

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)
)
Verizon Communications Inc. and)
MCI, Inc. Applications for Approval of) WC Docket No. 05-75
Transfer Of Control)
)
)

DECLARATION OF SIMON WILKIE

I. INTRODUCTION

1. My name is Simon J. Wilkie. I am a Senior Research Associate in Economics at the California Institute of Technology. Prior to joining the faculty at the California Institute of Technology, I was a Member of Technical Staff at Bell Communications Research. I have also held the positions of Affiliated Scholar of the Milken Institute, and Visiting Assistant Professor at Columbia University. Over the past fifteen years, my academic research has focused on the areas of mechanism design, regulation, and game theory, with a particular emphasis on the telecommunications industry. I received a Bachelor of Commerce degree in Economics from the University of South Wales, and an M.A. and Ph.D. in Economics from the University of Rochester.

2. From 2002 to 2003, I served as Chief Economist at the Federal Communications Commission (“FCC” or “Commission”). In that capacity, I oversaw the economic analysis performed by the Commission staff, and advised the Chairman and Commissioners on issues involving economic analysis. Major items before the Commission during my tenure included the EchoStar/DirecTV transaction, the Comcast/AT&T Broadband transaction, the Triennial Review of Unbundling Obligations, and the Biennial Review of Media Ownership rules.

3. I have been asked by Cbeyond Communications, Eschelon Telecom, NuVox Communications, and XO Communications (collectively, the “Joint Petitioners”) to review the pending Applications for Approval of the Transfer of Control (“Application”) of MCI, Inc. (“MCI”) and its subsidiaries to Verizon Communications

Inc. (“Verizon”) (MCI and Verizon together, the “Applicants”) and provide an analysis of the public interest issues raised by the proposed transaction.

4. The Application for approval of the transfer of control of MCI to Verizon represents a pivotal point in communications policy. If approved, it will reverse the separation that has been in place since the 1984 consent decree breaking up the Bell System and will undo the foundations of the Telecommunications Act of 1996. The proposed merger compels the Commission to undertake the most detailed and careful economic analysis of the possible effects of the merger on consumers and markets.

5. The Applicants propose to consolidate two of the largest providers of long distance telecommunications services in the nation, combine the first and third largest providers of retail local exchange services to a substantial portion of the country, and merge the owner of the largest holder of local network facilities in Verizon’s region – Verizon itself – with the owner of one of the two largest sets of competitive local exchange carrier (“CLEC”) local networks in that region. The situation is even more complicated when considered in the broader context of the proposed SBC/AT&T merger, as that transaction in combination with that proposed by the Application of Verizon and MCI would result in the loss of the two largest facilities-based providers of wholesale local access (*i.e.*, AT&T and MCI) in the region as well, with no other competitive service providers of sufficient size and scale available to replace them in the marketplace.

6. The Applicants compete vigorously in several geographically distinct product markets, most notably in general wholesale markets for local access facilities and circuits. MCI’s wholesale offerings compete directly with Verizon’s special access

products.¹ By removing the competitor with one of the two largest sets of CLEC local networks in the Verizon region, the merger would likely lead to significant increases in prices in wholesale markets. This will raise the marginal costs for rivals to Verizon, which in turn will reduce competition in the retail markets for the sale of voice and data services to business customers. At the very least, before ruling on the Application, the Commission should obtain and evaluate considerable additional information regarding these issues.

7. The Applicants have failed to demonstrate any credible merger specific public interest benefits from the transaction. Therefore, in my opinion, the Commission should either block the merger or impose stringent conditions designed to remedy the anti-competitive effects.

II. THE BUSINESS MARKETS

8. The Applicants assert that the proposed merger will not harm consumers. In discussing this claim with regard to business customers, the Applicants begin by dividing business customers into three classes: small, medium, and large. The different classes are purportedly characterized not just by their expenditures but also by the types of services that they typically purchase. The basis of Applicants' claim that the proposed merger will not harm business customers is apparently that MCI serves primarily the large customer class, while Verizon serves mostly the small and medium classes. In business markets, there may be a number of facilities-based competitors, and these firms tend to specialize in serving one or another of the general business classes (*i.e.*, small,

¹ See MCI, Inc. SEC Form 10-K for the fiscal year ended Dec. 31, 2004 at 49; Declaration of Jonathan P. Powell and Stephen M. Owens, Verizon Communications, Inc. and MCI, Inc., *Applications for Approval of*

medium, or large). Thus, the Applicants argue, if each customer class is a separate economic market, there is no increase in concentration from the merger.

9. Despite the above claims, and without any attempt at defining product or geographic markets, the Applicants present data regarding market shares in “the enterprise services business,” as if business markets were a single large national market.² They use this data to suggest that the merger will not result in a significant increase in market concentration. However, the putative market shares are inconsistent with the claimed business strategies of the Applicants. A more plausible assumption is that each ILEC only competes for customers based within its own territory, while IXCs and CLECs compete nationally and have roughly the same market share in each ILEC territory.³ Thus, we can renormalize the market shares offered by the Applicants in the Crandall/Singer Declaration to reflect a more reasonable geographic market definition. In this case, based on the competition present in Verizon territory, the proposed transaction will lead to an increase in the HHI of over 800 points.⁴ This increase is significant and such a large increase in the HHI highlights the need for a careful analysis of the transaction.

10. However, even accepting the existence of different classes of business customers, the scenario presented by the Applicants is misleading. The merger threatens

Transfer of Control, WC Dkt No. 05-75 (F.C.C. Mar. 9, 2005) ¶ 9.

² See Declaration of Robert W. Crandall and Hal J. Singer, *Verizon Communications, Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, WC Dkt No. 05-75 (F.C.C. Mar. 9, 2005), at 30.

³ See John C. Hodulik *et al.*, UBS Investment Research, *Wireline Postgame Analysis 10.0* (Mar. 17, 2005), at 7.

⁴ According to the *Horizontal Merger Guidelines* of the Department of Justice and Federal Trade Commission, mergers producing an increase in the HHI of 100 or more points in moderately concentrated markets or 50 or more points in highly concentrated markets “potentially raise significant competitive concerns.” U.S. Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (Rev. Apr. 8, 1997), at § 1.51 (hereinafter, “Horizontal Merger Guidelines”).

the viability of facilities-based competition by its impact on wholesale markets for local access facilities and circuits that the CLECs and others competing with Verizon require in order to serve their retail customers. In the downstream markets, CLECs, interexchange carriers (“IXCs”), and data companies compete to provide services to business customers. To provide these services, they must be able to reach the customer and deliver the customers’ voice or data traffic to its destination. No one firm has the infrastructure to provide all such services to all customers in any geographic area except the ILEC, which has circuits interconnecting every central office and connecting to virtually every building location. All other competitors must complement their own facilities with loops, interoffice transport, and entrance facilities purchased from other suppliers. The default option for the downstream firm is to purchase the required input from the ILEC (in this case Verizon) at special access rates. Absent an alternative source of supply, the ILEC has the incentive and ability to price these circuits at supra-competitive prices in order to foreclose competition or extract monopoly rents from the entrant.

