Before the

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Regulatory Plan to succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' intrastate retail telecommunications services in the Commonwealth of Massachusetts	**D.T.E. 01-31**

Direct Testimony of

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witness for the

Commonwealth of Massachusetts
Office of Attorney General

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TABLE OF CONTENTS

ALLEGEDLY PROPRIETARY DATA
HAS BEEN DELETED

Tables

Figures

Attachments

Attachment 4 Baca, Micky. "Struggling to Make the Connection: Why Businesses are Having Difficulty Getting Telecom Service in a Timely Way," *Worcester Business Journal*, July 30, 2001.

INTRODUCTION

Qualifications

Q. Please state your name, position and business address.

A. My name is Lee L. Selwyn. I am President of Economics and Technology, Inc., ("ETI"), Two Center Plaza, Suite 400, Boston, Massachusetts 02108. Economics and Technology, Inc. is a research and consulting firm specializing in telecommunications economics, regulation, management and public policy.

Q. Please summarize your educational background and previous experience in the field of telecommunications regulation and policy.

A. I have prepared a Statement of Qualifications, which is attached hereto as Attachment 1.

Q. Have you previously testified or served as a consultant on matters before the Massachusetts Department of Telecommunications and Energy ("Department"), or served as a consultant to the Department?

A. Yes. I have testified before this Department and its predecessor, the Department of Public Utilities, on numerous occasions dating back to the mid-1970s. I have testified in several New England Telephone ("NET") rate cases, as well as in a number of other investigations of proposed tariff changes and other policy matters. These have included D.P.U. 18210 (1975), D.P.U. 411 (1980-1981), D.P.U. 1117 (1982-1983), D.P.U. 84-82 (1984), D.P.U. 85-279 (1986), D.P.U. 86-13 (1986), D.P.U. 86-17 (1986), D.P.U. 86-33 (1986), D.P.U. 86-124 (1986), and D.P.U. 86-213 (1987). I served as consultant to the Department in connection with D.P.U. 89-300 (1989-1990). Also, I testified before the Department in a complaint proceeding concerning NET's conduit attachment rates, D.P.U. 91-218 (1992), in the ISDN proceeding, D.P.U. 91-63 (1991), in the Department's investigation of NYNEX's proposed alternative regulation plan, D.P.U. 94-50 (1994), and in the Department's investigation of intraLATA and local exchange competition, D.P.U. 94-185 (1995). In 1998, I testified on behalf of AT&T and MCI in D.P.U. 96-73/74/96-75/96-80/81/96-83/96-84, the Consolidated Petitions for Arbitration of Interconnection Agreements. Most recently, I served as a consultant to the Attorney General in D.T.E. 98-38 and D.T.E. 99-11 relating to the introduction of new area codes in Eastern Massachusetts.

Assignment

Q. On whose behalf is this testimony being presented?

A. I am appearing on behalf of the Attorney General.

Q. What was your assignment in this proceeding?

A. ETI was engaged by the Attorney General to review the testimony offered by Verizon Massachusetts ("Verizon-MA," "VMA" or "the Company") in support of its proposal for a new Alternative Regulation Plan, and to present the results of my examination and analysis of the Company's proposal to the Department. The Department has since bifurcated the proceeding into two separate phases. Phase I is to examine whether the current state of competition in the Massachusetts local exchange service market is sufficient to justify the significant reductions in the scope of the Department's regulation that Verizon is seeking. The testimony presented herein specifically addresses the level of competition and standards of review that constitute a finding of "sufficient competition" in the local exchange market.

Summary of Testimony

Q. Please summarize the testimony you are presenting at this time.

A. My testimony will show that the level of competition in the Massachusetts local exchange market does not justify any further relaxation of regulation. Verizon is still able to exercise substantial market power and its ongoing ability to set prices at monopolistic levels is not being materially

constrained by the limited amount of competition that exists at the present time. The Department has previously found that until the market is *fully* competitive, the dominant carrier must be regulated in some manner. I share the Department's concerns regarding the premature deregulation of a firm that can still exercise market power. As the DTE has stated:

> [u]nder regulation, market power is not as great a concern to the Department, since regulation takes the place of marketplace forces and limits the ability of a carrier to engage in ... predatory pricing and cross-subsidization practices. As competition is introduced into a market, however, it is extremely important that the reduction in regulatory oversight occur only after sufficient market forces are in place to ensure that carriers do not have an ability to raise prices to inefficient levels. Therefore, the degree of regulation of a particular carrier must focus upon the degree of market power exhibited by that carrier."[1]

Premature deregulation of Verizon's rate-regulated services raises several serious concerns. The potential for accumulation of persistently excessive profits by Verizon-MA under a new alternative regulation plan that (a) eliminates the existing "productivity offset" or "X-factor" and that (b) limits the operation of any rate freeze to certain residential services raises serious anticompetitive concerns. Absent competitive marketplace forces, Verizon-MA would be in a position to be highly selective in its responses to competition and to use its excess profits from those regulated and nonregulated services for which no effective competition presently exists to cross-subsidize

1. *Petition of the Attorney General for a Generic Adjudicatory Proceeding Concerning Intrastate Competition by Common Carriers in the Transmission of Intelligence by Electricity, Specifically with Respect to Intra-LATA Competition, and Related Issues, Filed with the Department on December 20, 1983*, DPU 1731, *Order*, October 18, 1985 ("*IntraLATA Competition Order*"), at 56.

services that do confront actual or a serious possibility of actual competition. Deregulation of all business services would, for example, permit Verizon-MA to implement surgically precise responses to competitive entry by targeting specific customers and specific geographic areas, while maintaining high prices wherever actual competition is not present. Verizon appears to assume that it is required to satisfy the DTE deregulation criteria only on a statewide basis, but from the perspective of an individual business located in a community in which no alternative service provider is available, the fact that Verizon-MA may face competition elsewhere in Massachusetts offers no meaningful protection against excessive pricing, poor service quality, and other monopoly abuses.

The DTE has stated in its Scoping Order that the Department's evaluation of whether or not there is "sufficient competition" in Massachusetts "will be guided by its precedent established in *IntraLATA Competition Order*, D.P.U. 1731 (1985), *NET–Centrex*, D.P.U. 85-275/276/277 (1985); *NET–Intellidial*, D.P.U. 88-18-A (1988); *AT&T Customer-Specific Pricing*, D.P.U. 90-24 (1991); *AT&T Alt. Reg. Order*, D.P.U. 91-79 (1992); and *Price Cap Order*, D.P.U. 94-50 (1995)."[2] However, the Department also concluded that "Verizon's proposal in this

2. *Investigation by the Department of Telecommunications and Energy on its own Motion into the Appropriate Regulatory Plan to succeed Price Cap Regulation for Verizon New England, Inc. d/b/a Verizon Massachusetts' intrastate retail telecommunications services in the Commonwealth of Massachusetts*, DTE 01-31, *Interlocutory Order on Scope*, July 9, 2001 (*"Scoping Order")*, at 18.

proceeding is more akin to AT&T's request for alternative regulation addressed by the Department in D.P.U. 91-79, than it is to Verizon's price cap plan addressed in D.P.U. 94-50."[3]

In its *AT&T Alt. Reg. Order*, the Department states that, "[i]n general, a finding that a service is 'sufficiently competitive' permits the Department to approve market-based pricing of the service. We also consider whether there are sufficient safeguards to protect against unfair pricing practices that potentially could result from market-based pricing."[4] In keeping with the Department's finding, defining whether a market is "sufficiently competitive" is essentially identical to determining whether any firm operating within that market possesses market power. A firm with market power is recognized as having the ability to raise prices above marginal cost without experiencing a decrease in revenue. Thus, if no firm possesses market power, then the market will appropriately set just and reasonable rates, and the market would be considered "sufficiently competitive."

Given the markets under examination in this proceeding, and based upon the Department's earlier determination that the circumstances of this proceeding are similar to those of the AT&T Alt. Reg proceeding, the three standards proposed by AT&T in that proceeding, and adopted by the

3. *Id*., at 16.

4. *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*, DPU 91-79, *Order*, June 22, 1992 ("*AT&T Alt Reg Order*"), at 18.

Department in its order, are the appropriate criteria for the Department to use here in judging whether or not Verizon possesses market power, and thus whether the local exchange market is "sufficiently competitive." These standards include market share, supply elasticity, and demand elasticity.[5] Additionally, however, in assessing VMA's market power overall, it is necessary to recognize the fact that the Company operates as a vertically integrated firm, acting as both the provider of the underlying network services and as the retailer of services to end user customers. Competitors in the Massachusetts local exchange service market are not similarly integrated, and most are either primarily or solely engaged at the retail level only. For this reason, VMA's market power must be examined separately with respect to each of these two vertically integrated components.

Market share is a fairly straightforward concept, and can be defined in a number of ways; those most relevant in the local exchange market would include measurements of access lines served, and revenues. Access line data is the most readily available, and therefore the most commonly used, in assessing market share. Recognizing the vertically integrated nature of VMA's operations, 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). Market share is a useful indicator in assessing the presence of market power in the local exchange market, and is even more obvious when assessing whether

5. *AT&T Alt Reg Order*, at 20-25, 32.

a market demonstrates sufficient competition. While firms possessing large market share do not necessarily also possess market power, given that the local exchange market has been open to competition since passage of the *Telecommunications Act of 1996*, the fact that Verizon maintains a significant share of the local service market with respect to both of its vertically integrated components provides a clear demonstration that neither market segment is sufficiently competitive, and therefore that the incumbent has market power with respect to both segments.

Supply elasticity generally refers to the extent to which firms are able to expand or contract their output in response to market price and other market conditions. Generally, if firms are able to rapidly adjust their supply — and particularly to increase it — in response to a price change, this will tend to limit any one firm's ability to maintain supracompetitive prices, thereby limiting or eliminating that firm's market power. On the other hand, if competitors are not able to expand supply when another firm in the market increases prices, the firm imposing the price increase will have the ability to maintain excessive prices over an extended period of time, which would demonstrate its market power.

Demand elasticity can be characterized as a customer's willingness and/or ability to modify the quantity of a good or service purchased from a given firm in response to a change in that firm's price. In a competitive market where rival firms offer similar, and hence substitutable products, an attempt by any one firm to increase its price will incent customers to switch to an alternative

supplier, and the price-raising firm will lose business. On the other hand, if there are no close substitutes *and* the good or service is viewed by the customer as *essential* (such as a core telephone or other public utility service), customers will continue to purchase roughly the same quantity of the product despite the increased price. An examination of the price elasticity of demand for local exchange services confronting Verizon-MA provides a good indication of the extent to which customers confront actual competitive choices in the marketplace.

Verizon's filing is entirely deficient in meeting these three standards for determining the existence of "sufficient competition" in a market, in that the Company has virtually *ignored* any of the past precedent established by the Department in this area. Indeed, not one word of the Company's direct filing addresses the DTE's standards of review in prior proceedings.

Since VMA has failed to address the relevant standards as set by the Department, it is not surprising that the evidence the Company has presented fails to demonstrate that any of the three standards have been met. In fact, Verizon admits that in the course of compiling evidence for its filing, no pricing studies, elasticity studies, or tests for market power were conducted, all of which are relevant economic tests that the Company could have undertaken to support its case. Instead, Verizon simply presents a variety of head-count data points on a statewide basis upon which general conclusions are drawn. As I will discuss in my testimony, not only has Verizon failed to provide data on competitive entry at the wire center level (which is the relevant market for a

customer making purchasing decisions), but the validity of the statewide access line counts and E911 database data that Verizon has provided are questionable as well.

Given Verizon's failure to adequately address the DTE's standards for review in demonstrating the existence of sufficient competition, the Department must reject the Company's request for service reclassification and deregulation of business services, as well as its request for departure from traditional cost-of-service or indexed price cap regulation for its remaining services.

STANDARDS FOR ASSESSING THE SUFFICIENCY OF COMPETITION

Verizon-Massachusetts is seeking substantial reductions in and in some cases outright elimination of regulation of its core local exchange services.

Q. Dr. Selwyn, what is your understanding of the types of regulatory changes that Verizon-MA is seeking in this proceeding?

