terms of the contracts. AT&T also objects to the GTE's refusal to sign agreements unless required to do so by a state commission. AT&T, Beasley Affidavit at 10-12.

Response: GTE has argued for inclusion of language on the non-voluntary nature of the obligations in the interconnection agreements in order to maintain its right to appeal and to avoid any allegation that it has somehow acquiesced in all of the terms of the contract. The PUC-approved contract, not the arbitration order, is the underlying document on which review is sought. GTE's concern is that, without such a statement in the contract, a federal district court may find that GTE must comply with the terms of the interconnection agreement as a matter of contract law, regardless of the requirements of the Act. Similarly, GTE signs interconnection agreements only when ordered to do so by the state commission so that GTE can preserve its right to legal review. Importantly, no delay in the implementation of interconnection agreements results from GTE's positions.

Reciprocal Compensation

Allegation: Hyperion asserts that "GTE has refused to pay Hyperion's affiliate in Pennsylvania reciprocal compensation charges for local calls, including calls that Hyperion has terminated to Internet service providers, notwithstanding a Pennsylvania Commission ruling to the contrary." Hyperion at 21.

Response: This statement is misleading. GTE pays reciprocal compensation for local calls. However, GTE has not paid reciprocal compensation for calls terminated to Internet service providers. GTE believes that such traffic is interstate, not local, and therefore is not subject to reciprocal compensation. Hyperion fails to note that it provided no basis for GTE to determine which calls delivered to Hyperion were truly local and which were passed on to an ISP; nor does Hyperion disclose that GTE has agreed to compensate it for truly local calls pursuant to a mutually agreed-upon percentage. In addition, the Commission has been considering the jurisdictional nature of dial-up ISP traffic and is expected to issue a decision shortly. Finally, the Commission should be aware that the Pennsylvania decision to which Hyperion cites was the outcome of a complaint proceeding involving another carrier. It does not apply to GTE; indeed, GTE is currently involved in an arbitration with Hyperion in Pennsylvania on this and other issues.

Other Negotiation Issues

Allegation: Certain CLECs claim that a number of other GTE negotiation proposals were unreasonable. In particular, they mention proposals regarding a mutual agreement to review advertising,¹¹ an environmental hazard provision,¹² conditions for termination of the agreement in the event of a sale of the exchange,¹³ liability for the negligence of employees,¹⁴ and universal service-related surcharges.¹⁵

Response: GTE believes that its proposals are valid negotiating positions, and several of these terms, or modified versions developed as part of negotiations, are included in GTE interconnection agreements approved by state commissions. Further, since all terms included in interconnection agreements are either mutually agreed to by the parties or mandated by a state commission in the arbitration process, there is no reason for the Commission independently to evaluate negotiation proposals, nor are they relevant to the merger.

Litigation Positions

Allegation: MCI asserts that because some of GTE's appeals were initially found to be premature, they were designed solely to cause delay. MCI at 12-13.

Response: GTE vehemently disagrees with such claims. GTE's appeals represented a legitimate legal position in a developing area of law. When parties began appealing state commission decisions, it was unclear at what point it was necessary to appeal to federal court under the Act and distinctly possible that courts would find that failure to appeal state arbitration decisions (as opposed to state orders approving arbitrated agreements) would result in a waiver of rights.

Allegation: MCI and AT&T claim that GTE's appeals of interconnection agreements are meritless. MCI at 12; AT&T at 16.

See, e.g., CTC Comments at 19-22; RCN Comments at 10-12.

Id.

Id.

¹⁴ *Id*.

Sprint Comments at 13; US Xchange Comments at 5-6; AT&T Comments at 11-15, Beasley Affidavit at 10-11; State Comments at 7; CTC Comments at 23-26.