11. Historically, because of these concerns, special access rates were regulated, most recently under a price cap regime.⁵ However since 1999, in the 140 largest metropolitan areas, those very geographical regions that contain the vast bulk of the business markets, special access pricing has been largely deregulated. This “pricing flexibility” regime allows the ILEC to set prices without a cap and engage in price discrimination. Since pricing flexibility was instituted, special access rates have risen

⁵ See, e.g., Patrick Rey and Jean Tirole, “Foreclosure,” in Mark Armstrong and Rob Porter, eds. (2005), HANDBOOK OF INDUSTRIAL ORGANIZATION: VOLUME III, North Holland.

dramatically.⁶ In the last few years, despite the widely publicized “telecom crash,” ILEC revenues in the special access market have increased from \$4 billion to more than \$14 billion per year. In stark contrast, rates have fallen over 90 percent on long-haul routes where there are multiple competing transport providers. Consider DS3 level transport (approximately 45 Mbps) from New York to Los Angeles, a distance of approximately 2,500 miles. In June 1999, such a circuit would have been leased for roughly \$55,000 per month. In February 2004, the price was approximately \$3,500 per month. This represents a decline of more than 90 percent.⁷

12. The structure of ILEC special access tariffs is such that the largest purchasers, AT&T and MCI, typically obtain discounts that are substantial relative to those afforded to smaller CLECs. This is due apparently to AT&T’s and MCI’s scale and scope and to the extensive nature of their local facilities, which together appear to give them substantial bargaining power and make them credible threats for the deployment of their own facilities. Smaller competitors have much less bargaining power. Also, because smaller competitors are generally in closer competition with the ILEC in focusing on small- and medium-sized customers, the special access rates they pay are significantly higher.

13. To be sure, there has been investment by CLECs other than AT&T and MCI in deploying their own local transport facilities. When the economies of scale are

⁶ See, e.g., Noel D. Uri & Paul R. Zimmerman, “Market Power and the Deregulation of Special Access Service by the Federal Communications Commission,” 13 INFORMATION & COMMUNICATIONS TECHNOLOGY LAW 129-173. See also Federal Communications Commission, “Current ARMIS Instructions,” <http://www.fcc.gov/wcb/armis/instructions/> (Apr. 1, 2005) (main menu).

⁷ See PrimMetrica, Inc., Telegeography Bandwidth Pricing Database Services, available at <http://www.telegeography.com/products/bandwidth_pricing/index.php> (“Telegeography Bandwidth Pricing Project”). All prices quoted here are from that database.

sufficient to justify the sunk costs *and* the financing is available, it is reasonable to assume that a competitor will self deploy. Because of the nature of fiber deployment, with large sunk costs and very low marginal costs, competitors to the ILEC that are able to self deploy will typically lay much more fiber than is required to meet current demand. On *some* links, therefore, there is apparently duplicative fiber installed, and so an alternative to the ILEC special access tariff *could* be available.

14. Thus, for a competitive entrant that needs to connect to customer facilities in a local market, there are three options: self deploy, pay the special access tariff, or conduct an auction to obtain competitive bids for these circuits. Because the special access rates available to smaller competitors are generally considerably higher than those available to the largest carriers, there has developed substantial wholesale markets for sourcing these circuits from carriers that can obtain substantial discounts. These are examples of what economists call a “bid market.”

15. A firm that requires a circuit or many circuits in a particular area may, for instance, put out a request for proposal (“RFP”) requesting bids for the required circuits. The bids typically will be composed of a monthly recurring charge (“MRC”) and a non-recurring charge (“NRC”). A firm may put out a request for a price for providing a given circuit or the right to provide the required circuits in an entire metropolitan statistical area (“MSA”) or even an entire LEC region. My understanding is that the two largest bidders by far in these wholesale bid markets are AT&T and MCI. They are direct competitors with the ILEC for its special access business. Thus, the proposed Verizon/MCI transaction represents a horizontal merger in wholesale local access markets. Consequently, the unilateral effect of this merger on prices in these markets should be

examined, and the possibility of coordinated effects among a post-merger Verizon and other large ILECs should be considered, especially given SBC's proposed acquisition of AT&T.

16. Despite the fact that ILECs are the only firms with ubiquitous presence and so can bid on every contract, my understanding is that they rarely actively underbid the posted special access rates. If this is the case, one can infer from their current bidding behavior that it is more profitable for Verizon to maintain high special access rates and to raise rivals' costs than it is to undercut, for example, MCI's bids. Notice that, after the merger, the incentive to raise rivals' cost or foreclose entry will be even greater because the merged entity will have an even larger share of the business markets.

17. As noted above, my understanding is also that MCI and AT&T are by far the most active bidders in the market to undercut the special access rates. A description of MCI's business practices in the wholesale market is provided in the declaration of Jonathan Powell and Stephen Owens.⁸ Additionally, AT&T boasts in its Application for Approval of the contemplated merger with SBC that it is "the top-ranked wholesale telecommunications vendor."⁹ My understanding is that, when a contract is sufficiently large, the ILECs occasionally enter the market and bid. However, when compared with their ubiquitous presence in the market, their participation in competitive bidding is paltry and their win rate almost negligible. Thus, one can examine the bidding behavior in these markets and anticipate the unilateral effect of the proposed merger on wholesale

⁸ See generally Declaration of Jonathan P. Powell and Stephen M. Owens, *Verizon Communications, Inc. and MCI, Inc. Applications for Approval of Transfer of Control*, WC Dkt No. 05-75 (F.C.C. Mar. 9, 2005).

⁹ Declaration of Dennis W. Carlton and Hal S. Sider, *SBC Communication, Inc. and AT&T Corp. Applications for Approval of Transfer of Control*, WC Dkt No. 05-65 (F.C.C. Feb. 21, 2005), at 9 (citing Yankee Group).

prices with the removal of MCI as an independent competitor. I begin by examining the importance of MCI and AT&T on the supply side.

18. I understand that both MCI and AT&T make available to wholesale customers within a metropolitan area a map of their “on net circuits” within that area – that is, those circuits that can be delivered using their own facilities. In these markets, bids representing service provided entirely over “on net circuits” are typically labeled “Type I,” while bids employing resold ILEC facilities are labeled “Type II.”¹⁰ Thus, AT&T and MCI compete in local wholesale access markets by providing circuits over their own facilities or by exploiting their special access volume discounts and reselling ILEC circuits to smaller competitors who cannot obtain similar discounts. In the latter role, MCI and AT&T act as efficient aggregators, essentially aggregating the demand of the smaller CLECs to facilitate CLEC entry to serve business customers through the volume discounts in the special access tariff that MCI and AT&T obtain.