A. Verizon-MA is proposing several far-reaching changes in the manner in which it is currently regulated under the existing DPU 94-50 alternative regulation plan.[6] At the present time, most of the Company's intrastate services are subject to an annual "price cap" rate adjustment based upon the annual economy-wide inflation rate as reflected in the Gross Domestic Product fixed-weight Implicit Price Deflator (the "GDP-PI"), offset by a "productivity factor" of 4.1%.[7] Since the annual increase in the GDP-PI has been well below 4.1% in each of the years since adoption of the current plan, the result has been a succession of rate *decreases* that have benefitted most Massachusetts residential and business telecommunications consumers.[8] Verizon-MA is now

6. *Petition of New England Telephone and Telegraph Company d/b/a NYNEX for an Alternative Regulatory Plan for the Company's Massachusetts intrastate telecommunications services,* D.P.U. 94-50, May 12, 1995.

7. *Id.*, at 168.

8. The percent changes from the previous year of the GDP-PI for each year 1995-2000 were 2.2%, 1.9%, 1.9%, 1.3%, 1.5%, and 2.1% respectively. *Survey of Current Business*, Bureau of

(continued...)

proposing to scrap the current "price cap" formula and to replace it with a three-year "rate freeze" and, moreover, to limit the operation of that rate freeze to basic residential dial tone and local usage charges and (through permitted "revenue-neutral" rate restructuring filings) to certain other residential rate elements as well.[9] Under the proposed plan, all business services would be effectively deregulated and as such removed from the operation of any price cap or rate freeze.[10]

Q. What theory or rationale does VMA offer for the regulatory changes it is seeking?

A. The rationale being offered by VMA for the changes that it is proposing is the alleged growth of competition in the Massachusetts telecommunications market. In principle, robust competition would obviate the need for regulation by relying upon marketplace forces to constrain prices to competitive levels and assure a level of service quality satisfactory to consumers. Ironically, notwithstanding these claims, Verizon-MA is also proposing, as a component of its proposed alternative regulation plan, a "Retail Service Quality Plan" that would ostensibly impose financial

8. (...continued)
Economic Analysis, July 2001, D-38: Table C.1 — GDP and Other Major NIPA Aggregates, available at http://www.bea.doc.gov.

9. Proposed Massachusetts Alternative Regulation Plan ("Plan"), at Part B.

10. *Id.*, at Part J.

penalties upon the Company for its failure to achieve certain service quality goals.[11] Of course, if the market were as competitive as the Company contends, there would be no need for DTE monitoring of service quality since customers could simply respond to poor Verizon service by switching to another carrier. Thus, the very fact that concerns persist as to service quality undermines at a fundamental level the Company's contentions as to the actual extent of competition in the Massachusetts market.

In its Scoping Order, the DTE has correctly concluded that Verizon-MA's various proposals to modify and, in some respects, to discontinue altogether the DPU 94-50 price cap regulatory paradigm is premised upon the Company's claim that the local service market has become sufficiently competitive that marketplace forces, rather than the existing regulatory structure, can be relied upon to protect consumers and limit Verizon's ability to exercise market power. Specifically, the Department concluded:

> In the instant proceeding, Verizon is, in effect, requesting classification of a large portion of its services as sufficiently competitive, and is proposing an alternative to traditional cost-of-service regulation for the remaining services. Thus, the appropriate regulatory framework for Verizon's retail services is dependent upon how the Department responds to Verizon's showing of sufficient competition. Based on the comments on scope received by the Department, there appears to be significant disagreement about whether or not there is sufficient competition in Massachusetts to warrant either market-based pricing or a departure from cost-of-service or indexed price cap regulation. It would be inefficient for the Department,

11. *Id.*, at Appendix B.

> Verizon, and other parties to proceed on an evaluation of the specifics of Verizon's proposal or alternative proposals before determining whether Verizon has met its burden of showing that there is sufficient competition.[12]

The Department further clarifies this point:

> For example, if the Department determines that Verizon has not demonstrated that there is sufficient competition in Massachusetts, then market-based pricing flexibility for a large number of services would be precluded. Similarly, if the Department determines that Verizon has demonstrated sufficient competition, then an evaluation by other parties of Verizon's cost-of-service and earnings would be irrelevant. In order to avoid spending a significant amount of time and resources investigating issues and proposals that may be unnecessary, an investigation into competition should come first.[13]

On this basis, the DTE concluded that it should bifurcate this proceeding into consecutive phases. This first phase will investigate the level of competition and standards of review that constitute a finding of "sufficient competition."

Q. What will the second phase of this proceeding address?

A. The content of the second phase of this proceeding will be governed by the outcome of the first. If Verizon meets its burden of proof to show that the services for which it seeks pricing flexibility are

12. *Scoping Order*, at 15-16.

13. *Id.*, at footnote 8.

sufficiently competitive and that competition is sufficient to warrant the use of an alternative form of regulation for other services, the second phase will consist of an investigation into whether Verizon's proposed plan, or later-filed intervenors' plans, for regulatory treatment of those services is appropriate. If Verizon has not met its burden in the first phase, the second phase will consist of an investigation into which form of regulation, be it a continuation of price cap, a restoration of rate-of-return regulation, or some alternative, is appropriate for the level of competition demonstrated by the investigation in Phase I.[14]

Approval of the types of deregulatory measures that Verizon-MA is seeking would require that it no longer have the ability to set prices at supracompetitive levels, i.e., substantially in excess of cost, which is clearly not the case at this time.

Q. How does the Department define "sufficiently competitive?"

A. In its *AT&T Alt. Reg. Order*, the Department stated that, "[i]n general, a finding that a service is 'sufficiently competitive' permits the Department to approve market-based pricing of the service. We also consider whether there are sufficient safeguards to protect against unfair pricing practices that potentially could result from market-based pricing."[15] In defining whether a market is "sufficiently competitive," it is necessary to determine whether any firm operating in that market

14. *Id.*, at 15-17 footnotes omitted.

15. *AT&T Alt Reg Order*, at 18.

possesses market power. A firm with market power is recognized as having the ability to raise prices above marginal cost without experiencing a decrease in revenue. Thus, if no firm possesses market power, then the market will appropriately set just and reasonable rates, and the market would be considered "sufficiently competitive."

Q. From an economist's perspective, are the three criteria that the Department adopted in the *AT&T Alt. Reg. Order* appropriate for determining whether a given market is sufficiently competitive to warrant service reclassification?

A. Yes. As stated above, addressing whether a market is sufficiently competitive requires an evaluation of market power held by firms operating in that market, and the three criteria adopted by the Department provide a proper basis for that assessment.

A market cannot be deemed fully competitive if a single carrier in the market is able to raise its prices above marginal cost. As the DTE reasoned in its *IntraLATA Competition Order*: "Those carriers that are able to raise prices unilaterally exhibit market power."[16] A firm generally is determined to have market power if it can raise the price of its services above marginal costs and

16. *IntraLATA Competition Order*, at 55.

sustain that price over a period of time without decreasing revenues.[17] In other words, a firm with market power is able to raise its prices, and although it may experience a decline in demand, such a decline is more than made up by the higher prices of the given good or service.

Q. How would this work in the telecommunications market?

A. For example, if it can be shown that Verizon is able to maintain prices that are above its marginal cost to produce a given service and Verizon does not experience a decline in demand in an amount sufficient to reduce its revenues, then Verizon clearly would be deemed to exhibit market power. And the presence of market power would mean that the market is not sufficiently competitive, as defined by the Department.

Q. Wouldn't economic theory also suggest that, if Verizon charged prices above marginal cost, then competitors would enter the market and undercut Verizon's prices, resulting in customer migration away from Verizon toward the competitors?

17. A standard university-level microeconomics text notes that "price exceeds marginal cost for the firm with monopoly power. Therefore, a natural way to measure monopoly power is to examine the extent to which the profit-maximizing price exceeds marginal costs." Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics*, New York: Macmillan Publishing Company, 1989, at 344.

A. Yes, but only if there are competitors in the market with the capacity and capability to *independently* serve the demand that would be shifted away from Verizon, i.e., competitors with relatively elastic supply/production characteristics *and* a sufficient number of such competitors that they will not simply mirror the price movements of the dominant firm. In markets characterized by one firm with overwhelming dominance and a number of small "fringe" competitors, the dominant firm tends to act as "price setter" while the fringe competitors act as "price takers," adjusting their prices in lock-step with those set by the incumbent. It is only where the relative sizes of the various firms in a market are approximately equal that no one firm can act as price-setter. The evidence being offered in this proceeding by VMA witnesses Taylor and Mudge confirms VMA's dominance in the market and its rivals' status as fringe competitors. Taking Dr. Taylor's and Mr. Mudge's own Verizon market share assessment at face value (which, as I shall demonstrate, his data actually understate the full extent of VMA's dominance) and spreading the non-Verizon share across the 161 different firms that Verizon claims exist in the Massachusetts local exchange market,[18] what we see is a market with one firm having an 84% share[19] and 161 firms collectively dividing up the remaining 16%, i.e., an average of 0.10% each. Under these extremely lopsided conditions — conditions that VMA's own evidence confirms to exist — competing fringe firms cannot realistically be expected to offer any serious pricing challenge or pressure on Verizon if the dominant firm, following price deregulation, were to impose supracompetitive prices.

18. AG-VZ 2-11

19. This calculation appears in my Table 2.

Q. How does demand elasticity provide an indication of VMA's market power?

A. Demand elasticity is simply a customer's willingness and/or ability to modify the quantity of a good or service the customer purchases from a given firm in response to a change in that firm's price. More formally: price elasticity of demand is the percentage change in quantity demanded as a result of a 1% change in the price of a good.[20] If the good or service has close substitutes (such as similar products that are offered by competing firms) or is viewed as a luxury or discretionary purchase by the consumer, demand confronting the firm will tend to be relatively price-elastic. Thus, in a competitive market where rival firms offer similar, and hence substitutable, products, an attempt by any one firm to increase its price (that is not immediately mirrored by other firms) will incent customers to switch to an alternative supplier, and the price-raising firm will lose business. On the other hand, if there are no close substitutes *and* the good or service is viewed by the customer as *essential* (such as a core telephone or other public utility service), customers will continue to purchase roughly the same quantity of the product despite the increased price, forgoing or reducing consumption of some other, more discretionary product or service. It is for this reason that an examination of the price elasticity of demand for local exchange services confronting Verizon-MA provides a good indication of the extent to which customers confront actual competitive choices in the marketplace.

20. *See*, for example, Edwin Mansfield, *Microeconomics: Theory & Applications*, New York: W.W. Norton & Company, Inc., 1970.

Q. Why is price elasticity of demand important?

A. If, for example, price elasticity of demand is at or greater (in absolute value) than –1.0,[21] then a firm cannot expect to gain revenues by increasing price above marginal cost, because customers would seek out alternative services from competing firms. However, if price elasticity of demand is less (in absolute value) than –1.0, a firm can expect to gain revenues by increasing its price for a good or service.

Q. You have been referring to price elasticity of demand with respect to an individual firm. Does price elasticity of demand exist with respect to the overall market for a particular good or service?

A. Yes. We generally think of "market elasticity" as referring to a customer's willingness to change the quantity demanded in response to a change in the overall market price level for the product, i.e., where all firms in the market modify their prices equally and simultaneously. If only one firm in a competitive market changes its price, customers are able to shift their demand toward that firm (if it lowers its price) or away from that firm (if it raises its price). If there is only one firm in a market (i.e., a monopoly), then the market and firm demand elasticities will be the same. For markets with

21. A price elasticity of –1.0 implies that a 1% rise in price will result in a 1% decrease in demand, such that total revenues are unchanged. Economists generally refer to price elasticity in absolute value terms. Mathematically, price elasticity of demand is negative for normal goods (i.e when price rises, demand falls).

more than one firm, the price elasticity of demand confronting any one firm will always be greater or equal to the price elasticity of demand for the market as a whole.

In this case, the Department should also be concerned with cross-price elasticity, one of the elements that determines firm elasticity of demand. Firm elasticity of demand is essentially the percentage change in the firm's sales that will result from a one percent change in the price the firm charges. The firm elasticity of demand is made up of individual consumers' elasticities of demand, cross-price elasticity of demand, and elasticity of supply. Thus, Verizon's firm elasticity of demand is dependent upon both how consumers and competitors react to price changes. The question then becomes, when the price of good X (or a service from the incumbent company) rises, is there a reduction of demand for good X and a corresponding increase in demand for good Y (or a service from the competitor)? In other words, do customers buy more competitive services when confronted with a price increase for incumbent services?

