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# REBUTTAL TESTIMONY

# OF

# WILLIAM E. TAYLOR

## Prepared on Behalf of Verizon New England Inc.

## d/b/a

## Verizon Massachusetts

## Before the Massachusetts

## Department of Telecommunications and Energy

## September 21, 2001

# WILLIAM E. TAYLOR

## I. INTRODUCTION AND SUMMARY

Q. What is your name, business address and current position?

A. My name is William E. Taylor. I am Senior Vice President at National Economic Research Associates, Inc. (NERA), head of its telecommunications practice and of its Cambridge office, located at One Main Street, Cambridge, Massachusetts 02142.

Q. Have you testified previously in this Docket?

A. Yes. I filed direct testimony in D.T.E. 01-31 on April 12, 2001. My professional qualifications were attached as Exhibit 1 to that testimony.

Q. What is the purpose of your rebuttal testimony?

A. Verizon Massachusetts ("Verizon MA") has asked me to comment on economic issues raised in the direct testimony of Lee L. Selwyn on behalf of Office of Attorney General, John W. Mayo on behalf of AT&T, and August H. Ankum on behalf of Network Plus.

Q. Please summarize your primary conclusions.

A. First, there is no practical value in the proposal made by AT&T or the Attorney General to require Verizon MA to provide information to evaluate market power. While enforcement agencies (the U.S. Federal Trade Commission and Department of Justice) and economic scholars accept a theoretical economic model of market power that references supply and demand elasticities, they also recognize the impracticalities of using such measures *directly* in a real-world evaluation of market power. The same economic principles underlying the theoretical model relied on by Dr. Selwyn and Dr. Mayo suggest alternative but equivalent economic measures (e.g., barriers to entry and expansion and indices of competitive loss) that the Department can use to assure itself that Verizon MA has no significant market power for a given service. Using such measures, Verizon MA has presented sufficient and credible evidence that it cannot exercise market power for business services in Massachusetts and that its request for relaxed regulatory treatment should be granted.

Second, contrary to claims by intervenors, recent reductions in CLEC market capitalization and failures of some CLECs are normal outcomes of competitive market processes. They do not imply that competition cannot survive in local exchange markets or that Verizon MA is somehow responsible for its demise. Moreover, significant investment by entrants in local exchange markets remains, and those facilities are used to compete in the market regardless of the name of the firm that owns the assets.

Third, prices in excess of incremental cost are not evidence of market power, particularly where economies of scope and scale imply that equilibrium prices must exceed incremental cost. In addition, pricing carrier access services above incremental cost is neither anticompetitive nor inefficient relative to other rate structures that would recover the total costs of the firm.

## II. VERIZON MA HAS PROVIDED THE DEPARTMENT SUFFICIENT INFORMATION TO DETERMINE THAT IT HAS NO MARKET POWER FOR BUSINESS SERVICES.

Q. Dr. Mayo asserts (at 16) that the competition-enabling principles he describes "are best viewed as necessary, but not sufficient, for the existence of effective competition." Do you agree?

A No. The term "effective competition" generally means a sufficient level of competition to prevent an individual firm from profitably holding the market price above the competitive level—i.e., from exercising market (or monopoly) power. Indeed, Dr. Mayo notes (at 21) his agreement with the principle that in "the absence of significant monopoly power a firm is said to be subject to *effective competition.*" The same principle is embodied in the Merger Guidelines of the U.S. Department of Justice, which describes a potential entrant as an example of effective competition if it is likely that it can enter and supply output in response to a price increase within a one-year period. Such entry is described in the Merger Guidelines as sufficient to mitigate the exercise of market power.

As described in Verizon MA's direct testimony, there is an abundance of evidence regarding (i) the level and growth of actual competitive entry that has already taken place throughout Massachusetts and (ii) Verizon MA's competitive losses. That evidence is

further supported by Mr. Doane's reply testimony, which details the character and degree of competitive entry in every wire center throughout Massachusetts.

Furthermore, Dr. Mayo's claim that policymakers are concerned with "the nominal presence of the competition-enabling policies" (at 20) and his admonition that "regulatory commissions cannot simply presume the absence of monopoly power in the wake of the Act" (at 17) ignore the fact that in Massachusetts, Verizon MA has met the rigorous criteria established by Congress, the FCC and the Department to provide in-region interLATA long-distance services. Local exchange markets have been opened to competition in Massachusetts; unbundled network elements and resold services are available to CLECs at TELRIC cost-based rates on terms which are comparable to Verizon MA's own services for its retail customers.

Q. Dr. Mayo asserts (at 21) that it is "critical" the Department engage in a "formal analysis" of market power held by Verizon in Massachusetts. Dr. Mayo goes on to assert (at 28) this "must necessarily consist of a stand-alone analysis of the extent of competition in business local exchange services that are classified as non-competitive" which he counts (at 27) as 68 services. Dr. Selwyn similarly asserts (at 10) that Verizon should have conducted a market power analysis at the "wire center level (which is the relevant market for a customer making purchasing decisions)." Do you agree?

A. No. There is no practical value in the proposals made by either Dr. Mayo or Dr. Selwyn. Taken together or separately, they represent a draconian procedure which, by design, could never be carried out by the Department in any reasonable or useful manner. As I discuss below, it is impractical and unnecessary to require that Verizon MA produce, and the Department evaluate, specific measures of demand and supply elasticities as discussed by Dr. Selwyn and Dr. Mayo. There is nothing to be gained by the Department's evaluating more than 18,000 separate market power studies.[1] The effect of such a proposal would be that the Department would likely never complete its analysis of Verizon MA's business

[1] Dr. Mayo asserts that formal studies must be performed for at least 68 different services in each of Verizon MA's wire centers. There are 27 wire centers in Massachusetts (68 x 272 = 18,496).

markets, and unnecessary asymmetric price regulation would continue indefinitely, thereby reducing consumer welfare.

The key question is simply whether the Department can determine if the services for which Verizon MA seeks relaxed regulatory treatment are subject to effective competition. As Dr. Mayo notes (at 25), if this is the case, "then the Department should move to approve this aspect of the Verizon Plan" because effective competition is superior to regulation.

While economic theory provides a useful guide to the elements of a competitive analysis, it does not supply a bright-line test that can be used in an adversarial proceeding to determine when existing competitors discipline the market price sufficiently that the service can be reclassified as competitive. There are no numerical standards readily available to determine when market forces can safely regulate a service. Moreover, the specific information necessary for the Department's assessment as described by Dr. Mayo and Dr. Selwyn is not solely in the possession of Verizon MA; it is in the possession of firms not subject to (or subject to lesser degrees of) Department jurisdiction or is simply unavailable.