19. To assess the role of MCI and AT&T in these markets, it is instructive to look at what portion of the potential competitive supply to business buildings they constitute. AT&T and MCI have the first and second-largest CLEC building presence, respectively, (counting buildings MCI serves using both Type I and Type II circuits) in every market I have examined to date. Moreover, the third largest firms have much smaller shares. It is instructive to view a few sample markets to appreciate how substantial AT&T and MCI are in these wholesale markets. For example, if we look at the New York metropolitan area, there are 16,869 commercial buildings served by CLECs using Type I or Type II circuits and MCI serves 1,085 of those buildings. The

¹⁰ I have been told that, other things being equal, buyers have a preference to purchase Type I circuits to avoid any reliance on the ILEC who may degrade quality or be unresponsive to service problems.

impact of removing both MCI and AT&T as suppliers of alternative access to buildings in New York and other metropolitan areas is shown in Table One below.¹¹

TABLE ONE
BUILDINGS SERVED BY CLECs IN SELECTED VERIZON METROPOLITAN AREAS
(PRE- AND POST-MERGERS)

Metropolitan Area	Buildings Served by a CLEC (Pre-Mergers)	Buildings Served by a CLEC Other Than AT&T or MCI (Pre-Mergers)	% Decline Post-Mergers
Albany, NY	1,207	350	71.0
Baltimore, MD	3,587	732	79.6
New York, NY	16,869	3,440	79.6
Philadelphia, PA	8,046	2,269	71.8
Pittsburgh, PA	3,988	772	80.6
Washington, D.C.	7,868	2,279	71.0
Source: GeoResults, Inc.			

20. The total supply of buildings with circuits accessing buildings outside the control of Verizon will be reduced, causing a diminution in competition in these markets. The question then arises as to how much competitive harm will result from the proposed merger. To evaluate this, I have examined bid data provided to me by the Joint Petitioners. To evaluate the likely competitive effects, one needs to consider both the unilateral effects and the coordinated effects. Unilateral effects are the effects on

¹¹ The source for the commercial building data cited in this Declaration is GeoResults, Inc., a leading vendor of U.S. telecommunications demand and network equipment data. As the firm advertises, “GeoResults provides a unique and proprietary set of telecommunication bandwidth estimates and circuit demand estimates at the individual business establishment level . . . Using our nationwide proprietary Telecom Competitive Infrastructure Reports, GeoResults can identify, locate and spatially profile all buildings that are currently being served by a specific competitive service provider. These buildings will include all central office collocation sites, all commercial office buildings and all potential network interface and carrier hotel sites.” GeoResults, Inc., “National Business Databases,” <http://www.georeresults.com/Databases.htm> (Apr. 22, 2005).

equilibrium prices that will result from the removal of MCI as an independent competitor with Verizon. Coordinated effects refer to the possibility that the remaining firms may have the incentive to jointly change their behavior, either tacitly or explicitly. Jointly with this proposed transaction and the proposed SBC/AT&T transaction, the possibility of coordinated effects is very real.

21. To examine the unilateral effect, at first one can look at the bid data and ask, “What would the price be in the absence of MCI’s bid, given the bids of the others?” However, focusing solely on the historical bids threatens to underestimate significantly the likely competitive effect of the proposed merger since, with one of the two leading competitors gone, the remaining bidders will bid less aggressively to win and will thus raise the equilibrium price. Auction theory provides the formula for how much the expected prices will rise.

22. As an illustrative example, consider a benchmarking exercise undertaken recently by a CLEC with which I am familiar. Among other things, that CLEC solicited bids from several carriers to provide DS1 circuits between its point of presence (“POP”) and central offices in various metropolitan areas throughout the U.S. In one major metropolitan market, for instance, the CLEC requested monthly recurring charge (“MRC”) bids from carriers on POP-to-central office DS1 circuits. The CLEC received bids for approximately 100 DS1 circuits, of which MCI was the low-price bidder for approximately two-thirds of the circuits. In fact, MCI was the only bidder for many of the POP-to-central office DS1 circuits identified by the CLEC in the metropolitan area involved. In instances in which bids were received from two or more carriers and in which MCI offered the lowest MRC, the average difference between MCI’s bid and the

second lowest bid in these instances was more than \$100 per DS1 circuit per month. Thus, removing MCI from the bidding would cause the winning bid to rise by more than \$100 per DS1 circuit per month. However, this is not the end of the analysis, as it is not the change in the *equilibrium* bid. Following the removal of MCI, the second lowest bidder can now win the procurement by bidding slightly less than the third lowest bidder. For example, consider the situation in which three carriers now bid for a circuit: MCI, Verizon, and AT&T. If Verizon is just bidding its posted special access rates (or a fixed discount from them), and if MCI is removed from the bidding, then AT&T can win by just undercutting the Verizon tariff rate.

23. The adverse competitive effects of the proposed merger in the downstream retail voice and data markets depend on the building specifics. Consider the case of a business in a building that currently has MCI as the only alternative wholesale supplier. In this case, any CLEC can reach the customer using, for example, MCI's wholesale access facilities or *via* Verizon's special access service. The downstream business can thus solicit bids from any CLEC based on its ability to serve the customer using the competitive MCI price for the access circuit. Given the retail offerings from various firms including Verizon, the downstream firm will choose the best offering. Now consider what happens post merger. There is no competition from MCI and, as a result, no other access providers to discipline Verizon's special access price. Thus, Verizon could charge an access price that would foreclose the CLECs and so charge the monopoly price to the customer and earn the monopoly rent for Verizon's service. The customer suffers from both a higher price and the loss of its first (and perhaps even second or third choice) provider in the market. If Verizon charges an access price that allows a CLEC to

win the customer, it must make at least as much profit on the wholesale offering as the profits it would make under foreclosure. Thus, even if the customer's first choice CLEC can still serve the customer, the customer will suffer a higher price due to the increase in the CLEC's marginal costs, and Verizon will extract its monopoly rent even as a wholesaler.

24. I have been able to reach some salient conclusions from the bid data I have reviewed to date.

- Winning bids currently are on average 50 percent to 60 percent lower than ILEC special access charges.
- The RBOC is almost never the lowest bidder.
- MCI and AT&T are by far the most frequent bidders.
- MCI or AT&T is the low price bidder most of the time.
- There is a significant difference between the winning price and the second lowest price.
- As MCI has moved to a wholesale business strategy, it has been bidding more aggressively in these markets over the last year. For example, one wholesale customer has indicated that, of its 221 new circuits put into service during February 2005, approximately 40 percent were procured from MCI. Therefore, the use of historical data may underestimate the merger specific harms.