Q. Has Verizon addressed its firm elasticity of demand for local exchange services in its filing with the DTE?

A. No. Verizon has not demonstrated, nor even attempted to demonstrate, that there exists any price sensitivity to its own services. In fact, the proposed plan for alternative regulation is asking for the

flexibility and opportunity to *raise* prices. This would indicate that Verizon does not face a high firm elasticity of demand.

Q. Under what circumstances would the firm or cross-elasticity of demand be less than one?

A. Cross price elasticity may be less than one for a host of reasons, but two such reasons stand out. First, customers may not switch immediately to another "brand" due to customer inertia or "loyalty" to their existing service provider. An application of this phenomenon in the instant case starts with the obvious observation that since its inception over 100 years ago, local telephone service in Massachusetts has been provided by a single carrier — New England Telephone/ NYNEX/Bell Atlantic/Verizon — and is, for the most part, still provided by the incumbent today. Customers routinely call Verizon when they need to order new telephone services in Massachusetts; the notion that Verizon is "the phone company" is so ingrained in most people's mindset that the United States Postal Service, in its *Mover's Guide*, advises people who are moving to Massachusetts specifically to contact Verizon in advance of their move to order phone service; no competing local service provider is even mentioned.[22] So in order for new entrants to

22. United States Postal Service, *Mover's Guide*, 0011 Pub. 75, Vol. 21, Winter '01. The booklet advises: "For moves to DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT and WV: Call directory assistance for the Verizon office in your new area." Significantly, the Postal Service seems to recognize that competition is present with respect to long distance service: "Once you know your new phone number, the next step is choosing a long distance carrier. Your local phone company will not transfer your present long distance savings plan and other services (like calling cards)

(continued...)

gain market share, they must incent customers to switch from Verizon (in the vast majority of cases) to a new, and in many cases, unknown, local service provider. Competitors may find any number of unique ways to convince consumers to switch their service (e.g. lower prices, packages of services, better service quality), but the fact remains that new entrants in a market long dominated by a single firm will always be fighting an uphill battle to gain market share simply because they must convince customers to switch away from Verizon. For Verizon, just the opposite is the case, as the market share is Verizon's to lose. Until such time as customers become accustomed to switching local service providers (much as they are in the case of long distance service), they will be less apt to switch providers based solely on a change in the incumbent's price.

In eastern Massachusetts in particular, customers may also resist taking new local phone service from a provider other than Verizon because by so doing they may not be able to obtain a telephone number in one of the "traditional" area codes (i.e., 617, 781, 508 or 978) but would instead be made to accept a number in one of the new "overlay" area codes adopted by the Department in DTE 99-11/99-99 (i.e., 857, 339, 774 and 351). This is because Verizon holds a large inventory of "traditional" numbers, but entrants can, at this time, only obtain number blocks

22. (...continued)
automatically. You'll need to call the different carriers yourself to ensure the best rates, calling and savings plans, and uninterrupted service. This is a good opportunity to find out which carriers offer the best rates for your new location and long-distance needs."

that in most cases will be assigned to one of the overlay area codes. All else being equal, customers are less likely to accept a telephone number in an unfamiliar area code even for a somewhat lower monthly price.

The second reason that elasticity of demand may be less than one is because consumers literally may have no alternative provider from which to receive service and thus are unable to "price shop." Because basic local exchange service is considered an essential service, it is extremely unlikely that a customer will decrease demand (i.e., disconnect from the network) unless it can substitute one carrier's service for that of another. It is of critical importance for the Department to pay particular attention to whether or not all consumers have this ability, which may (and likely does) differ both geographically and for different types of customers and services throughout the state. For example, while a business in downtown Boston may have the ability to price shop, a residential customer in a small town in western Massachusetts may have absolutely no alternative to taking service from Verizon.

Q. Isn't that type of demand elasticity (cross elasticity of demand) determined, at least in part, by supply, and thus by the elasticity of supply?

A. That is exactly right. The Department has specifically identified supply elasticity as one of the attributes to be examined in assessing the sufficiency of competition. Here, even if customers have

the willingness and the desire to switch carriers if Verizon raises its price, there may not be a carrier capable of providing perfectly substitutable services within a time frame that is acceptable to the customer.

The existence of a provider that is willing *and able* to supply service in the market is essential in determining the extent of competition. As the Department found in the *IntraLATA Competition Order*, "[m]arket power may exist where consumers are unable to switch suppliers in response to price changes or where no supplier is willing or able to meet the demand for services if prices are increased."[23] CLECs, therefore, must have both the financial resources and the capacity to expand their output and/or the capacity to serve customers in the market.[24]

In the *AT&T Alt Reg Order*, the Department found that "AT&T's competitors [had] the capacity to serve enough of AT&T's customers to make it economically irrational for AT&T to engage in supracompetitive pricing."[25] In order for Verizon's proposed Alternative Regulation Plan to be considered, the Department would need to make a similar finding. That is, in order for the Department to reach the same conclusion as it did in DPU 91-79, Verizon would have to show that there is so much competition in Massachusetts that if Verizon contemplated raising its prices

23. *IntraLATA Competition Order*, at 55-56.

24. *AT&T Alt Reg Order*, at 33.

25. *Id.*

above marginal cost, it would be constrained by the knowledge that customers would be able to simply switch providers and that the other suppliers would have the capacity immediately to serve customers who elected to switch. As I will discuss in detail later in my testimony, not only is Verizon's filing woefully inadequate in this regard, but additional evidence demonstrates that the competitive supply for local exchange services is highly inelastic.

Q. The last of the three standards you reference when assessing the presence of market power, and therefore whether a particular market is sufficiently competitive, is market share.

A. Yes. Market share is perhaps the most obvious standard, and most simple in terms of measurement. In its decision denying AT&T's first application for non-dominant carrier status, the DPU determined that market share is "the strongest indicator of the degree of a firm's dominance."[26] In that Order, the Department found that because AT&T controlled more than half of the relevant telecommunications market in Massachusetts in terms of both revenues and subscribed lines, it was still a "dominant" carrier and should thus be regulated as such.[27] The Department also found that while there were many interexchange carriers and resellers that had

26. *Petition of AT&T Communications of New England, Inc., pursuant to Section 1.04 of the Department's Procedural Rules, Mass. G.L. c. 159, Section 12, and the Department's Order in DPU 1731 (October 18, 1985) for approval to be reclassified as a "nondominant" telecommunications carrier in the InterLATA and IntraLATA telecommunications markets in Massachusetts*, DPU 90-133, Order, January 2, 1991, at 37.

27. *Id.*, at 39 and 43.

been certified to provide service in Massachusetts, *most had an "extremely small share of the market" and thus did not challenge AT&T's market dominance*.[28]

The FCC has also used market share as a requirement for deregulating telecommunications services. Following the break-up of the former Bell system, AT&T was the default toll carrier for the vast majority of customers despite the fact that the market was open to competition. AT&T was not granted complete pricing discretion until the FCC granted AT&T's bid for "nondominant carrier" status in 1995.[29] The FCC based its decision, in part, upon AT&T's market share, which had fallen to 60%.[30] The Department should be similarly strict with VMA's efforts to reclassify basic local exchange services. As my testimony will demonstrate, VMA does not even come close to satisfying either the 50% or 60% standard described above. In fact, VMA's own evidence, as offered by Mr. Mudge and by Dr. Taylor, translates into VMA market share of at least 84% statewide.[31] I know of no antitrust standard under which a market share of that magnitude would qualify the market as "competitive," i.e., lacking "appreciable economic power." Unless a firm is

28. *Id.*, at 38.

29. In the Matter of Motion of AT&T Corp. to be Reclassified as a Non-Dominant Carrier, *Order*, FCC 95-427, 11 FCC Rcd 3271 (1995).

30. *Id.*, at para. 68.

31. *See* Table 2.

challenged by a number of *comparable* competitors, that firm is still able to exercise market power.

Additionally, in assessing VMA's market power overall, it is necessary to recognize the fact that the Company operates as a vertically integrated firm, acting as both the provider of the underlying network services and as the retailer of services to end user customers. Competitors in the Massachusetts local exchange service market are not similarly integrated, and most are either primarily or solely engaged at the retail level only. For this reason, VMA's market shares must be examined separately with respect to each of these two vertically integrated components.

Q. What antitrust standards would be appropriate to examine in this context?

A. The US Department of Justice and the Federal Trade Commission follow Horizontal Merger Guidelines when examining the impact of mergers on the competitiveness of particular markets.[32] The general goal of the guidelines is to ensure that proposed mergers do not "create or enhance market power or enhance its exercise."[33] As such, the guidelines establish the use of the Herfindahl-Hirschman Index ("HHI") as a measurement of market concentration, and thus the

32. 1992 Horizontal Merger Guidelines (revising the 1984 Merger Guidelines), 57 Fed. Reg. 41552.

33. *Id.*, at "0.1 Purpose and Underlying Policy Assumptions of the Guidelines."

ability of the dominant firm to exercise market power.[34] The results of the calculation show the expected market concentration post-merger and are categorized as unconcentrated (HHI below 1,000), moderately concentrated (HHI between 1,000 and 1,800), and highly concentrated (HHI above 1,800).[35] While we are not addressing market share with respect to a merger in this instant proceeding, the HHI measurement is nonetheless an appropriate evaluation of market concentration.

Q. If the HHI was calculated with respect to the local exchange market in Massachusetts, what would the results show?

A. Irrespective of which set of market share data one employs (i.e., Verizon's or my own), the local exchange market in Massachusetts would be categorized as highly concentrated. Using VMA's 84% retail market share puts the HHI at well over 7,000.[36] As I stated above, the Horizontal Merger Guidelines regard an HHI above 1,800 as evidence of a highly concentrated market; thus,

34. *Id.*, at "1.5 Concentration and Market Shares." The HHI is calculated by summing the squares of the market shares of all participants in the market.

35. *Id.*, at "1.51 General Standards."

36. Because VMA possesses such a large share of the market, calculating the HHI with Verizon's data alone results in a conclusion of "high concentration." It is thus unnecessary to know the individual market shares of any other smaller competitors, as adding them to the calculation only raises the HHI. VMA's market share would have to fall to around 40% before the inclusion of other competitor's market share would have any impact upon the conclusion drawn from the HHI calculation.

under either the Company's or my market share estimate, the HHI for the Massachusetts local exchange service market is so far in excess of the 1,800 threshold for "highly concentrated" that by any objective standard the Department's market share criterion cannot be satisfied.

Q. Having set forth the economic reasons why the Departments' three critical standards for review are the proper basis for assessing the sufficiency of competition in the market for local exchange telephone service, have you undertaken to analyze the extent to which each of these standards is satisfied in the case of VMA?

A. Yes. As I shall show, based upon these three review standards, VMA is not even remotely close to demonstrating that the local exchange market exhibits a level of competition sufficient to justify the deregulatory measures that the Company is seeking.

AN ASSESSMENT OF LOCAL COMPETITION IN MASSACHUSETTS

Based upon the three specific criteria established by the Department for assessing the sufficiency of competition, the local service market in Massachusetts does not come even remotely close to satisfying the Department's standards.

Q. In light of the three specific standards that the Department has established for determining whether there is sufficient competition to justify reclassification or deregulation of a service — i.e., market share, supply elasticity, and demand elasticity — is the level of competition for VMA's residential and business exchange service offerings sufficient to justify the substantial reductions in, and outright elimination of, regulation of VMA's prices that the Company is proposing in this proceeding?

A. No, it is not. In fact, VMA maintains an overwhelming market share and continuing market dominance of both the business and residential local exchange service markets in all parts of Massachusetts; competitor supply of these services is highly constrained by a number of factors — many of which are entirely within VMA's control — and the demand for all of these services is highly price-inelastic. VMA thus fails *all three* of the specific standards set out by the Department as a basis for determining whether a given market is sufficiently competitive. VMA has substantial and pervasive market power in the Massachusetts local exchange service market and, as such, the various deregulatory initiatives that the Company is seeking in this proceeding are not justified and, if allowed, would be contrary to the public interest.

VMA maintains an overwhelming share of the Massachusetts residential and business local exchange service market in every community in the Commonwealth.

Q. In its application and accompanying testimony filed in this proceeding, VMA contends that it has experienced and is continuing to experience substantial market share erosion — particularly with respect to business services. Do the actual conditions in the market support this conclusion?