Response: GTE had a substantial legal basis for each of the issues it appealed. Moreover, the courts have found in GTE's favor on a multitude of issues. See, e.g., MCImetro Access Transmission Services v. GTE Northwest, Case No. C97-742WD (W.D.Wash. July 7, 1998); MCI Telecommunications Corp., et al. v. Pacific Bell, et al., GTE California Incorporated v. Conlon, AT&T Communications of California, et al., GTE v. Conlon, MCI Telecommunications Corp., et al., Nos. C 97-0670 SI, C 97-1756 SI, C 97-1757 SI, 1998 U.S. Dist. LEXIS 17556 (N.D. Cal. Sept. 29, 1998). The assertion that GTE has appealed interconnection decisions to "intentionally delay the resolution of interconnection issues between it and CLECs" (MCI at 12) is wholly without foundation.

III. GTE HAS FULFILLED ITS OBLIGATIONS UNDER THE 1996 ACT AND ITS INTERCONNECTION AGREEMENTS.

OSS Ordering and Provisioning

Allegations: GST alleges that GTE's National Open Market Centers (NOMCs) have delayed implementation of orders for resale, interim number portability, and unbundled loops due to "impediments and inefficiencies" in order handling. GST, Thomas Affidavit at 2-5. GST also points out, however, that "GTE has begun the implementation of an on-line ordering system in which orders are submitted electronically to GTE. Thus some progress toward a more robust OSS is being made." GST, Thomas Affidavit at 5. Sprint alleges that GTE is rejecting a high number of LSRs in error. Sprint, Brauer Affidavit at 19-20.

Response: This issue has arisen under GTE's interconnection agreements and therefore should be resolved under the dispute resolution mechanisms in those contracts. In any event, however, GTE has worked extensively with GST and Sprint to resolve these matters cooperatively. Through monthly troubleshooting meetings with many CLECs, GTE has worked to improve the accuracy and completeness of CLEC orders and moved to improve its own processing procedures. GTE has offered extensive training to its own personnel and CLEC employees to improve efficiency.

The processes involved in providing third-party access to the functionality of legacy systems are complex and new. GTE therefore continually looks for ways to improve wholesale ordering processes. To this end, GTE has implemented enhancements that permit orders to be submitted electronically (over the WISE web-based graphic interface processing system) rather than via fax if the CLEC so chooses. 16 All that is required is a computer, an electronic certificate

11

GTE notes that the constantly evolving systems and interfaces for ordering, while ultimately improving performance, do create the potential for glitches during transitions and upgrades. In some instances on complex matters, supplemental forms are required after the initial form is submitted.

for verification purposes, and Internet access. In fact, GST has volunteered for GTE's new Beta processing system and utilizes the WISE interfacing system. Today, 100 percent of orders can be submitted electronically. All of GTE's regions have electronic access now and all should have substantial electronic flow-through for simple resale by mid-year 1999. GTE has established these issues as a priority and plans to have electronic flow through for as many order types as possible by the end of 1999.

Allegation: Sprint claims that GTE has "bill[ed] . . . its own retail intraLATA toll to Sprint's California local end user subscribers." Sprint, Brauer Affidavit at 18. Sprint also claims GTE has been slow to respond to the problem.

Response: GTE has worked extensively with Sprint in an effort to resolve these billing issues. There were initial problems with billing as a result of updating the relevant routing tables and upgrading GTE's legacy billing systems. When efforts to reach a technological solution failed, GTE developed a manual work-around in an effort to prevent duplicative billing. As a result of these initial mishaps, GTE has sent written apologies to affected customers. GTE continues to conduct a manual review of customers' statements to ensure accurate billing.

Needless to say, a manual solution is not ideal for GTE or Sprint. Indeed, this approach consumes considerable GTE resources at significant expense to the company. GTE has assembled a team to address the routing tables issue and their work is now 85-90 percent complete. GTE hopes to have a full technological solution to this billing problem in the near future.¹⁷

Allegation: Sprint charges that GTE has failed to provide an automated interface to CSR data and access to the unbundled network elements platform. Sprint, Brauer Affidavit at 9-10.