25. I conclude that the removal of MCI as an independent competitor to Verizon in local wholesale access markets will cause significant consumer harm. In particular, for those circuits where competition is eliminated and the requesting carrier is left with the current special access tariff, prices will rise approximately 100 percent. Moreover, on those routes for which the number of alternative sources to the ILEC is reduced from two to one, the remaining competitor will have the incentive to raise price up to the level at which it just undercuts the ILEC special access rate. One recent study

estimated that cost of a DS1 loop circuit amounts to about one-third of a wireline CLEC's incremental costs and that a 100 percent increase in DS1 costs would make it uneconomic for the CLEC to compete, causing that firm to exit the market.¹² Thus, by this model, and consistent with the data presented in Table One above, it would be feasible for Verizon post-merger to foreclose competition for businesses located in thousands of locations throughout its area, and so enable the ILEC to raise prices to business customers in those locations. Moreover, without the presence of MCI and AT&T in the market exercising some constraints on the special access prices these prices are likely to rise further causing greater foreclosure.

26. We now turn to the issue of coordinated effects, in particular the issue of “tacit collusion” between Verizon and SBC in wholesale access markets across their respective regions. Tacit collusion occurs when firms through equilibrium behavior (rather than explicit agreement) act in a coordinated way to raise prices or reduce competition. Thus, for example, suppose it would be profitable for firm A to enter firm B's market and compete. However, firm A does not enter because of the possible retaliation that B would enter and compete down price in A's market. In this case, market A and B are characterized by tacit collusion. Economists have identified the market characteristics that make tacit collusion more likely as the market outcome. The key factors include (1) small number of firms, (2) repeated interaction, (3) multi-market contact, that is the same firms compete in many different geographic or product markets, (4) barriers to entry such as sunk costs, (5) distinct geographic areas that make it easy to coordinate by “dividing the market,” and (6) posted prices or publicly available price

¹² George S. Ford and Michael D. Pelcovits, *Unbundled Elements, Special Access, and Impairment for Wireline and Wireless Services* at 5 (2004).

information.¹³ Since these factors are present in local wholesale access markets, the combination of Verizon controlling MCI and SBC controlling AT&T creates a “perfect storm” for tacit collusion with the resulting coordinated effects harming consumers.

27. The empirical literature on tacit collusion is now quite large. For example Fournier and Zeuhlke examine airline pricing and find that when carriers are paired with multi-market contact where one firm has an advantage in one market (a city pair where one city is a hub for the carrier) and has a small presence in a second city pair market while a second firm has a hub in the second market but has a smaller presence in the first, then prices are 9 percent to 12 percent higher than would be expected.¹⁴ Busse examines cell phone pricing in the duopoly era and finds that prices in markets where the firms had multiple market contact prices were 7 percent to 10 percent higher than expected, all else equal.¹⁵ Other industries in which economists have examined tacit collusion include banking and bidding in the FCC spectrum auctions.¹⁶

28. This type of tacit collusion is orchestrated by a simple strategy: “I will not undercut your special access rates to competing carriers in your territory if you do not undercut my special access rates to competing carriers in my territory.” The strategy is consistent with the behavior of Verizon and SBC in other markets. In fact there are

¹³ See Fudenberg and Tirole (1994), “Game Theory,” Cambridge, MA: MIT Press. The classic reference on multi-market contact is B.D. Bernheim M.D. Whinston (1990), “Multimarket Contact and Collusive Behavior,” 21 *RAND JOURNAL OF ECONOMICS* 1–26.

¹⁴ Gary M. Fournier and Thomas Zuehlke (Nov. 2004), “Price Effects of Reciprocal Multi-Market Contacts Among Airline Carriers,” Department of Economics Florida State University Working Paper.

¹⁵ Meghan R. Busse (2000), “Multimarket Contact and Price Coordination in the Cellular Telephone Industry,” 9 *JOURNAL OF ECONOMIC AND MANAGEMENT STRATEGY* 287-320.

¹⁶ A.A. Heggestad and S.A. Rhoades (1978), “Multi-market Interdependence and Local Market Competition in Banking,” 60 *REVIEW OF ECONOMICS AND STATISTICS* 523–532, and Crampton, P. and J. Schwartz, 2002, “Collusive Bidding in FCC Spectrum Auctions,” *Contributions to Economic Analysis and Policy*, Vol. 1, No. 1.

possible coordinated effects in both wholesale local access markets and retail business markets.

29. ILECs have market power in special access markets, where there is no competition, but the current special access prices are (somewhat) constrained by AT&T and MCI's cost of self-deployment, which is lower than the self-deployment cost to the smaller competitors. Post merger, Verizon will have the incentive to raise rivals' costs in wholesale local access markets by removing MCI from the wholesale circuit bid auctions in Verizon's territory. This is the unilateral effect identified above. However, this still leaves SBC/AT&T as a potential bidder. Adverse coordinated effects caused by the proposed mergers would result if Verizon/MCI stopped competing with independent carriers in wholesale bid markets by undercutting SBC's special access tariff in its territory, and SBC/AT&T stopped bidding in Verizon's territory. This combination of decisions by Verizon and SBC would produce the coordinated effects in the wholesale markets.

30. In this case, the strategy of competing only in one's own territory is mutually beneficial and self-enforcing when (1) the discounted present value of the gains in the home markets, from higher special access revenues and raising the costs of CLECs and thereby reducing their competitive pressures on retail prices, exceed (2) the lost profits from bidding in the wholesale/resale markets in the other firm's territory. In particular, the in-region ILEC could always threaten that, if the tacit agreement is broken, it will compete down the price on the out-of-region ILEC's owned circuits in that ILEC's territory, thereby reducing any wholesale margins. Thus, to check that this is indeed equilibrium conduct the key variables are the profit margins in each market and the size

of the “home territory.” For example Sprint, has a much smaller home business market than Verizon or SBC, so it is somewhat less likely that Sprint would cede Sprint’s share of the national wholesale market for an increase in market share and prices in its small home territory, but for Verizon and SBC the special access market is so large and the extent of CLEC facilities in their home territory is sufficiently high that I am confident that the potential for tacit collusion should be a very serious concern.

31. The net result of this tacit collusion is to raise the costs of all other carriers, disadvantaging them as competitors. However, because Verizon only has to pay its true marginal cost in its home territory, it will capture a greater market share and/or can raise final prices. Thus the tacit collusion results in harms in the downstream business market from both higher prices and, to the extent that some carriers are foreclosed from the markets, customers lose their “first best choice” in the market. Again, notice that the result does not require Verizon to exit the markets in SBC’s territory, or vice versa. Both ILECs still maintain a competitive presence within the region of the other and may compete for large national customers and those who are “on net.” The harm is that the level and effectiveness of competition, compared to the situation in which an independent AT&T operates in Verizon’s territory, is diminished. Likewise, MCI can be expected to be a less robust competitor in SBC’s region.