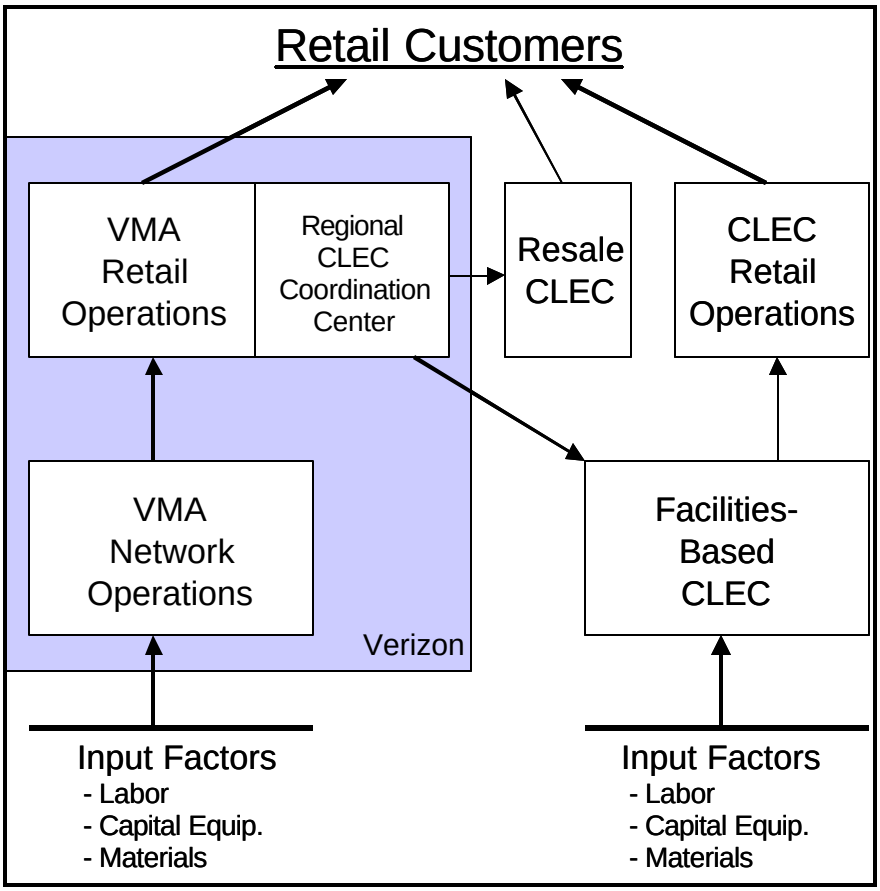

Figure 1. Existing Verizon Vertically Integrated Structure.

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A. No, they do not. First, it is necessary, for analytical purposes, to view VMA as operating in two separate and distinct markets — (1) the physical production of the underlying network functions and services that are provided both to VMA's own end user customers as well as to its competitors either for straight resale or for use in their own production of services furnished to the competitors' own end user customers, and (2) the retailing of the underlying services by VMA directly to its own end user customers.

It is thus useful to view VMA as a vertically integrated firm that both *produces* the underlying services and that then *retails* the services it produces to its end user customers. Figure 1 provides a schematic diagram of this vertical integration. In this context, VMA's operation is analogous to a manufacturing firm that both operates its own chain of retail stores as well as distributing its products through independent (non-affiliated) retailers, as illustrated in Figure 2.

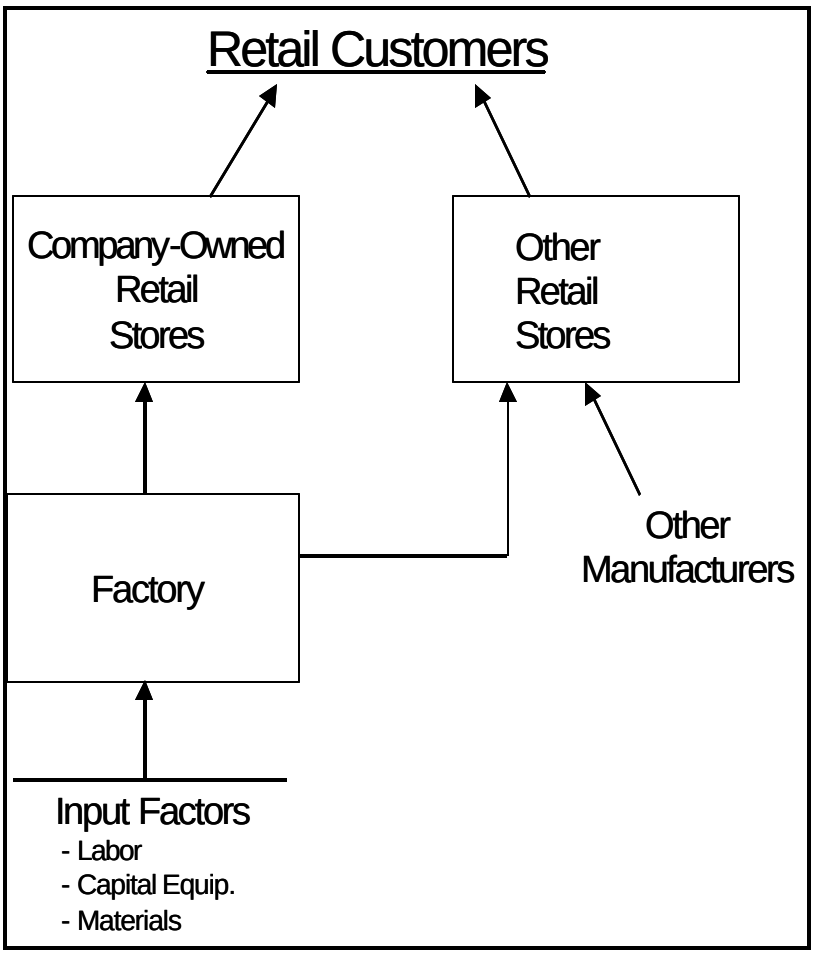

Figure 2. Vertically integrated manufacturing company with company-owned retail stores and non-affiliated retail distribution channels.

Q. Why is it necessary to separate and to separately analyze these two components of VMA's operations?

A. VMA confronts significantly different levels of competition as between these two vertically integrated components. The evidence being offered by VMA in this proceeding demonstrates that the vast majority of the competitive activity occurring in the Massachusetts local service market lies in the *retail* segment, and that far more limited competition is occurring with respect to the production of the underlying network services. While, as I will show, even the existing level of *retail* competition falls far short of satisfying the Department's three-pronged test for sufficient competition, competition for the production of the underlying service — what is being referred to by the Company as "facilities-based" competition — is so limited as to offer no consequential economic challenge to VMA's overwhelming dominance and market power. Significantly, by failing to treat these two vertical components separately for purposes of identifying the extent of actual competition, VMA is attempting to, in effect, finesse the somewhat larger competitor share of the *retail* segment to portray far more competition than actually exists.

VMA's "analysis" thus treats access lines that provide resale service and UNE loops to competitors as "competitive losses" to the Company. (Our hypothetical manufacturing firm depicted in Figure 2 that distributes a portion of its output through nonaffiliated retail channels would hardly consider sales *of its products* by those channels to constitute "competitive losses.") Defining market share solely with respect to *access lines provided at retail* overstates the actual competitor market share (relative to VMA's entire integrated operations) and correspondingly understates VMA's share of the total market. While VMA may no longer provide *retail* service in

connection with facilities provided to CLECs, the Company nevertheless continues to provide these services on a wholesale basis, and receives wholesale revenues from the competitors who lease these access lines and UNEs (just like the manufacturer with respect to products that are sold through nonaffiliated retailers). The only "loss" to VMA in these situations is the retail margin, the difference between the price at which VMA sells these services at retail and the price it sells the corresponding service on a wholesale or UNE basis. And if the prices of VMA's wholesale service have been properly set, the "loss" to Verizon of this retail margin should be roughly matched by the elimination of retailing costs that are avoided when a CLEC, rather than VMA, provides the service at retail, thus making VMA essentially *indifferent* as to whether it or a competing retail provider actually furnished VMA's services to the ultimate end user consumer.[37]

This critically important point can be readily demonstrated by means of a simple numerical example. Suppose that the total market consists of one million access lines of which 50,000, or 5%, are provided by CLECs using VMA wholesale and UNE services. (For purposes of this example, we will ignore facilities-based carrier shares of the underlying services/facilities segment.) By VMA's reckoning, the Company would have a 95% share of the market. However, if on average the retail margin (the wholesale "discount" or the difference between the UNE-P price and

37. With respect to bundled VMA services provided on a wholesale basis for resale, Section 252(d)(3) of the *Telecommunications Act of 1996* requires that the "wholesale discount" be set "on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier."

the retail price) is, say, 25%, then fully 75% of total CLEC *revenues* would still be paid over to VMA. VMA's actual market share (with respect to revenues) under these circumstances would be calculated as follows:

$$\text{Revenue share} = \text{VZ retail share} \times 100\% + \text{CLEC retail share} \times (1 - \text{wholesale discount})$$

$$\text{VZ Revenue share} = 0.95 \times 100\% + 0.05 \times (1 - 25\%) = 98.75\%$$

Thus, the effective CLEC market share (relative to the totality of VMA's integrated operations) would be only 1.25%, not the 5% as calculated by the Company's method, i.e., solely with respect to the *retail* component.

Q. You stated that VMA's evidence demonstrates that the vast majority of the competitive activity occurring in Massachusetts is in the *retail* segment. To what evidence are you referring?

A. First, by VMA's own reckoning, some 236,931 business and 31,889 residential access lines are being provided for resale.[38] In addition, VMA indicates that it provides 84,989 UNE-loops and

38. AG-VZ 2-10 (reproduced in Attachment 2).

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27,275 UNE-Platform ("UNE-P") services.[39] Additionally, VMA currently provides PROPRIETARY << >> END PROPRIETARY T-1 facilities to competing carriers either on a Special Access or on a UNE basis.[40] Assuming 24 voice-grade channels per T-1, this amounts to another PROPRIETARY << >> END PROPRIETARY access lines. In all, VMA furnishes some PROPRIETARY << >> END PROPRIETARY access lines or equivalent on a wholesale basis to competitors whose services (with respect to these facilities) are either *entirely* or substantially limited to the retail-level only.

Q. But VMA also contends that there is substantial *facilities-based* competition in Massachusetts — doesn't that suggest that the Company confronts competition with respect to its *service production* activities as well?

A. VMA clearly confronts *some* competition in this segment, but far less than the amount being claimed by VMA. VMA data identifies a total of 851,000 "total competitive lines" for January 2001.[41] These consist of about 296,300 "Resale" and "UNE-P" lines plus 554,700 lines that

39. *Id.*

40. AG-VZ 1-11 (reproduced in Attachment 3).

41. AG-VZ 1-6

VMA identifies as coming from the "E911" database.[42] As Mr. Mudge explains, 85,000 of the E911 listings that are attributed to CLECs are associated with UNE-loops being provided by VMA, and on that basis concludes that roughly 470,000 of these 554,700 competitor E911 listings are in some manner "*full facilities-based*."[43] In essence, VMA is relying upon the data in its E911 database as providing definitive evidence of the extent of facilities-based competition; as I shall demonstrate, such reliance is seriously misplaced and is likely exaggerated by several hundred thousand lines or more.[44]

Q. Please explain.

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42. *Id.*

43. Mudge (VMA), at 12. *See also* attachment to AG-VZ 2-10, page 4 of 4 (reproduced in Attachment 2).

44. In this regard and as an aside, VMA's use of the E911 data base to extract market information is in itself evidence of an abuse of its monopoly position. Apparently, VMA is able to obtain extremely granular market data about its competitors' activities from this data source that it exclusively controls. By mining the E911 database and assuming that it is sufficiently accurate for the conclusions being drawn by Dr. Taylor to be valid, Verizon apparently can identify the quantity of access lines being provided by each of its CLEC competitors in each exchange area — the very type of information that VMA, in its response to ATT-VZ 1-2, characterizes as "the confidential and proprietary information of the CLECs that may not be disclosed by Verizon-MA without the CLEC's [sic] authorization." While this information is not being furnished to VMA's competitors, the Company is apparently making liberal use of the very same "CLEC proprietary" market data for its own competitive and strategic purposes, such as its use in this proceeding to buttress is efforts to portray the Massachusetts local exchange market as competitive. Inasmuch as Verizon does not make this information available to its competitors while at the same time utilizing it for its own purposes, the practice is on its face competitively unfair.