Response: As a preliminary manner, GTE never agreed to make UNE platforms available, and the Eighth Circuit has ruled that a "rebundling" requirement is contrary to the Act. As for CSR access, Sprint opted into AT&T's interconnection agreement, which does not currently provide for CSR access in the way Sprint would prefer. If Sprint wished to make automated access to CSRs a higher priority, it was free to negotiate a different agreement.

Sprint claims that a court action was filed by a customer as a result of these billing difficulties and that GTE was found to be responsible. However, prior to the customer filing this complaint in small claims court, GTE had already credited the customer for the amounts at issue and the court found that the relevant damages were less than \$100.

Carrier-Specific Allegations

Sprint, GST, US Xchange, and Hyperion raise a number of company-specific concerns related to interconnection agreements with GTE. GTE is committed to working cooperatively with these companies to resolve these matters. If a negotiated resolution cannot be reached, these interconnection agreements have specific procedures in place for resolving these issues through state commissions, when necessary. In light of these procedures and the unrelated nature of these allegations to the merger itself, the Commission should not entertain these claims.

Sprint

Allegation: Sprint claims that GTE refused to provide marketing information for ADSL such as average loop length, percentage of customers located within 18,000 feet of a central office, and the percentage of customers that reside behind a DLC. Sprint, Brauer Affidavit at 20.

Response: GTE does not have a database with this type of information and is under no obligation to create one. Nonetheless, GTE is in the process of developing a database that includes this information and will make it available to Sprint and other CLECs as soon as practicable. In the interim, requests from CLECs for xDSL-capable loops will be handled like GTE's internal requests: GTE will assess technical feasibility on a case-by-case basis.

Allegation: Sprint asserts that GTE's collocation policies regarding DSLAMs and billing for power feeds are unreasonable. Sprint, Brauer Affidavit at 24, 27.

Response: GTE's collocation policy is consistent with the Act. GTE permits collocation for transmission and concentration functions, but not for switching or other intelligent router functions. See 47 U.S.C § 251(c)(6). As for power feed pricing, unlike other carriers, GTE does charge separately for the A and B feeds, but at half the price for each feed. Thus, GTE's two charges (for A and B) are roughly equal to other carriers' single power feed charge. This dispute therefore concerns only rate structure, not rate levels or overcharging.

Allegation: Sprint alleges that GTE charges Sprint three times the amount that it charges its own end users for a PIC change because of the service order charge. Sprint, Brauer Affidavit at 19.

Response: GTE charges all customers (both its own and CLECs') the same PIC charge charge. GTE also collects a service order charge for all LSRs pursuant to the state-arbitrated

AT&T interconnection agreement opted into by Sprint. Processing of LSRs imposes costs on GTE, which GTE has a statutory right to recover.¹⁸

GST

Allegation: GST asserts that GTE has had a number of switch translation and routing problems. GST also asserts that GTE violated the terms of the interconnection agreements by requiring GST to submit an Access Service Request (ASR). GST, Thomas Affidavit at 5-8.

Response: GTE has required an ASR in order to implement new or additional local interconnection trunks because the LERG data may be ambiguous or inadequate to ensure accuracy. Specifically, the LERG does not cover all types of routing in all cases; rather, it assumes one set of point-to-point routing. If a CLEC has multiple trunk groups coming into an access tandem with multiple routing requests, the LERG information alone will not result in accurate routing. GTE therefore had to require completion of an ASR in order to get the detailed information necessary. Nonetheless, GTE has worked with GST to make ordering processes as efficient as possible and is developing a new form that provides the information needed to supplement the LERG without necessitating CLECs to complete an ASR.¹⁹

Allegation: GST alleges that GTE failed to conduct a comprehensive review of southern California switches in response to routing and translation problems and that a number of customers have been improperly billed as a result. GST, Thomas Affidavit at 8-9.