In theory, the critical element in measuring market power is the profitability of holding the price of the service above its competitive level for a significant period of time. To construct the specific quantitative tests discussed in Dr. Mayo's testimony for instance, we would need to estimate the price elasticity of the demand curve facing the firm at the competitive price. That exercise would require generally unobtainable market data from competing carriers along with assumptions regarding the actual and potential competing services and their likely responses to changes in the incumbent firm's price. To assess the likelihood that a supra-competitive price could be profitable for the incumbent requires knowledge of existing and potential competitors' capacities and locations, the likely cost of expansion, the degree to which their services can substitute for those of the incumbent, and the appropriate weights to assign each of these factors.

In these circumstances, a more accurate measure of market power can be obtained by assessing directly the barriers to entry and expansion that competitors face in Massachusetts and the degree to which they have been able to overcome whatever barriers might remain.

Q. Dr. Selwyn and Dr. Mayo assert that the Department should rely on measures of market share, barriers to entry and expansion (i.e., elasticity of supply) and the market demand elasticity to determine if Verizon MA has market power. Do the data you refer to address these theoretical issues?

A. Yes. The economic theory relied on by Dr. Mayo[2] and Dr. Selwyn makes clear the degree of interdependence among the measures of market power, market share and supply and demand elasticities discussed in their testimony. For a given level of market power for firm i, for instance, the higher the elasticity of supply (i.e., the lower the barriers to entry and expansion), "the higher will be firm i's elasticity of demand." Such relationships are valuable; the theoretical treatise relied on by Dr. Mayo (at 22) also observes that:[3]

> More important is the difficulty that would face a court or an enforcement agency in estimating elasticities of demand for purposes of using our approach in antitrust enforcement and adjudication. We have written elsewhere of the practical difficulty of administering antitrust rules that require an explicit measurement of the elasticity of demand or supply.

Additionally, the treatise relied on by Dr. Mayo also makes the point that information about "market share alone is misleading" and should be considered only along with other indicators of market power.[4]

Q. Please provide a brief description of the data you believe to be relevant and how the Department should view them.

A. Verizon MA presented data that show there are no substantial barriers to entry or expansion, that market demand continues to expand, and that Verizon MA's competitive losses are growing. In addition to the wire center specific data presented in the rebuttal testimony of Mr. Mudge and Mr. Doane,[5] Verizon MA has already testified to a variety of

[2] See William M. Landes and Richard A. Posner "Market Power in Antitrust Cases," Harvard Law Review, March 1981: 937-996.

[3] Landes and Posner 943.

[4] Landes and Posner 947.

[5] It is noteworthy that the smallest conceivable "properly-defined economic market" would be a wire center, and the testimony of Mr. Mudge and Mr. Doane show detailed wire center level data on the number of resellers, UNE entrants, CLECs using their own switches, and CLECs and other service providers collocating at a (continued...)

losses and the growth of those losses over time to competitors that employ resale, UNE, UNE-P and facilities-based service provisioning. That data included the following evidence:

- ?? Residential lines lost to competition in the six months between July 2000 and January 2001 grew at an annualized rate of over 100 percent to more than 184,000.
- ?? Total lines lost to competition in the four months between September 2000 and January 2001 grew at an annualized rate of over 49 percent to more than 850,000.
- ?? Total lines lost to facilities-based competitors between September 2000 and January 2001 grew at an annualized rate of over 56 percent to more than 554,000.
- ?? Between July 2000 and January 2001:
  - o Ported numbers grew at an annualized rate of 66 percent;
  - o Interconnection trunks grew at an annualized rate of 45 percent;
  - o DSL UNE loops grew at an annualized rate of 159 percent; and,
  - o Interconnection minutes from CLECs to Verizon grew at an annualized rate of 119 percent.
- ?? In February 2001, Verizon MA processed:
  - o 18,000 local service requests from resellers (an average of about 900 per day)
  - o 33,000 local service requests for UNE and UNE-P from CLECs (an average of about 1,600 per day)

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(...continued)

Verizon MA central office. If a wire center level analysis were required, these data would show that no (continued...)

Further evidence of low barriers to entry and the potential for fringe supply to expand included:

- ?? Competitors **currently** have access to more than 97 percent of residence and 98 percent of business customers in Massachusetts by means of collocation arrangements in place as of January 31, 2001;
- ?? Carriers have **currently** deployed at least 48 local switches.
- ?? Several large integrated communications providers (e.g., WorldCom and AT&T) **currently** have networks that stretch across the entire state.

By themselves, these data make it clear that there are no significant barriers to entry or expansion in the supply of business services.

Q. Dr. Mayo asserts (at 26) that Verizon has "failed to identify the relevant economic markets," has relied on "anecdotal data" and presents data that are "potentially quite misleading." In summary, Dr. Mayo concludes that the data presented by Verizon MA is insufficient for the Department to "conclude that the retail services Verizon seeks to have deregulated are subject to effective competition." Do you agree?

A. No. Verizon MA has presented detailed data that demonstrate that there are no substantial barriers to entry and that competition for business services exists, is widespread and is growing – which are precisely the relevant issues in this proceeding. Dr. Mayo himself has relied upon similar data in proceedings before this Department. Testifying on behalf of AT&T in D.P.U. 91-79, Dr. Mayo expressed the following view of the evidence necessary to conclude that AT&T faced effective competition in Massachusetts toll markets:[6]

> The consequent need to examine both entry/expansion conditions and structural characteristics of the market has been emphasized by antitrust policy agencies. For example, the Federal Trade Commission has stated:

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(...continued)

significant barriers to entry exist in wire center geographic markets.

[6] See the Direct Testimony of John W. Mayo on behalf of AT&T Communications of New England, Inc., ("*Mayo Direct*"), Massachusetts Department of Public Utilities, Docket No. 91-79, December 18, 1991, pp. 15-16.

> "Ideally, if we could measure all relevant demand and supply elasticities, we could arrive at relatively precise estimates of market power. Such evidence, however, is rarely, if ever, available and is not readily susceptible to direct measurement. Therefore, other criteria must be utilized…. The most probative criteria include entry barriers; concentration trends (including volatility of market shares); technological change; demand trends; and market definition." [See Federal Trade Commission "Statement of the Federal Trade Commission Concerning Horizontal Mergers," June 14, 1982]

They go on to note that:

> "The issue of entry barriers is perhaps the most important qualitative factor, for if entry barriers are very low it is unlikely that market power, whether individually or collectively exercised, will persist for long."