32. The second effect in the retail business market is one first identified by Laffont, Rey, and Tirole.¹⁷ In a 1998 paper, they model competition in a network industry in which two firms compete for final customers. However, each firm needs access to the other firm's network to deliver service. Each firm sets an “access price” for

¹⁷ J.J. Laffont, P. Rey, and J. Tirole (1998), “Network Competition: Overview and Nondiscriminatory Pricing,” 29 RAND JOURNAL OF ECONOMICS 1-37.

the use of its facilities (for example, to terminate calls). The authors prove that, with unregulated access prices, if the two firms are sufficiently symmetric, then in equilibrium both firms can charge very high access prices. Even though the retail price for the consumer good may be competed down to the book marginal cost, the consumer actually pays the monopoly price, as the firms capture and divide the monopoly rent by charging each other high input prices. Thus, the firms are tacitly colluding through each firm's choice to accept the high access charges of the other. The authors then show that these high access costs can be used as a barrier to entry to thwart the transition to competition.

33. The adaptation to the case at hand is straightforward, where special access prices are the analogue to the access charges in the Laffront, Rey, and Tirole model. Suppose that SBC post merger raises special access prices above the current levels. This gives the combined SBC and AT&T a further cost advantage within its own territory, leading it to capture share, especially from firms whose demands are heaviest in the SBC/AT&T home territory. A similar situation holds for Verizon and MCI if Verizon raises special access rates in its home territory. Under the current pre-merger market structure, an independent MCI would react to Verizon's price hike by deploying more of its own facilities, such as fiber loops and transport, to mitigate the price hike and to preserve its market share. However, to carry out the threat requires an investment in sunk costs that are highly visible. Thus, following the mergers, the obvious coordinated strategy would be of the form, "I won't invest in new competing fiber links in your territory if you don't in mine." Again, this works if the benefits from tacit collusion, higher retail prices and greater market share in the ILEC's home territory, exceed the costs – i.e., the loss of market share outside the ILEC's home territory. The larger the

home territory as a fraction of the national market for each actor, the easier it is to sustain this pair of strategies as an equilibrium. Both Verizon and SBC have large home territories in which they serve scores of millions of customers each.

34. That these concerns are not just hypothetical can be seen in the behavior of Verizon and SBC. For example, one of the conditions imposed by the FCC in the SBC/Ameritech merger was that SBC had to invest in competitive facilities in markets outside its territory. SBC did invest substantial sums in its “National-Local Strategy” but then retreated from its investment. Thus, SBC has a history of being willing to forego large revenues rather than compete with another RBOC in that firm’s core market.

35. Similarly, SBC and Verizon divide the DSL and residential voice market in Los Angeles based on historical territories. Both firms operate in Los Angeles and both firms offer almost identical DSL service. However, there currently is a \$10 discrepancy between the monthly price charged by Verizon and the price charged by SBC.¹⁸ One of the fundamental tenets of economic competition is the “law of one price,” that is, identical products sold in the same market should have the same price. Here the law of one price fails, indicating a lack of competition. The reason is straightforward: SBC is forgoing arbitrage profits because it will not sell DSL to customers in “Verizon territory” and similarly Verizon will not sell to customers in SBC’s territory. Thus, the two firms have tacitly divided the market. SBC also will not provide bundled voice service for a number in Verizon’s territory.

36. Finally it is instructive to again look at the dearth of competition between Verizon and SBC in the business market in Los Angeles. There CLECs are present in

¹⁸ See generally company websites of Verizon Communications, Inc. and SBC Communications, Inc.

about 20,000 locations, 13,111 in SBC territory and 7,369 in Verizon territory.¹⁹ Of these 20,480 appearances, despite their massive cost advantage from their installed network bases, Verizon accounts for only 146 competitive appearances in SBC territory and SBC accounts for a mere 113 appearances in Verizon territory. If their performance as competitors in Los Angeles is indicative of what will happen nationally once they control both AT&T and MCI, then the public interest will be seriously harmed.

III. RESIDENTIAL MARKETS

37. Three classes of products are sold to residential customers: local, long distance, and the bundled product of unlimited local and long distance for a flat fee. In the pure local product market, there is scant evidence that competition from MCI has lowered prices. Given that the states continue to regulate Verizon's mass market telephone service offerings, it is difficult to gauge the extent to which the presence of MCI as a competitor in this market has affected retail prices. Nevertheless, the key issue is whether such competition would, over time, diminish the need for such state regulation.

38. In the long distance market, however, there is evidence that Verizon acts as a competitor to MCI and AT&T. One study by Hausman *et al.* found that the entry of Verizon and SBC into long distance markets after Section 271 approval lowered consumer long distance prices by eight to eleven percent.²⁰ We have direct evidence, therefore, of the price impact of competition between MCI and Verizon. Indeed,

¹⁹ The source of data is GeoResults, Inc.

²⁰ See Jerry A. Hausman, Gregory K. Leonard, and J. Gregory Sidak (2002), "Does Bell Company Entry Into Long-Distance Telecommunications Benefit Consumers?," 70 ANTITRUST LAW JOURNAL 463-484.

regarding the impact of Verizon in the market for long distance residential service, one can do no better than to echo the assessment of Marius Schwartz:

It stretches credulity to argue that a BOC has nothing to add relative to other competitors in long distance, such as the hundreds of resellers. BOC advantages that were discussed in section 3.1.3 for providing integrated services—reputation, customer relations, and scale—would also make the BOC a potent competitor in long distance, especially to serve low-volume customers.²¹

39. The case of the bundled unlimited calling (local and long distance) wireline product is even more problematic, as three firms – Verizon, MCI, and AT&T – control almost all the market in Verizon’s region. Thus, the proposed combination of Verizon and MCI is a classic three to two merger, with the further complication that AT&T may also effectively exit the market if purchased by SBC. My understanding is that the Applicants bear the burden of proof for their claim that the proposed merger will not harm the public interest. Given the high level of market concentration, this burden is substantial. However, the Applicants do not provide a formal economic market analysis, such as defining the geographic and product markets correctly by examining the data for the degree of substitutability.²² Instead, they provide unsubstantiated claims about intermodal competition, e.g., from wireless and VOIP services. Such competition may be increasing, but the relevant question is, given the effect of intermodal competition, will the merged entity have the incentive and ability to raise prices profitably? A formal antitrust economic analysis is required to answer this question.

40. In conducting such an analysis one begins by defining a relevant product market. Using the “smallest market principle,” we begin with products sold by the

²¹ See Marius Schwartz (2000), “The Economic Logic for Conditioning Bell Company Entry into Long Distance on the Prior Opening of Local Markets,” AEI-Brookings Working Paper No. 00-04.

merging parties and ask whether a hypothetical monopolist would find it profitable to impose a small but significant and non-transitory increase in price.²³ If the answer is yes, we are finished and that is the extent of the relevant product market. If the answer is no, then we include the next best substitute for the merging parties' products as revealed by market behavior such as the diversion ratio. Here the product of interest consists of the bundled "all distance" circuit switched wireline offerings of the merging parties. Given the number of customers and the known churn rate data, the next best substitute to MCI's and Verizon's wireline bundled products appears to be AT&T's One Rate USASM product.²⁴ If it would be profitable for a hypothetical monopolist to raise the price of this product, then we are finished and the wireline bundled product is a relevant antitrust product market. If not, then the issue of intermodal competition is raised.