A. First, it is necessary to understand the purpose and function of the E911 database, which is to provide location identification for emergency reporting purposes. Carriers are responsible for providing the names and addresses of their customers that correspond with each assigned telephone number, so that when the customer dials '911' the call can be routed to the appropriate municipality for response, and the 911 operator receiving the call can be advised automatically as to the customer's exact location. Where VMA provides the switching function (as in the case of resale lines and UNE-Ps), it is responsible for providing the E911 information for the CLEC's customer. However, where the CLEC provides the switching (i.e., when VMA provides only a UNE-loop or a T-1 facility, or where the CLEC provides the entire facility (loop and switching), the CLEC is responsible for providing the customer location data to the E911 database. Thus, at least some of the 554,700 E911 lines identified by VMA are still being provided in substantial part by VMA. As stated above, VMA provides a total of 85,000 UNE-loops, and the Company provides PROPRIETARY << >> END PROPRIETARY T-1 lines to competitors on either a UNE or on a special access basis.[45] Facilities-based CLECs also provide T-1 service, although the precise quantity of CLEC-provided T-1 lines is not known.

What is also not known precisely is the correspondence between the quantity of T-1 lines and the quantity of E911 listings. Generally, a T-1 can support up to 24 voice channels, so the above-referenced quantity of T-1 lines being provided to CLECs by VMA could support up to

45. AG-VZ 1-11 (reproduced in Attachment 3).

PROPRIETARY << >> END PROPRIETARY individual access lines. However, customers frequently utilize T-1 facilities as PBX trunks with Direct Inward Dialing (DID). In a DID configuration, each PBX station line is assigned its own unique 10-digit telephone number; typically, customers are assigned a "block" of numbers (usually in units of 100) and can then assign numbers out of the block to individual station lines. From the standpoint of the carrier, *all* of the numbers in a DID number block are "working;" the carrier typically does not know or have any direct way of knowing which numbers have actually been assigned by the customer to individual PBX stations.

Q. Are all DID numbers entered in the E911 database?

A. That is entirely unclear. Some PBXs have the ability to identify and send to the public switched network the full 10-digit number assigned to the calling station line; others only send the main or billing number, and do not identify the calling station line. Since the carrier does not normally know all of the details of a customer's PBX configuration, it is not clear what CLEC numbers are or are not placed in the E911 database. Thus, the figure for CLEC E911 "lines" that is provided by Mr. Mudge and used by VMA as the basis for its estimate of facilities-based competition may understate or overstate the actual number of lines that are provided by competitors.

Q. Did you undertake to determine what practices CLECs follow with respect to providing listings in the E911 database?

A. Yes. AG-VZ 2-5(e) asked VMA for this information, but it was not provided. VMA stated that "The Company does not have specific knowledge of CLECs' practices for entering DID numbers into the E911 database."[46]

Q. How many entries might be involved for a customer with DID service relative to the quantity of T-1 facilities being provided?

A. Suppose that a customer has a PBX with, say, 220 working station lines. Depending upon the customer's traffic, this could potentially be supported by a single T-1 facility providing 24 individual voice access lines. Assuming that the DID numbers are issued by the CLEC in blocks of 100, the customer would be provided with 300 numbers. If the CLEC put all 300 into the E911 database, then there would be as many as twelve times as many E911 entries as there are physical access facilities.

Q. I notice that, in the same VMA response to AG-VZ 2-5, the Company states that "certain types of services that do not originate calls are not usually listed in the E911 database" and that "[s]uch

46. AG-VZ 2-5(e).

services may include Direct-Inward-Dial (DID) lines and PBX trunks." Doesn't that suggest that if anything the quantity of CLEC entries in the E911 database may actually be understated if CLEC customers use DID?

A. No. The interrogatory sought information regarding CLEC practices with respect to DID *numbers*, but in its response VMA is referring to DID "lines" and PBX "trunks." In its most literal sense, the term "Inward" would suggest that DID lines and PBX trunks do not originate outgoing calls (and hence cannot place calls to E911). The Company is confusing the matter of number assignment with the matter of call directionality. Telephone numbers generally (i.e., whether for basic residential or business access lines or for DID station lines) are used *both* as an address to which *incoming* calls are directed as well as a means of identifying the *calling* number for outgoing calls for billing, Caller ID, and E911 purposes. If a PBX is capable of identifying individual station lines for Caller ID and/or E911 purposes, those numbers must be included in the E911 database.[47] And unless the CLEC knows for certain that the customer's PBX does *not* possess this so-called "Identified Outward Dialing" ("IOD") capability, it would necessarily have to provide all of the DID numbers it assigned to the customer to the E911 database.

47. Pending FCC rules would require PBXs to have the IOD capability for E911 purposes at least with respect to a limited number of PBX station lines. *In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems,* CC Docket 94-102, 9 FCC Rcd 6181, at para. 60.

Q. Do you have any other independent basis for your belief that the quantity of facilities-based CLEC lines that VMA derived from the E911 database is overstated?

A. Yes. It is useful to examine the recent growth experienced by VMA itself with respect to its own residential and business access (dial tone) lines. VMA has been providing the service quantity data to the Department in its annual price cap filings made pursuant to DPU 94-50. Table 1 summarizes these data for the years 1995 through 2000.

Table 1

Verizon Access Lines Reported in Annual Price Cap Filings

	Residential Lines	Business Lines	Total
July 3, 1995	2,562,177	861,608	3,423,785
June 10, 1996	2,606,720	898,093	3,504,813
June 9, 1997	2,662,481	939,115	3,601,596
July 1, 1998	2,835,746	1,013,091	3,848,837
November 17, 1999	2,832,892	1,018,174	3,851,066
October 2, 2000	2,876,034	1,033,489	3,909,523

During this five-year period, total VMA residential and business lines (including PBX trunks but not including T-1 based services) increased by about 480,000, from 3.42-million to 3.91-million, or about 14.2% — including growth of just over 58,000 lines in the most recent 12-month period

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for which data is reported (1999-2000). Yet according to VMA data, the number of CLEC E911 listings (which they equate to facilities-based access lines) increased by some 240,000 between July 2000 and May 2001.[48] Verizon's contention that the increase in facilities-based CLEC lines in a *single year* (and one that has been overshadowed by significant economic contraction) is equivalent to 50% of Verizon's growth in lines over the 5-year period 1995-2000 is dubious to say the least.

That same data also suggests that total VMA retail lines decreased by about 134,000 during the 11-month period (July 2000-May 2001).[49] Of this decrease in retail lines, 24,000 can be accounted for by a net increase in resold plus UNE-P lines, suggesting a net "loss" to VMA retail lines (which would include "losses" to UNE-loop and to VMA-provided T-1s) of about 110,000. The number of T-1 UNEs increased by about PROPRIETARY << >> END PROPRIETARY over this 11-month period, which represents approximately PROPRIETARY << >> END PROPRIETARY equivalent voice-grade access lines.[50] I do not know precisely what the UNE-loop growth was during that same period, but even if we were to conservatively assume that only 25% of the existing 85,000 UNE-loops that were in place in

48. AG-VZ 1-6.

49. *Id*.

50. AG-VZ 1-11 (reproduced in Attachment 3).

January 2001[51] were installed in that same time frame, then out of the 110,000 "loss" to VMA some PROPRIETARY << >> END PROPRIETARY would be accounted for by T-1 UNEs and UNE-loops. Hence, the *net* facilities-based gain during the period is likely in the PROPRIETARY << >> END PROPRIETARY line range, a far cry from the 219,000 line "competitor" gain being claimed by VMA.[52]

Q. Are there other sources of data on competitor facilities-based lines?

A. The best count of facilities-based CLEC lines would come from CLECs themselves. Unfortunately, this data is typically considered proprietary and is not easily obtained from these carriers. While Verizon might claim that it is for this very reason that it relied upon E911 listings as a count of facilities-based lines (which by itself is a back-handed way for Verizon to obtain this CLEC proprietary data), this is no reason to accept Verizon's data as accurate. Even the so-called "CLEC Report" published by New Paradigm ("New Paradigm Report") and relied upon by

51. While I recognize that this 85,000 UNE loop figure is from January, 2001, no more recent count of UNE loops are available. Thus, this calculation is quite conservative because if the UNE loop count were to have increased substantially beyond this 85,000 figure, then the number of installed UNE loops from July 2000 to May 2001 would be even higher, which would result in an even lower count of the *net* gain in facilities-based lines provided by CLECs.

52. AG-VZ 1-6. This figure is derived from the net gain in E911 listings of 240,000 from July 2000 through May 2001, less 25% of the 85,000 UNE loops assumed above as "growth" over this same period.

Verizon as a basis for some of its claims as to the presence of competition in Massachusetts does not provide any distinct count of facilities-based lines for competitive carriers.

Perhaps more surprising, for the two largest facilities-based CLECs serving residential customers in Massachusetts — AT&T and RCN — which Dr. Taylor trumpets as "strong individual competitors to Verizon,"[53] New Paradigm provides no line count data at all. AT&T has reportedly publicized that it collectively serves about 100,000 lines in the Greater Boston region, yet this count may also include AT&T's resale and UNE-based local service offerings.[54] The other major facilities-based residential service provider, RCN, claims to be providing approximately 231,000 voice connections[55] in its nationwide service territory, of which about 187,000 are "on-net," or provided over the carrier's own facilities. RCN provides service in 7 major metropolitan areas,[56] so assuming its Boston region accounts for one-seventh of the total, RCN would be found to serve only about 27,000 facilities-based lines in the state.[57] Thus, even

53. Taylor (VMA), at 7.

54. Howe, Peter J. Sector Report: Telecommunications, *Boston Globe*, August 13, 2001, at C3.

55. "RCN Announces Second Quarter Results," RCN Corporation press release, August 2, 2001, available at http://biz.yahoo.com/prnews/010802/nyth029.html (visited August 23, 2001).

56. RCN provides service in the Boston, New York, Philadelphia, Washington D.C., Chicago, San Francisco and Los Angeles metro regions. *Id*.

57. Boston representing one-seventh of RCN's market is itself a conservative estimate, since the (continued...)

under these conservative assumptions regarding the line count over cable facilities for AT&T and RCN, only about 127,000 facilities-based lines can be accounted for in the residential sector.

Verizon names AT&T/TCG, Worldcom, WinStar and Teligent (among others) as the principal facilities-based providers of business services in Massachusetts.[58] However, as was the case with respect to residential facilities-based carriers, Verizon has offered no specific evidence of a count of carrier-specific facilities-based business lines. Moreover, two of the carriers highlighted as significant competitors by Mr. Mudge, WinStar and Teligent (both purveyors of fixed wireless services) have filed for Chapter 11 bankruptcy protection. Surely Mr. Mudge would not consider either carrier to be considered strong competition for Verizon at the present time.[59] As I will discuss later in my testimony, financial setbacks by CLECs are not currently the exception but the *rule*, which can seriously affect a carrier's ability to maintain its position in the local exchange market.

57. (...continued)
Boston metro region is nowhere near the size of New York, Chicago or Los Angeles.

58. Mudge (VMA), at 11-14.

59. "Winstar Blames Lucent For Bankruptcy, Says It Was 'Seduced By Promises'", TR Daily, April 18, 2001; "Struggling Teligent Files For Bankruptcy Protection", Telecommunications Reports Wireless, May 24, 2001.

As is evident, the data available to estimate CLEC presence in the local exchange market in Massachusetts can vary considerably depending upon which sources one relies. Verizon's reliance upon the count of E911 listings as evidence of the number of CLEC facilities-based access lines is highly suspect and unsupported by other sources of information, including the very report issued by New Paradigm upon which Verizon has relied in asserting various other facts in its testimony.

Q. Do you dispute VMA's data relating to the CLEC share of the resale services market?

A. Clearly, VMA has the ability to obtain and provide the data on the total number of lines it provides at retail and the quantity of lines it provides to CLECs either as resale services or UNEs. However, I have some serious concerns as to the accuracy of the figures that VMA has provided, because there are a number of situations in which the data that VMA is providing in this proceeding does not square with data that the Company has provided to the Department in other proceedings.