Dr. Mayo then observed that market share data often leads to "specious conclusions" and quotes extensively (not included here) from a noted economist to make his point. Continuing, Dr. Mayo notes that:[7]

> By ignoring entry/expansion conditions and, instead, focusing on market share, totally specious conclusions may be reached. This was pointed out for an extreme case of a single firm with 99.9 percent of a market by Noble Laureate Paul Samuelson.

In that testimony, similar to his testimony in this proceeding, Dr. Mayo described how the elasticity of demand and supply were important concepts in analyzing market power. When discussing evidence regarding the supply elasticity for toll service in Massachusetts, however, Dr. Mayo did not rely on a quantitative measure of supply elasticity but rather relied only upon "a variety of factual material" presented by another AT&T witness. The "factual material" basically included "applications by potential entrants for entry into the Massachusetts market," a count of the number of firms that had already actually entered the market, competitors' output growth rates, and a generic observation that competitors had ample fungible capacity to expand output for any of the interexchange services in Massachusetts.[8]

[7] Mayo Direct 16.

[8] Mayo Direct 21.

Summarizing his view of the evidence necessary to conclude that AT&T faced a high market supply elasticity for the supply of toll service, Dr. Mayo concluded that:[9]

> In sum, where new firms have demonstrated their ability to enter a market and successfully capture market share, it can be concluded that economic barriers to entry and expansion are low and the responsiveness of their output to price is high.

Finally, in Dr. Mayo's view, the evidence necessary to conclude that AT&T faced effective competition for toll service in Massachusetts amounted to:[10]

> The presence of numerous competitors, the demonstrated vulnerability of AT&T's market share, the widespread availability of transmission capacity, the minimal amount of economic barriers to entry, and the fundamentally pro-competitive demand conditions in the interLATA market clearly point toward the presence of effective competition.

It is difficult to understand how Dr. Mayo can object to the type of data presented by Verizon MA in this proceeding, since he relied on the same type of evidence in arguing that AT&T faced effective competition in Massachusetts toll markets. Indeed, in that proceeding, the Department found in favor of AT&T's evidence versus the Attorney General's analysis that depended more on the "correlation of market share and market power." The Department found that:[11]

> However, as discussed below, we find that AT&T's economic analysis regarding market power is more relevant [than the Attorney General's analysis] in the existing telecommunications marketplace.

Moreover, in the instant proceeding Verizon has quantified (i) the presence of numerous competitors, (ii) the vulnerability of its share of business access lines, and (iii) the widespread availability of capacity in the form of unbundled loops, switching and transport accessed through widespread collocation. Economic barriers to entry are small and demand

[9] Mayo Direct 24.

[10] Mayo Direct 33.

[11] Before the Massachusetts Department of Public Utilities, *"Petition of AT&T Communications of New England, Inc, pursuant to G.L. c. 159, §12 and 220 C.M.R. 1.04, for an alternative mode of regulation of the Company's Massachusetts intrastate telecommunications services,"* Docket No. 91-79, June 22, 1992, at 32.

conditions are procompetitive because resale and the availability of unbundled network elements eliminates entrants' sunk costs, and, unlike Dr. Mayo's toll case, the main entrants into the business local exchange market are established firms with strong brand recognition and existing customer relationships with business customers throughout Massachusetts.

Q. Have AT&T witnesses taken positions in other proceedings that are consistent with your approach to assessing competition?

A. Yes. In other proceedings, AT&T, through a variety of economic experts, has acknowledged the limitations of market share analyses and argued against them. These experts have testified that if other carriers can provide substitutes and expand rapidly, those carriers can prevent an incumbent with a high share from exercising market power. They have also emphasized that regardless of market share, if entry barriers are low, market power will be constrained. AT&T has also argued that, to the extent that market concentration is relevant, it should be measured using the relative capacities of the competitors in the market, not their shares of recent revenues or output.

The FCC summarized AT&T's position in the Non-Dominance proceeding as follows:

> AT&T contends that market share alone is not a valid measure of market power in any aspect of the interexchange market because: (a) competitors' excess capacity constrains AT&T's ability to restrict output; and (b) AT&T's aggregate share does not reflect the extraordinary amount of consumer "churn" currently occurring in the marketplace. Thus, AT&T argues that market share figures based solely upon output—rather than on total available capacity—distort the importance of market share as an indicator of market power. ¶42.[12]

Thus, AT&T has argued on its own behalf that market share is not relevant for reclassifying a service as competitive when capacity is in place that can constrain an incumbent's ability to restrict output.

In contrast to Dr. Selwyn's reliance on market share (at 26-27), Drs. Mayo and Kaserman on behalf of AT&T have noted that:

[12] "*Motion of AT&T Corp. to be Reclassified as Non-Dominant Carrier*," FCC 95-427, October 23, 1995, citing AT&T April 24, 1995, *Ex Parte* Filing at 30-35.

- ?? [I]nformation that, in some cases, might be contained in a market share number at a specific point in time is diluted substantially by the fact that AT&T began the post-divestiture period with an inherited high [market] share. The competitive significance of a market share number…stems from a firm's ability (or lack thereof) to retain a given market share in the wake of an attempt to raise prices to above-competitive levels.[13]

- ?? [T]he presence of a high market share at a given point in time provides no information on the incumbent firm's vulnerability to market share losses.[14]

- ?? [M]arket share is one of the economic determinants of market power, it cannot by itself demonstrate that a firm has significant control over market price. The other economic determinants, such as entry conditions, must also be conducive to providing such control.[15]

- ?? It is important to understand that a firm cannot hold significant market power unless it has a large market share and other firms' supply responsiveness is low. That is either a low market share or a high responsiveness of other firms' supply to price changes means that the firm is facing effective competition. Is [sic] market share is low, significant market power cannot exist even if the responsiveness of other firms' supply to price changes is limited. Conversely, where other firms' supply is highly responsive to price changes, an individual firm cannot possess significant market power even if it holds a very high share.[16]

- ?? The FTC further notes that, "[t]he issue of entry barriers is perhaps the most important qualitative factor, for if entry barriers are very low it is unlikely market power…will persist for long."[17]

AT&T has also acknowledged elsewhere that there is no clear theoretical or empirical link between the degree of concentration and the intensity of competition in a market. One AT&T witness argued:

[13] "Is AT&T Dominant? An Assessment of the Evidence," by David Kaserman and John Mayo: June 1995, Attachment to AT&T Ex Parte letter from Charles L. Ward to William C. Caton. RE *Ex Parte* CC Docket 79-252, at 13.