41. However, this issue has been settled in recent proceedings. Every credible academic economic study of which I am aware has shown that wireless does not induce sufficient substitution from primary wireline service to be counted in the same relevant product market.²⁵ Indeed in the recent FCC and Department of Justice review of the Cingular/AT&T Wireless transaction, Cingular's (which is 60 percent owned by SBC) economic testimony was that wireline and wireless are separate markets, and the

²² See Horizontal Merger Guidelines.

²³ See Horizontal Merger Guidelines at § 1.1.

²⁴ See, e.g., John C. Hodulik et al., UBS Investment Research, *Wireline Postgame Analysis 10.0* (Mar. 17, 2005), at 5 (regarding shrinkage of UNE-P base among Regional Bell Operating Companies and retail access line losses).

²⁵ See, e.g., Mark Rodini, Michael R. Ward, and Glenn A. Woroch (Dec. 2002), "Going Mobile: Substitutability Between Fixed and Mobile Access," Haas School of Business, University of California at Berkeley, Center for Research on Telecommunications Policy Working Paper CRTP-58, reproduced at <http://ssrn.com/abstract=379661>, and the references cited therein. The authors find meaningful evidence of second line substitution.

Commission once again re-affirmed that at this point in time wireless is a separate antitrust product market.²⁶ This finding is supported by the fact that since 1996, the price of wireless service has fallen a dramatic 80 percent and yet only 6 percent of households have been induced to “cut the cord.” Thus, the current elasticity of substitution for primary line service is insignificant.²⁷

42. In the case of VOIP, there are approximately one million VOIP lines in the U.S. compared with 180 million traditional voice lines. Thus at this point in time, and likely for the next two years, sales of VOIP are too small to exert substantial price discipline on the bundled “all distance” wireline offerings of the merging parties. The situation is even more problematic in that one needs a broadband connection, either by means of DSL or cable modem, to use VOIP technology. Thus, the degree of substitutability differs for households with and without a broadband connection. Moreover, one of the largest providers of broadband connections in Verizon’s territory is Verizon itself through its DSL service. Moreover, Verizon engages in the practice of tying broadband to voice by refusing to sell so-called “naked DSL.” That is, in order to “switch” to VOIP to avoid a Verizon price hike, a residential consumer must also purchase a voice product from Verizon; to get the benefit of the discount DSL price, the

²⁶ See Memorandum Opinion and Order, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, 19 F.C.C. Rcd 21522 (Oct. 26, 2004), at ¶ 74 (“we find that there are separate markets for interconnected mobile voice and mobile data services, and also for residential and enterprise services”). See also Declaration of Richard J. Gilbert, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, WT Dkt No. 04-70 (F.C.C. Mar. 17, 2004).

²⁷ See Memorandum Opinion and Order, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, 19 F.C.C. Rcd 21522 (Oct. 26, 2004), at ¶ 241 (citing U.S. Census Bureau estimates “that six percent of households have cut the cord nationwide”); Ninth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, 19 F.C.C. Rcd 20597 (Sept. 28, 2004).

customer is required to buy a Verizon bundled voice product. Practically speaking, there cannot be any substitution at all. This leaves alternative DSL providers such as Covad, which has a relatively small percentage of the consumer market, and cable service. However, the availability of VOIP over cable or cable telephony service varies widely by geographic market. Very recently, Verizon has indicated that it has begun offering stand-alone DSL, although under limited circumstances and only in certain markets.²⁸ In sum, the Applicants must provide the Commission with an analysis of their churn data and diversion ratios broken down by the appropriate geographic markets so as to facilitate definition of the relevant product markets.

43. Given the appropriately defined markets, a merger simulation would answer the question as to what are the likely welfare consequences of the merger. However, if the product market is the wireline bundled product market, then the answer is straightforward. Assuming that Verizon merges with MCI, the merged entity would find it profitable to raise prices. If we assume Bertrand equilibrium with differentiated products, then using (1) the Lerner condition that the percentage markup equals the inverse of the firm-specific elasticity of demand and (2) data on rates of churn, we can check if a price increase would be profitable.²⁹ One number frequently used as an approximation for markup factor is the EBITDA to revenue ratio. For MCI's wireline

²⁸ According to news reports, Verizon has recently said that it “would offer a limited form of naked DSL, allowing existing customers who get both its DSL and phone service to continue subscribing to just the high-speed Internet service, even if they decide to switch local phone providers.” Yuki Noguchi, “Merger Critics Seek Telecom Regulation,” WASHINGTON POST (Apr. 20, 2005), at E05. *See also* “Verizon Promises Full Speed Ahead for Video Over Fiber Network,” TELEVISION A.M. (Apr. 28, 2005); “Oversight Hearing of the House Committee on the Judiciary Subject: The Telecom Marketplace Nine Years After The Telecom Act,” FEDERAL NEWS SERVICE (Apr. 20, 2005).

²⁹ If the products are homogeneous then a price increase will be always be profitable.

services, this ratio for 2004 equals approximately 10 percent.³⁰ Estimates of the diversion ratio are that 50 to 80 percent of customers who leave MCI churn to Verizon. Therefore, a 5 percent increase in MCI's price will lead to a loss of 50 percent of its customers; however, given the churn data, at least half of them (or 25 percent) will churn to Verizon. Since Verizon's margin is at least as high as MCI's, the net result to the merged firm is only a loss of 25 percent of MCI customers. Consequently, the price rise induces an increase in joint profits.

44. The merged entity, therefore, would have the incentive and ability to raise price. Econometric estimates of the elasticity for a primary wireline connection are extremely low, approximately 0.1. Estimates of the price sensitivity of minutes of use are approximately two.³¹ Since the bundled product combines a connection with unlimited usage, the elasticity for this product is unlikely to be greater than two. Therefore the merger will induce significant consumer harms in the market for mass wireline service. As of year-end 2004, Verizon had roughly 145 million access line equivalents and \$22.3 billion in domestic local voice and long distance revenues.³² Thus, a 5 percent increase in Verizon's and MCI's residential prices in Verizon's region after the merger would cause over a billion dollars of consumer harms per year. Furthermore, the withdrawal of competition from MCI would be on a national level. The national wireline market for 2004 (summing local and long distance service of the RBOCs, AT&T, MCI, and Sprint)

³⁰ See John C. Hodulik et al., UBS Investment Research, *Wireline Postgame Analysis 10.0* (Mar. 17, 2005), at 5, 25.

³¹ Glenn A. Woroch, "Local Network Competition," in Martin Cave, Sumit Majumdar, and Ingo Vogelsang, eds. (2002), *HANDBOOK OF TELECOMMUNICATIONS ECONOMICS – VOLUME 1: STRUCTURE, REGULATION AND COMPETITION*, Elsevier Scientific Publishers.