Response: GTE's technical support operations have worked with GST to resolve these issues. GTE believes this comprehensive process has alleviated these concerns; in fact, GST called to praise the GTE support personnel.

Allegation: GST contends that GTE unfairly required it to move from two-way to one-way trunking. GST, Thomas Affidavit at 9-11.

Response: GTE has not backed away from its contractual commitment to two-way trunking. Under existing arrangements using bill and keep rather than mutual compensation, a

Sprint also asserts that a large number of directory listing orders have been rejected for invalid reasons or for reasons undeterminable by Sprint. Sprint, Brauer Affidavit at 28. GTE has established a team to address initial coding problems with CLEC directory listing information. In addition, GTE has removed any false rejects from Sprint's contractual reject percentages.

See Letter from William R. Santos, GTE Account Management to Brian D. Thomas, Vice President, Inter-Company Relations, GST (December 2, 1998).

two-way trunking arrangement functions well. However, GTE's Nortel switches are not capable of measuring traffic for purposes of reciprocal compensation in a two-way environment. Therefore, one-way trunking is necessary to ensure accurate measurement for the reciprocal compensation arrangement requested by GST. As acknowledged by GST, GTE is now handling pending two-way orders for trunks and has agreed to resolve the measurement problem in the future. On October 30, 1998, Monte Marti, GTE's Manager for Industry Management, sent a letter to GST outlining his understanding of the parties' joint agreement on handling two-way trunking issues. GTE has not yet received a full response.

Allegation: GST claims that GTE was responsible for delays in customer installations and network grooming. GST, Thomas Affidavit at 11.

Response: These delays were largely the result of GST internal issues. GST records and instructions regarding specific trunks were not in order and delayed their Hawaiian grooming projects. Other delays results from GST's failure to have collocated equipment in place and operational. GTE is prepared to move forward with testing and turning up GST's network trunking, but GST does not yet appear to be ready to proceed.

Allegation: GST sets forth various problems with ordering unbundled loops in Honolulu. GST, Thomas Affidavit at 11-13.

Response: This was an isolated incident that has been resolved. This GST request was the first unbundling order handled by GTE's Honolulu technicians, who required technical assistance. Today, GTE's Honolulu technicians are trained to address UNE orders, and GST's subsequent orders have been processed properly.

Allegation: GST contends that there were various problems with migrating the NXX code assigned to March Air Force Base from GTE to GST. GST, Thomas Affidavit at 13-14.

Response: This was the first such request in the GTE West Area. In addition, the interconnection contracts at issue did not provide for this type of transfer. Thus, GTE did not have a procedure in place to address these requests. Nonetheless, the transfer was made. The clarifying letter between the parties simply affirmed the propriety of the full NXX migration and established that GTE did not become bound by this initial transfer to any particular process for handling future NXX migrations.

US Xchange

Allegation: US Xchange states that, in Indiana, GTE failed to establish points of interconnection (POI) within 120 days and to provide 911/E911 information and coordination. US Xchange at 16.

Response: The delay in implementation of the points of interconnection resulted from the decision by US Xchange to alter its type of interconnection cable. GTE and US Xchange discussed the POI issues throughout the process and both parties agreed to the revised schedule. As for 911/E911 systems, GTE never "refused to coordinate arrangements" for interconnection. Rather, any delay resulted from US Xchange's failure to identify properly the implicated CLLI codes and the fact that US Xchange was the first carrier to request 911/E911 service from GTE in Indiana.

Hyperion

Allegation: Hyperion claims that "GTE has ... attempted to maintain its monopoly position in its service areas by ensuring that business customers who need essential services commit to long-term service contracts with punitive termination penalties if the term of the agreement is not met," and that GTE has opposed a "fresh look" right for such customers. Hyperion at 24-25.