[14] Kaserman and Mayo 13.

[15] Kaserman and Mayo 16.

[16] Kaserman and Mayo 14.

[17] Kaserman and Mayo 15.

> [T]he link between market concentration and market competitiveness is a tenuous one, and that measuring concentration is not a substitute for analyzing the factors that determine market performance. … It is widely recognized that a firm's market power depends on whether rivals can supply defecting customers without significant increases in marginal cost and on whether consumers regard the products of other firms as good substitutes.[18]

In sum, Verizon MA's approach to assessing competition in this proceeding is similar to that used by AT&T in concluding that Massachusetts and national toll markets were effectively competitive.

## III. COMPETITIVE MARKET FORCES ARE NOT DETERIORATING

Q. Dr. Ankum makes a number of assertions (at 17-25) regarding the financial health of competitive carriers and how it affects their ability to compete. He refers to the RBOC's "quest for profit maximization" as causing competitive carriers to suffer "serious financial setbacks" and warns the Department that the "potential danger to the nation's economy cannot be overstated." Similarly, Dr. Selwyn asserts (at 55-56) that competitors in Massachusetts have been adversely impacted by the drop in their stock price over the past two years and that their ability to compete in Massachusetts is in jeopardy. Do you agree?

A. No. This line of argument is unpersuasive for several reasons. First, while it is true that several entrants into the local exchange markets have not survived the past several months or even a few years, there are other CLECs that have been far more successful. For example, AOL Timer Warner, McLeod USA, Allegiance Telecom, and XO Communications are among those who have been more successful. A recent study documented their experience as follows:

> The most successful of the new entrants are Time Warner Telecom, McLeod USA, and Allegiance. Each has contributed substantially to competition, employing different business strategies. Time Warner has tripled the number of its customer lines since 1998, and has increased its revenues six-fold during this time. McLeod has shown consistent quarterly revenue growth of ten percent from 1998 to 2000, and it was one of the largest of the new carriers with over

[18] Statement of Stanley M. Besen, *Reply Comments of American Telephone and Telegraph Company*, CC Docket No. 90-132, September 18, 1990, Appendix B at 2-3 (footnotes omitted).

> $400 million in revenues during the fourth quarter of 2000. In less than three years, Allegiance has grown from scratch to almost $285 million per year in revenues, and its market capitalization of $1.7 billion is one of the largest in the industry. These firms prove that a CLEC can succeed.[19]

Success has continued for these four companies through the second quarter 2001. All four companies express confidence in their abilities to continue to provide and expand their services.

- AOL Time Warner's total revenues grew to $9.2 billion (an increase of 3 percent from second quarter 2000) and total subscriptions grew to more than 135 million, resulting in $4.1 billion in subscription revenues (a 10 percent increase).[20]

- McLeod USA reported $473.6 million revenue in second quarter 2001, up 43 percent from the same period a year ago.[21]

- Allegiance Telecom announced second quarter revenue of $124.1 million, an increase of 17.2 percent from the first quarter and 96.9 percent compared with the second quarter of last year. In addition, lines sold increased 15.7 percent from the first quarter of this year to 192,000 lines. Lines installed also showed record a record growth of 7.6 percent.[22]

- XO Communications' revenue in the second quarter of 2001 grew to $306.8 million, an 11 percent increase over the revenue reported in the first quarter of this year. Year to date revenue for the six months ending June 30, 2001 increased by 137 percent from the comparable period in 2000, totaling $584.1 million.[23]

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[19] See Robert W. Crandall, "An Assessment of the Competitive Local Exchange Carriers Five Years After the Passage of the Telecommunications Act," Criterion Economics LLC, June 2001: 4.

[20] AOL Time Warner Quarterly Earnings Release. http://www.aoltimewarners.com/investors/financials/earnings/2Q01/atrearningsrelease.html

[21] McLeod USA Quarterly Releases. http://www.mcleodusa.com/html/ir/singleStory.php3?pid=141$type=QR

[22] http://www.allegiancetele.com/about_allegiance/in_the_news/2q01_results.jsp

[23] http://www.xo.com/news/81.html

Second, several unsuccessful CLECs have been victims of their own business errors or the vagaries of the business cycle. Those that entered the market in pursuit of regulatory arbitrage profits alone—for example, from carrying Internet-bound traffic to Internet service providers—found themselves without a business when the FCC rewrote the rules. Other unsuccessful CLECs have failed to attract sufficient capital or customers to compete and stay viable even in niche market segments:

> On the other hand, another entrant, ICG, expanded too quickly by adding markets before its initial network operating problems were eliminated. Ultimately, it filed for bankruptcy protection, citing service problems and revenue shortfalls. Another entrant, NorthPoint, sold digital subscriber line (DSL) service to Internet Service Providers (ISPs) rather than provide Internet access itself. With the recent financial crunch claiming many Internet firms, many of its customers defaulted on their payments, resulting in NorthPoint's filing for bankruptcy protection. Yet another entrant, Focal, relied too heavily on a gimmick -- collecting reciprocal compensation payments from established carriers for simply placing itself between these established carriers and Internet service providers. When this gambit was revealed and ultimately phased out by regulators, Focal's inefficient network design was exposed, placing it in substantial financial difficulty. [24]

Despite Verizon MA's compliance with the duties and responsibilities imposed upon it by the 1996 Act, there can never be a guarantee that *any* competitor that enters the market will survive and thrive. Nor should the Department act as a guarantor of the survival of any and every competitor. The 1996 Act contains no provisions—beyond allowing for fair competition—to ensure the survival of every new entrant.