Q. Please explain.

A. According to the VMA data provided in this case, the Company as of January 1, 2001 provided some 4.33-million "retail lines" plus 269,000 resale lines, for a total of about 4.6-million. Yet in its

October 2000 annual price cap filing, VMA identified in its "price-out" a much lower figure of 3.9-million residential and business lines in all, which appear to include both retail and resale lines.[60] Furthermore, in its "rate center consolidation" study provided in DTE 98-38, VMA identified some 4.0-million residential and business lines[61] (again, presumably, including both retail and resale), which exceeds the value provided in the price cap filings in 1998 and 1999.[62]

Q. Are you sure that these various figures should be comparable?

A. No, not precisely, but that only compounds the problem. For example, VMA may be including in the "retail lines" and "resale lines" identified for this case services like Centrex, which confront distinctly different market conditions. I also do not know how VMA-owned and customer-owned (COCOTS) coin lines are being treated. And I do not know whether the Company is including as "UNEs" facilities that are not being used by CLECs to provide dial tone services (for example, UNEs that are being provided for use with CLEC-furnished DSL services) or is including interconnection facilities that it provides to CMRS carriers, perhaps even including Verizon Wireless itself.

60. *See* Table 1.

61. *See* Verizon's Feasibility Analysis of the Attorney General's Proposed Rate Center Consolidation Plans, September 24, 1999, Attachment F (Residential) and October 28, 1999, Attachment F (Business).

62. *See* Table 1.

The point is that there is no assurance that the "market share" conclusions that the Company is presenting to the Department, which necessarily involve the calculation of a ratio between VMA-provided and total market services, are comparable, even if they are in other respects accurate (for what they are, which we don't actually know).

Q. Notwithstanding all of the foregoing qualifications, what is your assessment of actual VMA market shares?

A. The total market size that must be used as the denominator in this calculation consists of VMA retail services, VMA resale and UNE services, and facilities-based dial tone services, all expressed on a voice-grade dial tone equivalent line basis. I have attempted to summarize these figures on Table 2 below. According to Verizon's interpretation of the data, the total market size appears to consist of some 5.2-million lines, of which VMA serves some 4.3-million *at retail*. Thus, VMA's share of the *retail* component is 84%. By Verizon's count, only 9% of the CLEC lines being provided at retail utilize CLEC facilities instead of VMA network services; hence, the VMA network component's share of the market is 91%.

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Table 2

Calculation of Verizon Market Share (Retail and Network Services)

Line	Item	VG lines	Source
a	VMA retail	4,323,879	AG-VZ 2-10
b	VMA resale	268,820	AG-VZ 2-10
c	UNE-P and loops	112,264	AG-VZ 2-10
d	CLEC facilities-based (VZ est.)	470,000	Mudge (VMA), at 12.
e	Total market size	5,174,963	a + b + c + d
f	VZ retail share	84%	a ÷ e
g	VZ network services share	91%	(a + b + c) ÷ e

Q. Is it appropriate for the Department to examine market share on a statewide basis as the Company seems to be suggesting?

A. No, because there is enormous variation in the extent of competitor penetration across the state. Attachment 2 to my testimony reproduces VMA's response to AG-VZ 2-10 which provides the total retail and resale lines, separately for residential and for business customers, for each VMA wire center. Moreover, the percentages provided by VMA in its response to AG-VZ 2-10 overstate competitor market shares, because they are calculated incorrectly as a ratio of resale lines to VMA retail lines, rather than as a ratio of resale lines to *total* lines (resale + retail). But more to the point, there are numerous communities throughout Massachusetts, urban, suburban and rural, in which even *retail* competitor penetration is minimal.

Q. Why is the geographic extensiveness of CLEC activity important?

A. The specific regulatory changes that VMA is seeking in this proceeding will apply *statewide*, not just in areas in which some level of competitor activity is present. VMA is asking for virtual deregulation of residential services and for total deregulation of business services. If allowed, VMA will not be required to maintain uniform statewide pricing, but will instead be able to apply geographically differentiated competitively-targeted pricing, potentially raising rates in communities that do not have competitive alternatives, while perhaps lowering rates in those that do.[63] Unless *all customers*, statewide, have access to competitively-provided alternatives, VMA will continue to be the monopoly provider, except that it will then be a nonregulated monopoly. And as I have already noted, even for those communities in which there is some competitor activity, VMA's retail market share is still overwhelming, and its share of the underlying facilities market is even larger than that.

Supply elasticity for competitive firms is highly inelastic, due in large part to the financial difficulties faced by CLECs and their reliance upon VMA for the underlying network facilities required to provide service in most parts of the state.

Q. The second criterion for review is supply elasticity. What is your understanding of this term?

63. *See* DTE-VZ 1-7; AG-VZ 2-15; AG-VZ 2-16.

A. Supply elasticity generally refers to the extent to which firms are able to expand or contract their output in response to market price and other market conditions. Generally, if firms are able to rapidly adjust their supply — and particularly to increase it — in response to a price change, this will tend to limit any one firm's ability to maintain supracompetitive prices. In other words, if VMA's competitors are able to rapidly expand their supply in response to a VMA price increase, then VMA's ability to sustain a significant price increase would be limited. On the other hand, if competitors are not able to expand their supply when VMA raises its price, VMA will be able to implement and maintain excessive prices over an extended period of time.

Q. What evidence has VMA provided that would suggest that competitor supply elasticities satisfy the Department's criterion?

A. Basically, VMA has offered virtually no evidence in this regard, other than the implication that the growth that it claims competitors are experiencing is indicative of their ability to expand output.

Q. Are CLECs characterized by a level of supply elasticity sufficient to act as a competitive constraint on VMA's market power?

A. No, and in fact the evidence in this proceeding would affirmatively support a finding that CLEC supply is highly *inelastic*.

Q. On what do you base that conclusion?

A. Several things. At a macro level, CLECs are experiencing immense difficulty raising capital to finance and sustain any major expansion of their facilities. The plummeting stock prices and market capitalization of nearly all CLECs coupled with the fact that many have either gone out of business or are operating under bankruptcy protection provides a stark contradiction to Dr. Taylor's assertion that competition within the industry is alive and well.

As illustrated in Table 3, many of the carriers identified by Dr. Taylor as "strong competitors" in Massachusetts[64] have experienced a precipitous drop in stock price and market capitalization over roughly the past two years. The dramatic decreases in CLEC share prices indicate that (1) investors have less confidence in these companies' ability to succeed with business plans premised upon competing with ILECs; and (2) the companies themselves now will have much more difficulty attracting capital with which to pursue their business plans. Telecommunications is a high fixed-cost industry, and a lack of capital with which to pursue market entry and expansion will adversely impact many carriers' ability to stay in business, let alone gain market share.

Q. What factors contribute to the lack of survival of these competitors within the telecommunications industry?

64. Taylor (VMA), at 7.

Table 3

CLEC Market Capitalization September 1999 - August 2001

Company Name	Market Cap Sept 30, 1999 (millions)	Market Cap Sept 30, 2000 (millions)	Market Cap Jan 31, 2001 (millions)	% Change Sept 1999-Jan 2001	Market Cap Aug 8, 2001 (millions)	% Change Sept 1999-Aug 2001
Adelphia	$ 1,439.70	$ 650.16	$ 598.22	-58%	$ 529.40	-63%
Allegiance	$ 4,086.50	$ 2,512.79	$ 3,654.18	-11%	$ 1,550.00	-62%
AT&T Corp	$ 151,592.90	$ 102,286.76	$ 89,242.80	-41%	$ 76,400.00	-50%
Commonwealth Tele	$ 972.87	$ 837.43	$ 852.37	-12%	$ 993.00	2%
Connectiv	$ 1,712.68	$ 1,585.20	$ 1,581.45	-8%	$ 2,010.00	17%
CoreCom	$ 2,679.43	$ 459.16	$ 234.19	-91%	$ 15.60	-99%
CTC Communications	$ 239.24	$ 538.19	$ 362.18	51%	$ 165.20	-31%
CTCI	$ 936.49	$ 756.98	$ 838.48	-10%	$ 315.20	-66%
Intermedia	$ 1,274.64	$ 1,303.25	$ 902.55	-29%	$ -	-100%
Focal	$ 1,451.72	$ 1,085.25	$ 1,070.66	-26%	$ 102.00	-93%
Global Crossing	$ 21,061.42	$ 28,022.93	$ 10,048.81	-52%	$ 5,260.00	-75%
GST Telecomm Inc	$ 265.18	$ 0.63	$ -	-100%	$ -	-100%
Northpoint	$ 3,044.88	$ 941.58	$ 187.73	-94%	$ 6.27	-100%
ICG Communications	$ 736.77	$ 22.77	$ -	-100%	$ -	-100%
Level 3 Communications	$ 17,810.58	$ 28,317.09	$ 14,964.98	-16%	$ 1,700.00	-90%
Worldcom	$ 144,541.84	$ 72,623.19	$ 62,100.00	-57%	$ 41,270.50	-71%
RCN	$ 3,785.42	$ 1,378.47	$ 1,048.81	-72%	$ 364.10	-90%
Sprint	$ 42,597.39	$ 21,148.60	$ 19,820.74	-53%	$ 20,200.00	-53%
Winstar Comm Inc	$ 2,145.89	$ 1,429.48	$ 1,722.90	-20%	$ 6.19	-100%
XO Comm/Nextel	$ 19,360.84	$ 7,970.99	$ 9,005.36	-53%	$ 666.30	-97%
Total CLEC	**$ 421,736.38**	**$ 273,870.88**	**$ 218,236.42**	**-48%**	**$ 151,553.76**	**-64%**

Source: carrier 10Q reports, www.thedigest.com/stocks/

1 A. Competitive LECs have become marginalized because they do not own the strategic assets
2 necessary to compete, and must instead rely upon the ubiquitous Bell network — a network that
3 remains largely closed to new entrants, Sections 251 and 252 of the Telecommunications Act of
4 1996 notwithstanding. There has been carnage among CLEC stocks, and numerous competitive

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LECs have filed or are on the verge of filing for bankruptcy.[65] From a financial perspective, many CLECs operating within Massachusetts are experiencing a major economic downturn. The optimistic tone of Dr. Taylor's testimony would have one believe that CLECs are stronger than they have ever been in their ability to capture market share, when in fact just the opposite is true. Additionally, that CLECs can expect to encounter substantial difficulty in raising capital is reflected in the recent sharp drop in their overall market capitalizations. CLEC analysts at Morgan Stanley Dean Witter stated that as of August 14, 2001 the market capitalization of CLECs as a group have fallen by 65.8% year-to-date,[66] and this figure does not account for the drop-off in stock prices that began in the 4th quarter of 2000.

Q. Dr. Taylor and Mr. Mudge have specifically referenced AT&T, RCN, MCIWorldcom, CTC and Level 3 as examples of "serious" competitors operating in the Massachusetts local market.[67] Have these companies been affected by the financial downturn you have described?

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65. Many CLECs have filed for bankruptcy this year among them, Winstar, Covad Communications Group Inc., PSINet Inc., Rhythms NetConnections Inc., Teligent Inc., 360networks., Vitel Inc., Digital Broadband Communications Inc., and Essential.com, Inc.; *See* "Covad Says File for Bankruptcy, Restructure Debt", Jonathan Stempel, Reuters, August 7, 2001; http://www.bankruptcydata.com/BankruptcyDataNews.htm; "Ailing telecom firm sells name list," Bruce Mohl, Boston Globe Online, August 10, 2001.

66. Morgan Stanley Dean Witter, Equity Research: North America, Industry: Competitive Local Exchange Carriers (CLECs), August 14, 2001 at 1.

67. Taylor (VMA), at 8; Mudge (VMA), at 14.

A. As shown in Table 3, AT&T, RCN, MCIWorldCom, CTC and Level 3 all have experienced dramatic decreases in their market capitalizations since September of 1999, and would thus also experience the difficulties described above in maintaining their status as a competitor, let alone a "serious" competitor. Over the past two years, AT&T has seen a decrease in its market capitalization of approximately $75-billion, or about 50%. CTC's market capitalization has decreased by 31%, while MCIWorldcom, RCN and Level 3 have experienced decreases of 71%, 90% and 90%, respectively, over the same time period.

Q. How have data CLECs fared within the Massachusetts market?

A. Competition within the DSL market in Massachusetts (or the distinct lack thereof) has undergone major retrenchment over the past year. Five major DSL providers, Northpoint, Vitts Network, Digital Broadband Communications, HarvardNet, and Rhythms NetConnections have all either ceased providing service or have announced that they will do so shortly, and all have filed for Chapter 11 bankruptcy protection. One of these fatalities, data CLEC NorthPoint, was actually an acquisition target of Verizon. NorthPoint's stock went into a nosedive immediately following Verizon's decision to pull out of the deal, and the carrier never recovered.[68] More recently, on August 2, 2001, Rhythms NetConnections, Inc. filed for Chapter 11 bankruptcy protection and on

68. "Blaming Verizon For Bankruptcy, NorthPoint Plans Asset Auction," *TR Daily*, January 22, 2001.