Response: Hyperion's argument is without foundation for two reasons. First, the use of long-term contracts with termination penalties is a legitimate competitive tool used in a variety of industries, including telecommunications. Under GTE's tariffs (which, of course, are reviewed by the Pennsylvania PUC), GTE makes available discounts on certain services for customers wishing to commit to one-, three-, or five-year terms. The discounts reflect cost savings realized by GTE as a result of having predictable demand and the return on capital on contracts where special construction is required. If a customer wishes to terminate prior to the end of the service term, it is subject to a tariffed early termination charge that assures GTE of the revenue stream it anticipated in establishing the applicable term discount. That charge is not punitive; nor is it intended to deter customers from switching to a competitor. Indeed, term discounts have been in place for years, long before the advent of substantial competition.

Second, as Hyperion acknowledges, the issue of whether customers should be entitled to get out of their term commitments without making GTE whole is pending before the Pennsylvania PUC. See Hyperion Susquehanna Telecommunications v. GTE North Incorporated, Pa. PUC Docket No. C-00981575 (filed May 7, 1998). That issue is entirely unrelated to this merger, is not appropriate for consideration in this proceeding, and is outside the Commission's jurisdiction, since it concerns the provision of intrastate service. See 47 U.S.C. § 152(b).

IV. SERVICE QUALITY ISSUES ARE OUTSIDE THE SCOPE OF THIS MERGER AND IN ANY EVENT ARE BEING ADDRESSED BY GTE.

Two parties – the Texas Public Utilities Commission ("PUCT") and the New Jersey Coalition for Local Telephone Competition ("New Jersey Coalition") – urge the Commission to consider the quality of service provided by GTE's telephone operating companies as part of this merger proceeding. Neither party, however, has shown that the merger will diminish GTE's service quality in any way. By sharing best practices, GTE and Bell Atlantic both expect to improve the service levels provided to their customers. Moreover, service quality issues already are being addressed by the PUCT (as well as the other state commissions that regulate GTE's telephone operations). Consequently, there is no reason for the Commission to consider the petitioners' claims in this proceeding, although GTE discusses them briefly below.

Service Quality in Texas

Allegation: The PUCT claims that GTE has historically failed to provide adequate customer service in Texas and that the number of complaints is increasing. PUCT at 3-4. In addition, on December 17, the PUCT filed "Supplemental Comments" attaching "a detailed analysis of GTE-SW's service quality performance from the first quarter in 1996 through the second quarter in 1998" and reiterating its request that "a commitment by GTE-SW to improve its service quality performance be a precondition to approval of the merger." PUCT Supplemental Comments at 1, 2.

Response: GTE disagrees with the contention that it has failed to provide adequate customer service. Because of the low customer density of its service areas in Texas, GTE has more plant per customer – and, therefore, more plant-related complaints per customer – than some of the larger LECs, such as Southwestern Bell. In fact, GTE's average number of customers per square mile in Texas is one of the lowest in that state and is significantly lower than that of most RBOCs. However, GTE's customer service compares favorably with that of other carriers of similar size to GTE serving similar exchanges. Continual improvement of customer service has always been a high priority for GTE. In 1991, GTE re-engineered its customer service processes and moved testing and switching equipment to the desks of the repair clerks (i.e., the employees receiving trouble or repair calls). The objective of this approach is to ensure that there will be no more than two GTE employees involved in solving any one customer's problem. As a result of this effort, GTE has dramatically reduced the average time it takes to solve a customer's problem from 11 hours to approximately three hours.

GTE has also put tremendous efforts into improving the quality of its network. In each of the last few years, GTE has invested approximately \$240 per customer in its Texas network. The fruits of this investment are clear. In Texas, GTE is the largest carrier with 100 percent digital switches. In addition, GTE has met or exceeded all of its network upgrade obligations under the Texas Public Utility Regulatory Act ("PURA") and is on schedule to complete its fiber and digital program in 1999. Moreover, GTE now has fewer troubles per one hundred lines than Southwestern Bell or Sprint, despite the fact that GTE service areas have lower customer density.