Finally, Dr. Ankum would apparently have the Department believe that non-incumbent carriers are about to go out of business and that their demise is Verizon MA's fault. I disagree. First, Dr. Ankum's exhibits highlighting the changes in market capitalization show that the CLECs and Wholesale Providers category has an April 23, 2001 capitalization in excess of $55 billion. This is hardly a trivial amount; indeed it is larger than the Gross Domestic Product of most nations in the world today. Also, Dr. Ankum's much-touted decline in market capitalization for the CLECs and Wholesale Providers

[24] Crandall 5.

category ($122.3 billion) pales by comparison with the market capitalization decline of companies such as Lucent ($188.2 billion decline) and Microsoft ($238.4 billion decline) over the same period analyzed by Dr. Ankum.[25] Indeed, the general health of most companies declined over the same period—the Nasdaq 100 index, for instance, declined more than 50 percent over the same period.[26]

Furthermore, with the declining economy and tightening capital markets, CLECs are in a relatively advantageous investment position. Verizon MA is compelled to continue its investment program to meet retail service requirements, thereby ensuring that UNE, UNE-P and resale offerings continue to be available to CLECs in Massachusetts. The local exchange telecommunications market is unique in that respect—i.e., in the short run, entrants can survive and grow without expending a great deal of their own capital because the ILEC network can be relied upon to meet both wholesale and retail demand.

Q. Both Dr. Ankum and Dr. Selwyn point to the recent financial woes of some CLECs to suggest that local competition may not occur or be permanent. Do you agree?

A. No. There is virtually no chance that *competition* will disappear or even significantly recede in the local exchange even if particular competitors exit the market. First, the major competitors are not "start-up" CLECs; many substantial firms compete in Boston and elsewhere, including AT&T (and its Teleport and MediaOne subsidiary), WorldCom (and its MCI Metro and MFS subsidiaries). In fact the major competitors are not really "CLECs," *per se*, they are more accurately characterized as diversified telecommunications service providers.

Second, the number of lines served by competitors has been growing vigorously—especially in the last year. CLECs have made substantial sunk investments between 1997

[25] http://www.my.yahoo.com and Standard & Poors Stock Guide, McGraw Hill, April 2000, January 2000 and May 2001.

[26] http://moneycentral.msn.com/investor/charts/chartdl.asp?Symbol=%24NDX.X&DateRangeForm=1&PT=4&CP=1&C5=12&C6=1999&C7=4&C8=2001&C9=0&ComparisonsForm=1&CE=0&CompSyms=&DisplayForm=1&D7=&D6=&D3=0&ShowTablBt=Show+Table

and 2000[27], which clearly demonstrate that competition is permanent. Local competitors, as a whole, will not walk away from this substantial sunk investment.

Third, the current travails of some CLECs are a normal part of the competitive process. For example, a telecommunications analyst noted recently:

> Statistically speaking, the CLEC industry is performing at a phenomenal rate when compared with how other industries performed in their startup phase, such as the automobile, railroad or PC industries. Admittedly, as the industry approaches the five-year mark, we are witnessing some fallout, but what we should be focusing on is the impressive success of CLEC market. According to the most conservative of estimates, approximately 50 percent of all startups fail by the fifth year. If this is true then the CLEC industry should be lauded as truly exceptional. … NPRG [New Paradigm Resources Group] reports 223 CLECs as of late 2000, thus making the failure rate due to a bankruptcy filing a measly 4 percent. [28]

Finally, and most importantly, even if some individual CLECs exit the local market, the remaining competitors are likely to purchase their assets (in the case of a facilities-based CLEC) and/or take over their customer bases. This process strengthens the purchaser's network and product mix and, ultimately, strengthens competition.[29]

Q. Dr. Selwyn (at 57) raises a specific concern about the financial health of AT&T, RCN, MCIWorldCom, CTC and Level 3 and their ability to compete in Massachusetts. Do you agree?

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[27] According to the Association for Local Telecommunications Services, CLECs invested over $55 billion in infrastructure nationally between 1997 and 2000. David A. Wolcott, Director, Public Policy Research, ALTS, "An ALTS Analysis: Local Competition Policy & The New Economy," February 2, 2001: 4; available at http://www.alts.org, retrieved May 10, 2001. A similar figure ($56 billion) was cited in another ALTS report, *see* The Association for Local Telecommunications Services, "The State of Local Competition 2001," February 2001: 4.

[28] Robert A. Saunders, Senior Analyst, "Evolution in Action," Eastern Management Group, March 16, 2001, available at http://www.teledotcom.com/article/TEL20010316S0004, retrieved June 8, 2001.

[29] As Mr. Saunders states: "[T]he very factors that are currently challenging the industry will ultimately lead to the development of a strong and viable CLEC sector. Companies that are doing well now will most likely continue to succeed due to experienced management, financial discipline, strategic acquisition and strong customer service. Other companies will rise up to replace the ones that fall along the way, learning from past mistakes and leveraging new technologies to more efficiently compete with incumbents." *Id*.

A. No. Dr. Selwyn's assertion that these companies are experiencing financial difficulties is not entirely accurate and certainly is not a basis for any conclusion regarding their ability to compete. AT&T's YTD stock price has increased 11.3 percent, in comparison to the –14.2 percent decrease in the overall telephone long distance market.[30] AT&T Broadband provides cable telephony service to 848,000 subscribers as of the end June 2001.[31] RCN's on-net revenues grew 15 percent in the second quarter 2001 to $65 million and connections grew at 12 percent to 606,429.[32] Total revenues for RCN were $131.4 million, a 37 percent increase from the same quarter last year.[33] MCIWorldCom reported second quarter revenues of $5.4 billion, a 12 percent increase over the same period last year.[34] CTC's access lines in service increased by 8.2 percent to 535,400, and the company maintains that they are continuing to rapidly expand. The company also reduced their EBITDA losses by 34 percent in the second quarter.[35] While Level 3 experienced a 13 percent drop in their second quarter revenue, second quarter 2001 revenue is 66 percent higher than the comparable period in 2000. The company successfully completed building a global network in just 30 months, which they view is a strong testament to the commitment of their employee-owners, construction and technology partners, and investors.[36]

Q. Is it likely that the apparent shakeout among CLECs will lead to stronger competition?

A. Yes. The current apparent shakeout, including consolidations and acquisitions, will result in robust, viable competition. Although a few competitors are struggling and might even go out of business, there is little chance that the competition faced by Verizon MA will become ineffective or anything less than permanent. Indeed competitors have been

[30] Data current through 9/5/01. Dow Jones Interactive, Company and Industry Center. http://www.djinteractive.com

[31] http://www.internetnews.com/isp-news/article/0,,8_80851,00.html

[32] RCN Announces Second Quarter Results. http://www.rcn.com/investor/press/08-01/08-02-01.html

[33] RCN Announces Second Quarter Results. http://www.rcn.com/investor/press/08-01/08-02-01.html