³² See Verizon Communications, Inc., Form 10-K: Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Fiscal Year Ended December 31, 2004 (S.E.C. Mar. 14, 2005).

exceeds \$114 billion. Thus, a 5 percent increase in these prices would cause approximately \$5.7 billion dollars in consumer harms per year.

45. The Applicants' undocumented claim of intermodal price discipline rests on the implicit assumption of churn and an elasticity of demand outside the known bounds. In particular, their claim implies that a 5 percent increase in consumers' wireline bills (\$2.50 for the \$50 bundled service or \$1.00 for a \$20 local service) would induce several million additional households to cut their primary line service and switch to either VOIP or wireless only. By comparison eight years after the 1996 Act, only six million households have cut the cord, despite wireless prices falling 80 percent. Moreover, there are only 3.5 million cable telephony subscribers, including VOIP.³³

46. The Applicants' claim that the proposed acquisition will not cause consumer harm is troubling given recent regulatory decisions. The basis of Verizon's arguments for relief from its unbundling obligations was that CLECs in general and AT&T and MCI in particular were not impaired without access to UNE switching and local transport. If this correct, then by the FCC's definition of impairment, it must be that AT&T and MCI can profitably enter the residential market absent the UNEs, and so as rational firms, they will.³⁴ Thus, if the assumed factual basis, as represented to the

³³ See Memorandum Opinion and Order, *Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation for Consent to Transfer Control of Licenses and Authorizations*, 19 F.C.C. Rcd 21522 (Oct. 26, 2004), at ¶ 241; Ninth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, 19 F.C.C. Rcd 20597 (Sept. 28, 2004). See also CNet News.com, "Cablevision Rings in 270,000 Phone Customers," http://ecoustics-cnet.com.com/Cablevision+rings+in+270,000+phone+customers/2100-1034_3-5587465.html (Feb. 23, 2005) (top four cable MSOs provide telephony to approximately 3.5 million subscribers nationwide); Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *Local Telephone Competition: Status as of June 30, 2004* (Dec. 2004), at 3 (3.3 million cable telephony subscribers as of June 2004).

³⁴ See the *FCC Triennial Review and Order* adopted February 20, 2003, at Section V.B.

Commission and the courts by Verizon, is correct, then by definition MCI will have the incentive and ability to re-enter the market, and so is indeed a competitor with significant market share. However, if AT&T's and MCI's withdrawal from the residential market is genuine, as the then CLECs are impaired without access to these elements and the logical basis for relaxing the unbundling requirement is false. In that case, it is troubling that a sequence of regulatory decisions based on apparently incorrect assumptions about competition should lead to the implication that Verizon can now merge with MCI.

IV. BENEFITS

47. Against the clear and demonstrable harms caused by the proposed merger, the Applicants have an obligation to provide clear and demonstrable benefits. They have failed to do so. Indeed, many of the claimed benefits are unsupported or likely symptoms of harms. I will discuss each of these in turn.

48. First the Applicants claim "synergies" of \$7 billion.³⁵ However, the failure of synergies to materialize from mergers has led to voluminous academic literature in finance and economics. Such efficiencies are almost never realized, and it well known that merging firms making such claims generally underperform the market. Indeed, the history of recent transactions before the Commission provides a litany of such failures, e.g., AOL/Time Warner and USWest/Qwest.

49. It is particularly instructive to revisit the USWest/Qwest merger, as a combination of an IXC and BOC. In that case, Qwest did not own the vital local

³⁵ See, e.g., "Description of Transaction and Public Interest Showing," *Verizon Communications Inc. and MCI, Inc. Applications for Approval of Transfer Of Control*, WC Dkt No. 05-75 (F.C.C. Feb. 21, 2005), at Exhibit 1 "Public Interest Statement," at 3, 15 (hereinafter "Verizon MCI Public Interest Statement").

infrastructure that competes with the ILEC facilities that generates harms in the case at hand. In the *Qwest/USWest Order*, the Commission clearly recognized the possible competitive harms from allowing such a merger, but accepted the Applicants' claimed public interest benefits: (i) a greater incentive to advance DSL and advanced technology because of the relative synergies between Qwest IP technology and USWest's DSL experience, and (ii) that the merger would create a better competitor by giving Qwest a greater incentive to open its markets, thus speeding the Section 271 approval.³⁶ In fact, pre-merger, the states primarily served by USWest led those of the other Regional Bell Operating Companies in DSL deployment, but now they generally lag the country in DSL deployment.³⁷ In addition Qwest was the last BOC to receive initial Section 271 approval, with Qwest's first authorization coming nearly three years after the earliest approvals. Similarly, Qwest was the last to finish the process, receiving Section 271 approval for Arizona in December of 2003.³⁸ Thus, not only did the purported gains not materialize, but the merged firm actually performed worst among its peers.

50. Similarly any claims of telecommunications company mergers inducing productivity gains should be viewed with skepticism. A recent study compared the growth in productivity for 38 Bell Operating companies over the period 1991-2000, comparing the total factor productivity of merged firms, Bell Atlantic/Nynex and SBC/Pacific Telesis, with that of firms that were not involved in a merger. The analysis

³⁶ See Memorandum Opinion and Order, *Qwest Communications International Inc. and US WEST, Inc.*, 15 F.C.C. Rcd 5376 (Mar. 10, 2000).

³⁷ Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission, *High-Speed Services for Internet Access: Status as of June 30, 2004* (Dec. 2004), at Table 9.

³⁸ See Federal Communications Commission, "RBOC Applications to Provide In-Region, InterLATA Services Under §271," http://www.fcc.gov/Bureaus/Common_Carrier/in-region_applications/ (Feb. 25, 2005).

showed that mergers have a negative, or at best a zero, impact on productivity. Moreover, the authors found no evidence of any economies of scale or scope, but they did find that the mergers probably raised total costs.³⁹ History tells us one must seriously doubt these efficiency claims. The Commission is correct to demand further documentation.

51. Moreover to the extent that the claimed benefits are cost savings due to increased firing of personnel, it is not clear that they should be counted as a benefit under the Commission's public interest standard. In particular, the relevant question is to what extent such cost savings will they be passed on to consumers. Thus, as the Commission found in EchoStar/DirecTV, the key issue is to what extent do the claimed cost savings reduce the merged firm's *marginal costs*.⁴⁰ Changes in marginal cost will be reflected in prices and so have an effect on consumer welfare. Cost reductions that affect fixed costs will not be passed on to consumers, and so do not offset potential consumer harms. Indeed, the Applicants' description of the cost savings in the transaction is in reducing overlapping overhead and administrative personnel. These costs are counted as endogenous fixed costs by economists and part of overhead by accountants. Since changes in these costs do not affect the firms' marginal costs, cost savings will not flow to consumers in the form of lower prices. Indeed, to the extent that a reduction in marketing and customer support personnel post-merger is caused by a diminution of

³⁹ Nakil Sung and Michael Gort (2003), "Estimating the Efficiency Effects of U.S. Telecommunications Mergers," reproduced at <http://ssrn.com/abstract=448660> (working paper).