Although GTE's efforts to improve its customer service and network have led to significantly improved service, they have not yet resulted in the level of service that GTE

continually seeks to provide. To ensure further improvement, GTE is continuing its investment in both its customer service and network facilities. To this end, GTE has identified four areas on which it will continue to focus its efforts:

- communications with customers;
- meeting commitments (including installation intervals and resolution of billing disputes);
- reduction of cycle time on "non-fielded" activities (those where there is no need to dispatch a technician, such as the addition of vertical features); and
- reduction in the number of re-work tickets.

To ensure that GTE employees recognize the importance of improving customer service, customer satisfaction will be further emphasized in determining all 1999 management compensation. The merger with Bell Atlantic will only strengthen GTE's commitment, as Bell Atlantic has consistently made customer service a top priority. GTE believes that its continued investment in customer service and network facilities will ensure that it is able to provide its customers with even more dependable and higher quality service.

Indeed, examining Attachment A to the PUCT's Supplemental Comments shows that GTE's overall service quality easily meets or exceeds all of the PUCT's service quality standards. As an initial matter, as the PUCT acknowledges, all GTE customers in Texas (like all GTE customers nationwide) are served by digital switches. Approximately 81 percent of GTE's Texas customer have access to ISDN capability and all customers are expected to have such access by the end of 1999. Specific analysis of Attachment A further reveals that:

- The number of surveillance reports filed by GTE-SW has declined each year since 1996. See Table 1.1. Surveillance reports are filed when performance in a given exchange is below the value established in the PUCT's service quality rules.
- On a state-wide basis, GTE easily surpasses the PUCT's standard for percentage of regular orders completed in five working days. In fact, GTE's second quarter 1998 performance was the highest it has been since reporting commenced. It is true that, in 8 of GTE's 474 exchanges in Texas, performance did not meet the PUCT's standard. In some cases, the non-compliance was due to causes outside GTE's control, such as weather. GTE's dispersed service territory was hit by two major hurricanes and substantial flooding within the relevant period. Nonetheless, GTE is continuing to take steps to improve its performance.
- GTE has virtually eliminated the number of regrade orders held over thirty days, with a total of 6 in the first half of 1998. The PUCT's standard (regrade held orders not greater than 1 percent of access lines in any months) equates to a compliance level not to exceed 19,000 orders. See Figure 1.5.
- On a company-wide basis, GTE has far exceeded the PUCT's standard for percentage of installation commitments met. See Figure 1.3. Nonetheless, in 15 exchanges out

of the 474 served by GTE in Texas, surveillance reports were filed. GTE will continue to take steps to improve its performance.

- As the PUCT's report demonstrates, GTE-SW has met the minimum requirements for operator assistance answer time in every quarter except the second quarter of 1996. The PUCT notes that GTE's "performance has deteriorated compared to the fourth quarter of 1996," but the overall decline was from 2.14 seconds to 2.68 seconds still well below the 3.3 second reporting threshold. See Figure 1.6.
- Similarly, GTE has met the standard for directory assistance answer time for every quarter except the second quarter of 1998. The PUCT notes deterioration compared to the first quarter of 1997, but GTE's most recent performance (4.98 seconds) is still well below the reporting threshold (5.9 seconds). See Figure 1.7.
- GTE's performance on percentage of business office answer time within twenty seconds has met or surpassed the PUCT's standard every quarter since the first quarter of 1997. See Figure 1.8.
- Likewise, GTE has easily surpassed the PUCT's standard for percentage of repair service answer time within twenty seconds every quarter since the second quarter of 1996. See Figure 1.9.
- In one of the most important service quality measures and a leading indicator of network quality, GTE's state-wide number of trouble reports per 100 access lines has consistently been well below that PUCT threshold e.g., 1.67 in the second quarter of 1998, compared to the standard of 6. The PUCT suggests that "the averaging of performance indicator in this category may indeed be masking poor performance in smaller exchanges located in low density rural areas," but nonetheless acknowledges that no surveillance reports have been filed, which indicates that performance in individual exchanges (including rural exchanges) has been good. In addition, GTE's performance in this areas exceeds that of any major carrier in Texas. See Figure 1.10.
- GTE has comfortably met the standard for percentage of out-of-service complaints cleared within eight working hours. While GTE has filed surveillance reports in 38 of its 474 Texas exchanges, it continues to work to improve responsiveness. See Figure 1.11. Again, GTE's performance exceeds that of the larger carriers in Texas. This is a significant accomplishment given the dispersed nature of GTE's network in Texas.