[34] http:www.worldcom.com/about_the_company/press_releases/display.phtml?cr/20010726

[35] http://www.ctcnet.com/CTCweb/ctc_investors.jsp?BV_SessionID=@@@@1258536487.0999799197@@@@&BV_EngineID=dalliflhhlebemfcfkmckecnn.0

[36] http://www.Level3.com

becoming larger in terms of revenue, geographic reach, and service lines, better able to take advantage of economies of scale and scope, and more credible with customers (allowing them to experience lower churn rates). Thus, there can be no lasting long-term negative effect even if a number of the smaller competitors do not survive as separate entities. One industry source accurately summarized the situation this way:

> Expect the strong CLECs to bulk up this year, while the weaker ones turn into road kill on the Information Superhighway. Although many carriers are facing slowing sales, plummeting stock prices and possible bankruptcy, many CLECs have found their niche and will survive the economic storm.[37]

# IV. OTHER ISSUES

## A. Prices in excess of marginal cost do not imply market power.

Q. Dr. Selwyn asserts (at 16-17) that in "sufficiently competitive" markets no firm is able to raise the price of its services above marginal costs. To do so, asserts Dr. Selwyn, is evidence of market power. Is it true that in competitive markets, competitive forces push market prices down to the marginal cost of each service?

A. No. Dr. Selwyn's citation to a "university-level microeconomics text" notwithstanding, the Department of Justice (the organization entrusted as the U.S. government watchdog of anti-competitive activity) defines market power as the ability "to maintain prices above *competitive levels* for a significant period of time."[38] The Department of Justice's choice of "competitive levels" rather than "marginal cost," as found in the university text referred to by Dr. Selwyn, is deliberate. Unlike the university student's textbook, the Department of Justice practitioners recognize that, all firms, in either competitive or regulated markets, must recover *all* their forward looking costs—shared fixed and common as well as direct—or be forced to exit the market.

[37] R. Pringle, "CLEC Shopping Days?," Communications Today, 7(36), February 26, 2001.

[38] Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines, April 2, 1992, p. 4 (emphasis added).

In competitive markets, prices are not set but are determined by market forces. Those forces are (i) total customer demand for a product and (ii) volume of profitable supply, given the economic costs experienced by the suppliers. In markets where regulation is necessary, prices should be set to imitate the competitive process, i.e., set to recover the total cost of the firm, with individual service prices *marked up above* marginal (incremental) cost to reflect market conditions and minimize the distortion caused by the necessity to price services above incremental cost. The efficient price of switched access, for example, may include such a markup, as does the retail price of long distance service, which has been determined in markets subject to competition for nearly 25 years.

Q. Please explain what an *efficient* price is and why it could include a markup above incremental cost.

A. The appropriate cost basis for the efficient pricing of a service is its *economic cost*. Economic cost has two components: (i) the incremental cost component that varies with the volume of service and (ii) fixed shared and common costs that do not so vary. The *efficient* price of every service must recover not only its incremental costs but also a portion of the firm's shared and common costs. If all services were priced at their respective marginal costs, the firm would only recover its total direct incremental costs. In the process, it would fail to recover both (i) fixed costs specific to all services and (ii) fixed costs common to (or shared by) all services firm-wide, and would become financially insolvent.

The presence of fixed costs that are large relative to incremental operating costs gives rise to economies of *scale.* The sharing (across services) of resources or facilities that comprise the fixed costs gives rise to economies of *scope.* In the presence of such economies, the incremental cost can only define the price floor. The *economically efficient* price, i.e., the level to which a price would converge in a competitive market, must, at a minimum, help to effect full recovery of *all* of an efficiently functioning firm's costs. This means that when there are scale and/or scope economies and the firm's fixed costs cannot be recovered elsewhere, efficient prices for its various services would typically include *contribution* toward the fixed costs and, therefore, *exceed* their respective price floors.

Firms in all markets, whether competitive or not, must price their services to recover all of their forward-looking incremental and shared or common fixed costs. Failure to recover all such costs will force firms to exit the market. Even in competitive markets, when firms experience economies of scale and/or scope (for reasons mentioned earlier), prices must recover more than all of their incremental costs. The shared and common fixed costs must be recovered as well and, when those costs are significant, firms may use markups in their prices to do so.

### B. Verizon MA's competitive losses exceed the effect of a wholesale discount.

Q. Dr. Selwyn asserts (at 32 –38) that Verizon MA has overstated its losses to competition. His calculation asserts these losses are limited to the retail margin represented by the Department-approved wholesale discount for each line lost to a CLEC. Do you agree?

A. No. Dr. Selwyn's testimony and calculation are critically flawed and provide no useful insight. First, Dr. Selwyn's reliance on "revenue share" assumes that all lines lost to competitors are homogeneous with regard to revenue. This is clearly an unwarranted assumption. All evidence suggests that lines lost to CLECs are medium to large business lines for which costs to serve are generally lower and revenues generally higher. Dr. Selwyn's calculation[39] could only make sense if the service revenue/contribution characteristics of the Verizon MA and CLEC retail shares in his example were identical; they likely are not. If, for instance, the service revenue of lines in the CLEC retail share were higher than for Verizon MA, the 5 percent "line share" loss would understate the "revenue share" loss objective in Dr. Selwyn's equation.

Dr. Selwyn's example attempts to make the point that Verizon MA gets 100 percent of the revenue from the 95 percent of lines it retains and 75 percent of the revenue from the 5 percent of lines it loses to CLECs. He asserts that if Verizon MA claimed a 5 percent loss of lines (i.e., if it retained a 95 percent retail share) then Verizon MA's revenue share would

[39] From page 37, line 5 of Dr. Selwyn's testimony, it is:

Revenue share = VZ retail share x 100% + CLEC retail share x (1-wholesale discount).

be 98.75 percent (his point being that this is a number greater than 95 percent). He is wrong. While Dr. Selwyn interprets the relative size of the two numbers correctly, his calculation (based on an unwarranted assumption) yields a meaningless result. Using Dr. Selwyn's general calculation, but recognizing that all lines are not homogeneous with respect to revenue, produces a different answer. For example, assuming that revenue on each Verizon MA line is 30 percent less and that revenue on each CLEC line is 30 percent more than the average revenue of all lines, Dr. Selwyn's calculation produces the opposite result: a 5 percent loss of retail lines would result in a Verizon MA revenue share of 71.4 percent.[40]