⁴⁰ See Hearing Designation Order, *Application of EchoStar Communications Corporation, (a Nevada Corporation), General Motors Corporation, and Hughes Electronics Corporation (Delaware Corporations)*, 17 F.C.C. Rcd 20559 (Oct. 18, 2002).

competition due to the loss of MCI, the claimed benefit is actually a *symptom* of the anti-competitive harms.

52. However, the Applicants' most troubling claim regards "eliminating duplicative network facilities, staff, and information and operation systems."⁴¹ Specifically, the heart of the facilities-based CLEC infrastructure is to be eliminated. The very links that provide the greatest resource for competition to evade the ILEC's bottlenecks and so offer better services to customers will after the merger be redundant and so be eliminated. This is a classic example of the fallacy that runs through much of the Applicant's Public Interest Statement – cost savings do not necessarily translate into lower prices or higher social welfare. In a market with substantial fixed costs, a second firm with "redundant costs" may increase industry average costs, but by providing competition the firm lowers the equilibrium price and increases social welfare. The loss of the second firm's facilities through merger may well have a net anticompetitive impact.

53. Another public interest benefit claimed by the Applicants is that, by combining Verizon's extensive local network with MCI's backbone, the merger will lead to an improved IP network.⁴² I am not in position to judge the engineering basis of the claim, but assuming that such a benefit exists, it is not merger specific. For example, they should be able to obtain any such benefits by contracting in the marketplace. Indeed, the history of the Internet shows that a series of voluntary contracts is more efficient than some super owner in order to coordinate decisions. Absent a compelling

⁴¹ Verizon MCI Public Interest Statement, at 15.

⁴² See, e.g., Verizon MCI Public Interest Statement, at 10-12, 15-18.

demonstration of transaction costs that would thwart any such ability to contract, these claimed benefits are not merger specific. Moreover, Verizon could acquire Level 3 or Wiltel, both of which have a national IP backbone network, without the attendant competitive harms. For example Level 3 states: “The Level 3 Network was the first international network in the world built to be continuously upgradeable and fully optimized for Internet Protocol. Because the network was constructed with multiple conduits, Level 3 can deploy new generations of optical fiber and equipment far more quickly and economically than its competitors – a critical capability in an era of rapid technological change.”⁴³ Again, I am not in position to judge the engineering basis of the claim, but assuming that such a benefit exists, it is not merger specific.

54. In particular, assuming the Applicants’ hypothesis that Verizon and MCI have complementary network assets, they should be able to obtain the value of any such complementarities by contracting in the marketplace. The Applicants provide no compelling reason to suggest that the merger is superior to the workings of the market. Indeed, Verizon by its past actions has shown otherwise. In particular, as a condition of the Bell Atlantic merger with GTE, Verizon had to spin off the Internet assets that became Genuity. These assets are very similar to MCI’s, and as Genuity was formerly owned by GTE, there should not be the difficulties of integration due to, for example, the different corporate cultures that Verizon will face with MCI.⁴⁴ The Commission required that Verizon divest most of its interest in Genuity but granted it an option, “a contingent right that enables the merged firm to convert the shares into additional shares of up to 80

⁴³ Level 3 Communications, “The Level 3 Network,” <http://www.level3.com/673.html> (visited Apr. 22, 2005).

percent of Genuity only if it obtains section 271 authority with respect to 95 percent of Bell Atlantic's in-region access lines within five years of the merger's closing."⁴⁵ After the conditions were met, Verizon had the opportunity to re-acquire Genuity, thus providing it with a national IP presence and the ability to implement the claimed benefits of such an integration. Verizon chose not to exercise its option, even though Genuity went into bankruptcy and the assets could have been reacquired at a "fire sale" price.⁴⁶ Thus, in the case of Genuity, Verizon's behavior demonstrates that coordinating through the market (rather than merger) was apparently more efficient.

55. As to innovation, the claimed benefits are purely speculative. Indeed, the Applicants admit as much, that the "two companies have not been able to begin any joint business planning, so predictions about innovation are necessarily tentative."⁴⁷ However, given the nature of the merger and the level of possible harms induced by the elimination of the largest competitor to the ILEC in the wholesale market for local access, the *Merger Guidelines* and past merger decisions of the FCC have required that the benefits must pass a higher threshold of credibility, rather than being speculative.

56. A more fundamental issue is the fact that Verizon is the wireline incumbent with large sunk investments in legacy technology that generate enormous cash flows. Nobel Prize winner Ken Arrow identified what has become known as the "replacement effect," i.e., an incumbent earning rents from an existing installed technology or large installed base will lose the legacy rents from installing new

⁴⁴ These problems are likely to be significant given the different histories of the two firms, as was the case with the AOL/Time Warner merger.

⁴⁵ *GTE/Bell Atlantic Merger Order* ¶ 5.

⁴⁶ Ultimately, Genuity was purchased by Level 3. See <http://www.genuity.com>.

⁴⁷ Verizon MCI Public Interest Statement, at 16.

technology.⁴⁸ That is, the opportunity cost of investing in a new technology is higher for the incumbent because by investing it is “replacing” or competing with himself. Therefore, entrants will have a higher incentive to innovate than the incumbent. This phenomenon has been well documented. For example recently, it has been adapted by Clayton Christiansen and labeled “The Innovator’s Dilemma” in reference to companies with a large installed customer base.⁴⁹ Thus, as a matter of economic theory, we should question the claimed benefit. Furthermore, the economic literature shows that Verizon and the RBOCs have additional incentives to delay investments because they are in a strategic game with regulators from who they wish to extract concessions. These papers find that gaming by firms and regulators has delayed the adoption of some innovations for periods of years.⁵⁰ For example the rollout of ISDN was delayed for at least ten years and Verizon delayed the widespread roll out of DSL to the consumer for several years.⁵¹

V. CONCLUSIONS

57. Given the demonstrable public harms, most notably in wholesale markets for local circuits, and the resulting downstream harms in the business market, coupled with the lack of tangible merger-specific benefits, in my opinion the proposed merger of Verizon and MCI as it stands cannot be found in the public interest.

⁴⁸ See Jean Tirole (1994), *THE THEORY OF INDUSTRIAL ORGANIZATION*, Cambridge, MA: MIT Press, at 390-392.

⁴⁹ See Clayton Christensen (2003), *THE INNOVATOR’S DILEMMA*, HarperCollins Publishers: New York, NY.

⁵⁰ See Prieger, James E., “The Timing Of Product Innovation And Regulatory Delay” (September 17, 2001). University of California, Davis - Department of Economics Working Paper No. 01-9.

⁵¹ See, e.g., Patrick Flanagan, “DSL and the Access Race,” *TELECOMMUNICATIONS ONLINE*, <http://www.telecommagazine.com/default.asp?journalid=2&func=articles&page=dsl&year=1999&month=5>.