In short, while GTE remains committed to continuing its efforts to improve service levels throughout Texas, the record fails to reveal any pervasive problems and, in fact, shows that in several key areas, GTE is a leader among carriers serving Texas. Certainly, there is no basis for conditioning approval of the merger on commitments to improve service quality. GTE is already committed to doing so, and it believes that the record shows both that those efforts are working and that the merger will further enhance quality in Texas and the rest of GTE's service territories.

Finally, the PUCT has ample authority to address its particular issues, and GTE will continue to work closely with the PUCT to satisfy its concerns.

Diversion of Resources

Allegation: The PUCT states that it fears the merger could divert resources away from improvements to GTE's network and customer service. PUCT at 4.

Response: There is no basis for this concern. GTE has already made its capital plans to invest in its Texas network and the merger will not affect these decisions. In addition, GTE will continue to be subject to PURA obligations and has budgeted sufficient resources to meet them. Moreover, as explained above, Bell Atlantic regards customer service as a top priority, so the merger will only strengthen GTE's commitment to its network and its customers.

Selling Exchanges

Allegation: The PUCT also expresses concern that GTE's plans to sell some of its exchanges in Texas will result in increased pressure on the state's universal service fund. PUCT at 4.

Response: This concern is unwarranted. The exchanges GTE plans to sell have recently undergone extensive modernization so that they exceed the standard needed to meet universal service requirements. These exchanges have 100 percent digital switches and, despite their rural character, are completely one-party service. In addition, before these exchanges are sold, GTE will invest another \$23 million to install ISDN and interoffice fiber and eliminate all open wire. Thus, there will be no need for the Texas universal service fund to finance any improvements to these exchanges to ensure customers in these areas continue to receive excellent service.

J.D. Power Survey

Allegation: The New Jersey Coalition states that, "[i]n a J.D. Power and Associates survey on the quality of local phone service, GTE ranked last among local phone companies." New Jersey Coalition at 3.

Response: The New Jersey Coalition's allegation is incorrect and fails to disclose that GTE's quality improved more in the past year than any other company included in the survey. As an initial matter, GTE did not rank last. In fact, with the exception of Cincinnati Bell and Southern New England Telephone Company (both of which serve densely populated, compact territories), GTE (along with Sprint and Frontier) was the top-rated independent telephone company.²⁰

It is true that GTE was rated lower than the RBOCs. This is not a surprising finding, (Continued...)

Of course, GTE is not satisfied with its rating and will continue to strive to serve its customers better. Those efforts already are producing results. Between the 1997 and 1998 surveys, GTE improved more than any other telephone company. The largest improvements came in the Cost of Service, Operators, Billing, and Calling Card categories, but GTE showed gains in every area measured by the survey. GTE expects that its performance rating will continue to increase and that the merger will enable it to provide even better service, as it incorporates best practices from Bell Atlantic into its customer service operations.

^{(...}Continued)

however, since those companies generally serve more urban territories where it is easier to perform maintenance and repair functions. Indeed, notwithstanding this difference in their operating territories, it is noteworthy that the largest gap between GTE and the RBOCs was in the extremely subjective "Corporate Image" category.