Second, Dr. Selwyn's analysis is critically flawed insofar as it does not recognize the differences between how resale, UNE or UNE-P services are priced relative to cost. While the Department-approved wholesale discount represents a part of the loss Verizon MA suffers when a line is resold, the revenue effect is different from when Verizon MA loses a retail customer who is then served by a CLEC through UNE or UNE-P.[41] Dr. Selwyn ignores the fact that the sale of a UNE or UNE-P reduces Verizon MA's per-line revenue to a Department-approved level of forward-looking economic cost. Again, using Dr. Selwyn's general assumptions but assuming that resold to UNE/UNE-P lines lost are in a 60/40 relationship and that the cost of a UNE/UNE-P is 80 percent below Verizon MA's retail price, I recalculated Dr. Selwyn's resultant Verizon MA revenue share to be 70.0 percent.[42]

Finally, beyond the obvious flaws in Dr. Selwyn's assumptions and calculations discussed above, a more egregious error is that he completely ignores competitive losses to facilities-based competition. Verizon MA obtains no revenue when a business customer is served by

[40] That is, VZ Revenue share = 0.95 x (1 – 0.3) x 100% + 0.05 x (1 + 0.3) x (1 – 25%) = 71.38%

[41] Also, the character of "loss" being evaluated here is very limited insofar as it focuses only on revenue loss in a static sense. It ignores completely the dynamic loss that comes from diminished ability to sell other services and reduced customer contact.

[42] That is, VZ Revenue share = 0.95 x (1 – 0.3) x 100% +

0.05 x (1 + 0.3) x (1 – 25%) x 0.6 +

0.05 x (1 + 0.3) x (1 – 80%) x 0.4 = 69.95%

a CLEC using its own facilities. If, for instance, 65 percent of Verizon MA's competitive losses were to facilities-based providers (leaving 35 percent as either resold or UNE/UNE-P service), Dr. Selwyn's calculation of the Verizon revenue share would fall to 67.7 percent.

In summary, Dr. Selwyn attempted to make the point that Verizon MA's characterization of competitive loss is overstated because, as he assumed, the only loss Verizon MA experiences is the revenue intended to compensate Verizon MA for providing the retail function—i.e., the Department's approved wholesale discount. However, Dr. Selwyn's calculation understates Verizon MA's revenue loss because (i) the average per-line revenue loss associated with lines lost to CLECs is likely higher than the average per line revenue of lines retained by Verizon MA, (ii) a loss of revenue intended to compensate Verizon MA for providing the retail function only pertains to resold lines, not to UNE/UNE-P lines; and (iii) Verizon MA obtains no revenue when a line is lost to a facilities based provider.

Q. Are there other problems with Dr. Selwyn's assertion about Verizon MA's losses to competition?

A. Yes. Dr. Selwyn's notion that there should be a distinction between competitive losses to resellers and UNEs compared with losses to facilities-based providers is at odds with the Department's price floor rules and the generally accepted economic view of a competitive loss. The Massachusetts DTE found that resale is a sufficient competitive force to discipline the market for retail services in the sense that explicit retail price floor requirements were automatically satisfied when Verizon MA filed wholesale tariffs to provide the resold services.[43]

Dr. Selwyn's assertion (at 7) that "market share needs to be assessed separately with respect to the underlying network services (facilities-based competition) and with respect to VMA's retail operations (facilities-based and resale competition at the retail level)" has, in fact, been addressed by Dr. Mayo in another proceeding before the Department. Dr. Mayo

[43] The Department has recognized this fact. In DPU Docket No. 94-185-C, issued December 17, 1997, the DTE found that Bell Atlantic (n/k/a Verizon MA) satisfied the Department's retail services price floor requirement by implementing resale of those services and filing wholesale tariffs. The DTE upheld this decision in its subsequent Order on AT&T's Motion for Reconsideration.

argued that there is no reason to discount the effect of non-facilities based competitors. He argued that:

> The ability of these firms to purchase tariffed services from other firms and to resell these services to final consumers is merely an indication that separate wholesale and retail segments exist in this industry. Some firms (the facilities-based carriers) are vertically integrated across both segments, while other firms (resellers) are not. Competition between vertically integrated and non-vertically integrated firms, however, occurs frequently in the U.S. economy. … The pertinent question that regulators should ask here is whether transmission capacity is a bottleneck facility that is solely controlled by AT&T. Clearly, it is not.[44]

Similarly, given the mandates of the 1996 Telecom Act and subsequent regulatory orders, the underlying capacity required to provide exchange services in Massachusetts is not solely controlled by Verizon MA.

### C. There is no economic basis to the claim that carrier access charges impede flat-fee bundled service offerings.

Q. Dr. Mayo asserts (at 46-47) that Verizon MA Massachusetts' entry to the interLATA market is likely to result in Verizon MA's offering bundled (local and long distance) telecommunications services at a flat fee that is time and distance insensitive. He asserts that "competitors that face the bundled offering cannot drive the flat prices down to squeeze out excess profits that may be earned by Verizon MA because these competitors face asymmetrically higher costs as a consequence of excessive carrier access charges that are assessed on a per minute basis." On this basis, Dr. Mayo asserts that Verizon MA is ensured monopoly control over some customers. Do you agree?

A. No. Dr. Mayo's entire argument rests on the premise that "competitors face asymmetrically higher costs" *because* carrier access charges are excessive. I cannot comment on whether or not AT&T or any other carrier faces asymmetrically higher costs due to the efficiency of their network and/or operations, but I do know that competitors do not face asymmetrically higher costs related to access charges. While it's likely that the Department's approved

[44] See Mayo Direct 29.

carrier access rates in Massachusetts exceed incremental cost, it's also the case that the Department's imputation rules require that any service Verizon MA offers recover sufficient revenue to equal or exceed the service price floor. In the case of service bundles that include a long distance element, the service price floor explicitly includes the price Verizon MA charges dependent competitors for access. Thus, Verizon MA faces the identical access cost as its competitors when it supplies long distance service singly or in a package of services.

In addition, Dr. Mayo's argument on pages 46-47 of his testimony appears to ignore his testimony on pages 13-14 where he discusses how "rules designed to ensure the ability of new entrants to resell the ILEC's services will help prevent price discrimination resale." Indeed, any Verizon MA calling plan, under the law, is available for resale by any other carrier. Dr. Mayo notes in his testimony (at 13) that:

> A rule requiring the ILEC to allow unrestricted resale of their services can help prevent the incumbent from practicing anticompetitive price discrimination among its customers.