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August 10th the carrier sent out notices to its customers stating that it would discontinue service in 31 days.[69] A sixth DSL provider, Covad Communications Group, Inc. filed for bankruptcy in mid-August as part of a financial restructuring plan that would erase $4.1 billion in debt.[70] Wall Street's prior infatuation with these and other CLECs has all but evaporated, and it is becoming extremely difficult for CLECs to raise any significant amount of capital with which to grow and compete with ILECs.

Q. Mr. Mudge points to Teligent and Winstar as facilities-based competitors using fixed wireless licenses across Verizon MA's service area.[71] Do you consider these carriers to be viable competitors to Verizon?

A. Not anymore. Within 6 weeks of the filing date of Mr. Mudge's testimony, both Winstar and Teligent filed for Chapter 11 bankruptcy protection.[72]

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69. "Rhythms NetConnections Files Bankruptcy, Seeks 'Going-Concern' Bids", TR Daily, August 2, 2001; "Rhythms Doesn't Find Financial Rescuer, Sends Out Service-Termination Notices", TR Daily, August 10, 2001.

70. "Covad Plans Restructuring As Rhythms Goes Bankrupt", TR's Last-Mile Telecom Report, August 13, 2001; "Covad Files for Bankruptcy in Accordance with Refinancing Plan," TR Daily, August 15, 2001.

71. Mudge (VMA), at 14.

72. "Winstar Blames Lucent For Bankruptcy, Says It Was 'Seduced By Promises'", TR Daily, April 18, 2001; "Struggling Teligent Files For Bankruptcy Protection", Telecommunications Reports

(continued...)

Q. Are the ILECs suffering the same financial setbacks as the CLECs have experienced?

A. No. Wall Street's recent treatment of telecom stocks has been directed specifically at CLECs rather than at the telecommunications industry as a whole. As is shown in Table 4, RBOC shares have been performing fairly well, with market capitalization declining only 20% as a whole over the past two years, as compared to a decline of 64% for the group of CLECs appearing in Table 3. Investors and analysts thus remain far more confident that Verizon and the other RBOCs will be successful in preserving their market positions and associated revenue streams, which obviously would include preserving their existing stranglehold over local service markets. In fact, industry officials and financial analysts indicate that they did not expect the capital markets to open up anytime soon for most cash-starved CLECs, which is likely to force more CLECs to sell assets or go into bankruptcy.[73]

72. (...continued)
Wireless, May 24, 2001.

73. "Who Killed the CLEC's? Bring in the Usual Suspects", TR's Last-Mile Telecom Report, May 28, 2001.

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Table 4

RBOC Market Capitalization September 1999 - August 2001

Company Name	Market Cap Sept 30, 1999 (millions)	Market Cap Sept 30, 2000 (millions)	Market Cap Jan 31, 2001 (millions)	% Change Sept 1999-Jan 2001	Market Cap Aug 8, 2001 (millions)	% Change Sept 1999-Aug 2001
BellSouth	$ 81,526.25	$ 82,279.88	$ 78,801.80	-3%	$ 74,100.00	-9%
Ameritech	$ 79,888.88					
SBC	$ 102,284.00					
SBC post merger	$ 182,172.88	$ 180,569.44	$ 163,423.00	-10%	$ 144,100.00	-21%
Bell Atlantic	$ 107,918.62					
GTE	$ 77,921.07					
Verizon	$ 185,839.69	$ 135,966.99	$ 148,365.00	-20%	$ 143,500.00	-23%
US West	$ 28,703.16					
Qwest	$ 27,242.19					
Qwest post merger	$ 55,945.35	$ 85,746.31	$ 69,919.20	25%	$ 40,200.00	-28%
Total RBOC	**$ 505,484.17**	**$ 484,562.61**	**$ 460,509.00**	**-9%**	**$ 401,900.00**	**-20%**

Note: US West 9/30/99 shares outstanding represents last reported shares outstanding of US West in April 1998
Source: Daily Stock Price Record, NYSE, Oct.- Dec. 1999, Standard & Poor's 2000, carrier 10Q reports

Q. Dr. Selwyn, it is clear from your testimony that CLECs have been victimized by the capital markets, and that those still in business are much weaker competitors than they might once have been. Are there any other repercussions that you can identify from the poor financial health of the CLEC sector?

A. Yes. While it is certainly obvious that cash-strapped carriers are going to have a more difficult time expanding their markets to compete with Verizon, the more critical fallout of the market

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downturn is likely to come on the side of consumer demand for CLEC service. At its most primitive level, customers considering a switch from the incumbent Verizon to an upstart CLEC not currently known for providing local telephone services (irrespective of what other lines of business in which they may already be involved) will require a reason to switch to a CLEC that is more compelling than the reason to stay with the incumbent. A customer may look at any number of criteria when making this determination, such as available services, price, and service quality. However, given that the uncertainties in the CLEC market have come to grace the business pages of most respectable newspapers across the country and are thus widely recognized, one criteria for switching local exchange service carriers has been elevated to new heights, that being: will my carrier be in business tomorrow? While this may be a common criteria in making purchasing decisions in many industries, it has not until recently been part of the equation when purchasing local exchange service. Consumers and businesses alike see local exchange telecommunications services correctly as their link to the outside world, and most, if not all, would resist jeopardizing that link, particularly if all they hoped for in return was a savings of a few dollars per month. As more and more carriers dissolve or seek bankruptcy protection, one can expect Verizon's grip on the local exchange bottleneck to strengthen as risk-averse consumers remain Verizon customers rather than seek out alternative sources for their local exchange service.

In terms of supply elasticity, the bottom line is that even if CLECs were inclined to expand their networks in Massachusetts, they would likely be unable to attract sufficient capital for this initiative at this time.

In addition to the financial difficulties faced by CLECs, it is important to note that all *non-facilities-based* CLECs and many facilities-based CLECs are enormously dependent upon VMA for network facilities in order to provide their service. This is evident by the large number of interconnection agreements that have been entered into by CLECs with Verizon.[74] (In fact, CLEC dependence upon Verizon's network facilities is entirely one-sided, as Verizon has indicated that it "has had no reason to initiate a request for interconnection with a CLEC."[75] Obviously, as the overwhelmingly dominant firm, VMA has no need to worry about whether *it* can interconnect with fringe competitors, since its inability to do so would fatally impact those fringe firms while having no perceptible impact upon Verizon. Were the Massachusetts local market truly competitive such that VMA's relationship to its rivals would be on a peer-to-peer basis rather than one in which rivals are allowed to compete on Verizon's terms and at its sufferance, one would expect that Verizon would *need* to interconnect with the facilities owned and operated by CLECs, such as those that might exist in a new office building, apartment complex, or housing development.)

74. AG-VZ 2-11 states that there were 158 approved interconnection and resale agreements between incumbents and CLECs in the year 2000.

75. AG-VZ 1-10.

Because existing CLEC facilities are deployed in only a highly limited number of locations, CLECs must rely upon VMA facilities so that they can offer service (at retail) to a sufficiently large geographic area so as to support their marketing and customer service costs. Whereas VMA facilities are ubiquitously deployed, CLEC facilities serve a small fraction of customer locations. Yet for a CLEC to market its services, it must advertise to the entire market, not just to the minute fraction of the market that its facilities happen to pass. Mass media such as television stations and newspapers do not offer CLECs a discount on a minute of TV time or a page of newsprint merely because CLEC facilities pass only a small fraction of the customers that are passed by VMA facilities. Hence, even facilities-based CLECs need to supplement their own networks by reselling (in some manner) VMA services.

Q. What control does VMA exert with respect to facilities it provides to CLECs that would operate to limit CLEC ability to expand their capacity in response to a growth in demand (i.e., supply elasticity)?

A. This has been the subject of a number of proceedings before the Department, and I will not undertake to recite all or even a small fraction of the specific concerns and complaints that have been expressed by CLECs relative to the various difficulties that they have encountered in obtaining facilities and services from VMA for resale or for incorporation into the CLEC's own services. I would note, however, that a number of the "interconnection agreements" cited by Dr.

Taylor and Mr. Mudge involved extensive, protracted and costly (in terms of professional resources) negotiations with Verizon and its predecessors, including arbitrations that were ultimately decided by the Department. These interconnection negotiations were in no sense "peer-to-peer" encounters between comparably sized firms; in practice, Verizon would present requesting CLEC with what amounted to an "adhesion contract," which the CLEC could either accept "as is" or pursue arbitration.

Looking at the matter of competitive choice from the *customer's* perspective, I have personally experienced the difficulties and frustrations that many customers have reported in obtaining service from a CLEC that requires VMA facilities in order provide that customer's service, in that our service was not installed for nearly three and a half months following the date of our initial order, and was two full months late relative to the installation date that we had requested. My firm's experience, which is admittedly anecdotal, is nonetheless corroborated by performance data that VMA has provided in response to AG VZ 1-11 as well as other anecdotal reports on the experience of other Massachusetts businesses, experiences that are similar to my own.

Q. Why did you decide to order your business telephone service from a CLEC — wouldn't it have been a lot simpler just to have dealt with Verizon?

A. So it would seem. However, ETI has been willing to subject itself to numerous difficulties and to undertake various extraordinary interim measures due to the delay in getting our service, in order to gain first-hand experience with the process of obtaining business telephone service from a CLEC that is dependent upon Verizon for the underlying facilities. ETI was, and is, generally aware of the possibility that doing business with a CLEC could engender certain difficulties and delays in order for the service order to be completed. However, I am of the opinion that few businesses —most of which lack first-hand knowledge of the processes confronting CLECs in dealing with Verizon and other ILECs in attempting to serve the CLECs' customers — would willingly subject themselves to these conditions for very long. I would further note that we contacted Verizon's small business sales unit in Boston to inquire as to the installation interval for VMA's own retail T-1 exchange access trunk service, which is known as Flexpath. We were quoted an installation interval of one month from the date at which we place an order with Verizon.

Q. Is the experience that you have encountered an isolated incident or is there reason to believe that similar conditions have been confronted by other businesses who undertake to order their local telephone service from a CLEC?

A. While I am certain that *some* CLEC service installations go smoothly, I am just as certain that our experience is unfortunately neither unique nor particularly unusual.

AG-VZ 1-11 asked VMA to provide data comparing service provisioning times for its own retail T-1 business exchange service trunk offering, Flexpath, and T-1 lines being provided to CLECs either as UNEs or as special access. The Company's response to this interrogatory is reproduced as Attachment 3 to this testimony. Interestingly, PROPRIETARY<< >>END PROPRIETARY

Clearly, there is a consistent and *persistent* pattern of VMA providing superior service to its own retail customers vis-a-vis that which it provides to CLECs *with respect to the same types of T-1 facilities*. And although the more than three months that elapsed between the time that ETI placed its order for service and the date at which it was actually provided was on the high-side of the average installation time for VMA T-1 services provided to CLECs, it appears that it was not all that out-of-line with at least some of the figures provided by the Company in AG-VZ 1-11.

Q. Can you cite any other indication of customer difficulties with obtaining Verizon-provided services from CLECs?

A. Yes. A recent article in the *Worcester Business Journal* relates a litany of customer frustrations with CLEC services that rely upon VMA for the underlying facilities.[76] Problems experienced by companies range from a loss of phone and data service for one week, to waiting two months for Verizon to add phone lines, to the listing and dissemination of incorrect information, to the inability of customers to find reasonably priced data services.

One such business customer located in Northboro — marketing and communications firm SCT Group — claims to have taken "every precaution to try to make sure the transition [from Verizon to CLEC] went smoothly, beginning the process well in advance." When the company stated that it wanted to have the system up and running before their upcoming change of location, Choice One assured them that the order for the last-mile connection with Verizon had been placed and that the work was to be completed well before the move. When trying to double-check with Verizon on the status of the work order, SCT was told that they needed to deal with Choice One. After months of planning, SCT was forced to open its new office with no voice or data services. Without informing Choice One, Verizon had "inexplicably" put a hold on the work order for the

76. *Worcester Business Journal*, "Struggling to Make the Connection: Why Businesses are Having Difficulty Getting Telecom Service in a Timely Way," Micky Baca, July 30, 2001. This article is provided as Attachment 4.

phone-service connection to the new office. Moreover, when Verizon workers showed up at the offices to install the new lines, they showed up at the old offices. In addition to the delay in service provision, the carriers incorrectly programmed the company's phone numbers, resulting in some customers being unable to call the company from parts of Massachusetts and outside the state.