Furthermore, Verizon MA's switched access is not the only means for competitors like AT&T to offer competing intraLATA toll plans. AT&T has the option of self-supplying such access as a CLEC or by leasing UNEs and other facilities from Verizon MA. Under either of those options, AT&T would be the recipient of access charge revenue.

### D. Pricing carrier access above incremental cost does not distort the economic outcome.

Q. Dr. Mayo asserts (at 49-50) that (i) according to economic theory an efficient outcome requires carrier access service to be priced at its marginal cost, (ii) if there is a need to price above marginal cost in order for Verizon MA to recover its total costs it should do so "through the pricing of its retail toll services," and (iii) because carrier access is an intermediate good, pricing it above marginal cost distorts production processes and consumption choices. Do you agree?

A. No. In the first place, as discussed above, it is necessary and appropriate to price carrier access at rates that exceed the marginal cost of the service. Telecommunications is an

industry with economies of scale and scope, and economists agree that in such circumstances, setting service prices equal to marginal cost will fail to recover the firm's total economic costs.[45]

Second, Dr. Mayo's suggestion notwithstanding, there is no economic or efficiency argument on which to base a requirement that Verizon MA reduce the price of carrier access and raise the price of its retail toll services. Indeed, setting access prices at marginal or incremental cost would distort competitors' choices regarding inputs. The 1996 Telecom Act created a new class of substitutes for Verizon MA's carrier access services: the unbundled elements of Verizon MA's local network. Carrier access service and combinations of unbundled network elements (links and ports) are thus substitute factors in the production of toll service. The FCC's forward-looking TELRIC cost-based pricing standard for unbundled network elements is made up of two components: (i) the incremental cost of the network element, and (ii) contribution to the firm's (forward-looking) common costs. Thus, if the price of carrier access service did not contain contribution to the firm's common costs, there would be a distortion in the relative prices of the two substitute factors of production and a consequent reduction in efficiency.

Third, the distortion referred to by Dr. Mayo is derived from an article by Peter A. Diamond and James Mirrlees which evaluates the different effects on consumer welfare of taxing final goods and intermediate goods.[46] There are conceptual problems in applying the Diamond-Mirrlees results to telecommunications markets. First, the theory does not make an assessment of the *total welfare* effect, where total welfare is made up of consumer plus producer surplus. Specifically it ignores changes in producers' surplus. Second, the analysis assumes that the production sector is characterized by constant returns to scale—an assumption we know does not apply to the telecommunications industry. In general, the

[45] *See* William J. Baumol and J. Gregory Sidak, Toward Competition in Local Telephony, (Washington D.C.: American Enterprise Institute, 1994) and Franklin M. Fisher, "An Analysis of Switched Access Pricing and the Telecommunications Act of 1996", filed in CC Docket No. 96-98 (1996) on behalf of MCI.

[46] Peter A. Diamond and James Mirrlees, "Optimal Taxation and Public Production I: Production Efficiency," American Economic Review 61 (March 1971).

effect on total welfare of taxing intermediate as opposed to final goods is not clear under increasing returns to scale.

In addition, even under the Diamond-Mirrlees assumptions, the relative loss in consumer surplus from taxing an intermediate good is likely to be small in the telecommunications application. The intermediate good in question—carrier access—is one for which few substitutes have been available until recently and one that is used in fixed proportions to output. In these circumstances, a tax on the input would not distort greatly the relative demands for inputs and thus would not significantly reduce economic welfare.

### E. Miscellaneous issues.

Q. Dr. Selwyn asserts (at 22) that Verizon MA customers may not switch immediately to another "brand" due to customer inertia or "loyalty" to their existing service provider. He asserts this phenomenon helps explain why the cross price elasticity of demand is less than one. Do you agree?

A. No. Dr. Selwyn's assertion obviates the relationship most Massachusetts consumers have with AT&T, MCIWorldCom, Sprint and others. Each of these names are as well known (perhaps even more well known) than the recently named Bell Atlantic and GTE combination—Verizon. It is particularly important to recognize the notoriety of traditional interexchange carriers because these firms will go head-to-head with Verizon MA to attract local and long-distance service subscribers and it is not at all clear what firm has the advantage. One-stop shopping will be a key feature of the integrated firm's marketing plan, and both traditional local service and long-distance service providers are capable suppliers. The FCC noted that:

> As firms expand the scope of their existing operations to new product lines, they will increasingly offer consumers the ability to purchase local, intraLATA, and interLATA telecommunications services, as well as

> wireless, information, and other services, from a single provider (*i.e.*, "one stop shopping"), and other advantages of vertical integration.[47]

And also that:

> BOCs and other firms, most notably existing interexchange carriers, will be able to offer a widely recognized brand name that is associated with telecommunications services.[48]

Moreover, as carriers compete to provide bundles of local and toll services to Massachusetts customers, it becomes more difficult to distinguish the entrants from the incumbents. When local competition began in Massachusetts, nearly every household and business subscribed to Verizon's local services. At the same time, nearly every household and business subscribed to someone other than Verizon MA for long distance service: roughly 90 percent of customers subscribed to AT&T, MCIWorldCom or Sprint for long distance service. While inertia and consumer loyalty may be valuable assets for a firm, Verizon MA benefits no more from those assets than do its major competitors in the supply of bundles of local and long distance services.

Q. Dr. Selwyn asserts (at 21-22) that Verizon MA's application, which he asserts will result in higher rates, indicates "that Verizon does not face a high firm elasticity of demand." Do you agree?

A. No. For measuring market power, the relevant firm price elasticity of demand is measured at the competitive level of price, not at current prices.[49] Rates for business services have been pervasively regulated in Massachusetts for many years, so that it is difficult to know what levels of rates would emerge for these services in unregulated, competitive markets. Suppose, hypothetically, that regulation kept these prices below the competitive level. Efficient firms would have been discouraged from entry, and we would have observed less

[47] "In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended" ("*Non-Accounting Safeguards*"), First Report and Order, CC Docket No. 96-149, FCC 96-489, December 24, 1996, ¶7.

[48] Non-Accounting Safeguards, ¶7.

[49] The object of a market power study is to determine whether a firm can profitably hold price *above the competitive market level*, not above its current price, whatever that happens to be.

competition for these services than if prices were unregulated. In that case, prices would increase after deregulation, entry would increase, customers would be better off and the firm would not be able to exercise market power.

Q. Does this conclude your testimony?

A. Yes.