Another example involves GIA Mortgage Corp., located in Holden. GIA put in a request to add three local and long-distance voice lines after switching to Choice One for DSL provision, a request that only Verizon can handle. Having had the experience of adding lines in the past while a customer of Verizon, GIA executives expected the installation of the requested lines to take two weeks. The installation for each new line, however, took much longer and culminated with one line taking nearly two months to install. "It appears Verizon puts other providers in the back seat," says Gregory Korn, vice president of business development at GIA Mortgage Corp.

Bitwise Internet Technology, currently moving from Boston to Fitchburg, has been unable to get reasonably price multiple T-1 lines installed in their new offices and, therefore, will have to maintain a satellite office in the Boston area for data operations due to Verizon's continued monopoly on services. President Jacob Leifman contends that the existence of competitors in the Greater Boston area has led to a decline in the cost of monthly T-1 services to about $200, while in Fitchburg, comparable services would cost between $700 to $1000 per month because Verizon is the only provisioner of T-1 services. Leifman, the article explains, is "convinced that Verizon is

deliberately trying to thwart competitors." Leifman is quoted as saying that: "It doesn't matter how competitive you are, you're always dependent on Verizon at one point or other."

Q. Has the Department itself recognized the presence of these kinds of problems specifically with respect to T-1 services provided to CLECs by VMA?

A. Indeed it has. On March 14, 2001 the Department opened DTE 01-34, an investigation into Verizon-MA's provision of special access services.[77] The Department initiated the investigation in response to complaints by competitive carriers that Verizon "quotes extremely long intervals for provisioning, fails to meet these extended intervals, fails to keep carriers informed of the status of their orders, and has maintenance and repair problems with existing special access services."[78] The Department also noted that end user customers had complained of "adverse business consequences," so severe that one customer moved some of its business to another state.[79]

77. Investigation by the Department of Telecommunications and Energy on it own motion pursuant to G.L. c. 159, §§ 12 and 16, into Verizon New England Inc. d/b/a Verizon Massachusetts' provision of Special Access Services, DTE 01-34, *Vote and Order to Open Investigation*, March 14, 2001.

78. *Id.*, at 1.

79. *Id.*, at 2.

Q. What conclusions have you reached as a result of your first-hand experience in attempting to obtain a competitively provided T-1 business exchange service from a CLEC where provisioning of the underlying facilities was required to be performed by Verizon and the corroborating evidence of similar treatment that you have described?

A. Although ETI's own "case study" is admittedly based upon a sample of one, our experience is not inconsistent with numerous other "horror stories" that have been reported with respect to the provisioning of local telephone service by CLECs using ILEC — and specifically Verizon — facilities, and is entirely consistent with the Department's own concerns that are being pursued in 01-34. It is unrealistic to expect that most customers would consider CLEC services to be "equivalent" to or substitutes for ILEC services if obtaining service from a CLEC is so difficult and fraught with uncertainties of this sort.

CLEC difficulties in obtaining, on a timely basis, underlying services from VMA have the effect of maintaining CLEC supply at a highly inelastic level. Firms that are subject to severe capacity constraints will have difficulty competing with incumbents even if, all else being equal, customers are inclined to do business with them. On the basis of our recent experience here in Boston and the pattern of inferior provision of facilities by Verizon to CLEC, it is readily apparent that a CLEC's ability to provide service — i.e., to expand its capacity in response to an increase in demand — is controlled and constrained by the actions of the incumbent, Verizon in this instance.

As ETI's first-hand experience indicates, AT&T was wholly *unable* to respond to our request for service within the time frame in which it was required precisely because AT&T is not in control of the underlying network facilities it requires from Verizon in order to provide the requested service. Therefore, AT&T's supply elasticity with respect to this type of multiline business service is at or very close to zero, and one can reasonably infer that the supply elasticity for other CLECs with respect to this same type of service configuration would be similar.[80]

Consequently, the mere theoretical existence of competitive offerings at the T-1 level does not represent a sufficiently close substitute for Verizon's own business service offerings so as to warrant the types of deregulatory measures that the Company is seeking in this case.

Q. Why does it seem to take VMA so long to provide a T-1 facility — even for its own retail customers?

A. That is an interesting question and is one for which there is no simple answer. When first invented, digital time-division multiplexing — the technology that is used to provide the 24 voice channels on a single T-1 facility — was used solely for *interoffice* trunks and was not generally offered to end

80. In his testimony, Dr. Taylor notes that competitors have access to 97.8% of Massachusetts residence customers and 98.8% of Massachusetts business customers through collocation arrangements. Taylor (VMA), at 7. However, as is illustrated in ETI's own experience, AT&T's collocated presence at the Bowdoin central office had no bearing on AT&T's ability to rapidly expand its supply to meet demand for services that required Verizon facilities.

user customers. However, during the 1980s when digital PBXs became available, customers demanded that T-1 facilities be made available as an efficient means for providing PBX trunk services. Then-NYNEX's *Flexpath* T-1 service was introduced in response to that demand.

Today, the use of T-1 lines for PBX trunks is not only commonplace, it is likely the serving arrangement of choice for any business that utilizes a digital PBX or other digital telephone system. And digital PBXs and key telephone systems have become relatively inexpensive and are widely used throughout Massachusetts and across the country.

When initially offered on an end user basis, T-1 services were treated as "Special Services" by (then) New England Telephone and other ILECs. That meant that each T-1 order would be handled on an almost entirely manual (i.e., non-mechanized) basis by engineering and installation personnel. Whereas ordinary "POTS" lines are provided using highly sophisticated operations support systems and various other mechanized systems that assign facilities and configure services, T-1 lines continue to be provided today in much the same way as they were ten, fifteen or twenty years ago. Thus, whereas a POTS line can be provided within a few days of receipt of the customer order, T-1 lines require weeks or months to design, configure, connect, test, and ultimately deliver to the customer or CLEC, as the case may be.

Q. Why wouldn't it be in VMA's interest to mechanize the provisioning of T-1 services?

A. That is curious, since this has been the area that has confronted the greatest amount of facilities-based competition. Indeed, so-called "Competitive Access Providers" ("CAPs") began offering "high-capacity digital services" at the T-1 (DS-1) level or greater more than a decade ago, yet VMA and other ILECs have done little or nothing to mechanize and modernize their own provisioning of these same, seemingly competitive services.

Q. Why would that be in their interest?

A. First, the very fact that VMA and other ILECs have not felt compelled to mechanize and modernize their provisioning of these services only serves to underscore how fundamentally *noncompetitive* these services actually are: If VMA were seriously concerned about facilities-based competitors "taking" its T-1 market away from the Company, it surely would not still be utilizing decades-old provisioning processes.

More to the point, it is probably to the Company's competitive advantage to maintain the provisioning of its T-1 services in a degraded state precisely because by so doing VMA is able to keep CLECs' supply elasticities low. In theory, CLECs should be particularly attracted to the multi-line business telephone service market, the segment of the market that is most likely to use and demand T-1 based services. Were VMA able to physically provide its competitors with a T-1 facility in the same time frame as VMA can provide POTS and POTS-like services (i.e., a few

days), competitors would be far more able to rapidly expand their own service base by integrating their own and VMA facilities. However, by intentionally degrading its provisioning of these competitively-important facilities, VMA can undermine its rivals' own ability to offer retail services in this market.

Q. But doesn't VMA then sacrifice its own retail T-1 service base?

A. No, because for the most part VMA continues to dominate this market segment — and all other local market segments — at the network facilities level. By maintaining its T-1 offering at its decades-old degraded level, VMA makes retail-level competition in this segment far more difficult, and actually *protects*, rather than risks, its own retail service and customer base.

No evidence has been presented that demonstrates Verizon faces a high degree of demand elasticity for local exchange services.

Q. The third Department criterion is demand elasticity. What evidence has VMA provided that would suggest that the firm elasticity of demand faced by VMA satisfies the Department's criterion?

A. VMA has offered no evidence in this regard, other than vague inferences that given a supply of competitor services customers will substitute competitor's services for their own.

Q. Is the firm elasticity of demand faced by Verizon sufficient to constrain its market power?

A. Verizon has made no such demonstration.[81] As I testified above, VMA's firm elasticity of demand is dependant upon both competitors' supply elasticity and the price elasticity of basic local services. I have provided ample evidence that supply elasticity is in fact very low.

Q. What about demand elasticity?

A. VMA has failed to show that it faces a high degree of demand elasticity. A sufficiently competitive market implies that no one firm confronts relatively inelastic demand. I believe that VMA still faces an environment in which there is little or no price sensitivity in the demand for its basic exchange services. In fact, VMA's proposed alternative regulation plan contemplates pricing flexibility to allow the Company to *raise* its prices. As essential, nondiscretionary services, basic local services have always exhibited extremely low price elasticity of demand. The characteristics of the local exchange market, be they customer inertia, supply elasticity, and the like, have not changed so dramatically at this stage to raise the degree of elasticity of demand that VMA faces. Thus,

81. Dr. Taylor responded in the negative when asked, in AG-VZ 1-4, whether the witness had "performed, or reviewed any quantitative studies or analyses of the cross-price elasticity(ies) confronting Verizon MA with respect to prices being charged by actual competitors or threatened by potential competitors offering or potentially offering comparable services in the Massachusetts local exchange market."

demand elasticity certainly plays no part in constraining the ability of VMA to exercise market power.

The evidence provided by Verizon is of no assistance in demonstrating that the Massachusetts local exchange market is sufficiently competitive to warrant further pricing flexibility or relaxed regulation.

Q. Do you agree with Mr. Mudge's assertion that "the competitive markets that exist in Massachusetts substantially limit Verizon MA's ability to vary its prices from the competitive market levels?"[82]

A. No, I do not. Beyond making this assertion, neither Mr. Mudge nor any other VMA witness in this proceeding offers any evidence that would support this claim. In order for Mr. Mudge's statement to be true, Verizon would have to make a showing that the local exchange market is sufficiently competitive, as defined by the Department. As I have discussed at length above, the evidence provided by Verizon is severely lacking in this regard. Mr. Mudge's statement that competitors "substantially limit" Verizon's ability to raise prices is little more than unsupported rhetoric, and is belied by the fact that the Company has conceded that no studies were performed, reviewed or analyzed that support this statement.[83]

82. Mudge (VMA), at 5.

83. AG-VZ 1-3 and AG-VZ 1-4.

Q. Doesn't the fact that VMA has received Section 271 approval by the FCC and a favorable recommendation from this Department mean that VMA has met the standards of review described above?[84]

A. No, it does not. The standards that a BOC must satisfy in order to obtain Section 271 authority are materially different from the standards that the Department has applied in assessing the sufficiency of competition for purposes of reduced regulation or deregulation of a service. Section 271 deals with BOC entry into the interLATA long distance market, not with BOC deregulation, and there is nothing in Section 271 that suggests or implies that having satisfied the Section 271(c)(2)(B) "competitive checklist" is sufficient to protect consumers against excessive pricing or other anticompetitive practices on the part of a BOC. The FCC has applied Section 271 as requiring that a BOC merely demonstrate that it has "opened" its market to competition by having

84. *In the Matter of Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks Inc., For Authorization to Provide In-Region, InterLATA Services in Massachusetts,* FCC CC Docket No. 01-9, *Memorandum Opinion and Order,* April 16, 2001; *In the Matter of Application of Verizon New England Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks Inc., For Authorization to Provide In-Region, InterLATA Services in Massachusetts,* FCC CC Docket No. 01-9, *Evaluation of the Massachusetts Department of Telecommunications and Energy,* October 16, 2000.

satisfied the 14-point "competitive checklist." Section 271 approval in no sense implies that the BOC no longer has market power,[85] nor that the local exchange market is sufficiently competitive.

Obviously, competitors have some competitive *presence* in Massachusetts, which is hardly surprising in view of the various market-opening initiatives that have occurred both in Massachusetts and at the federal level. Indeed, the DPU began certificating CLECs and CAPs as early as the mid-1980s, and in fact was one of the first states to do so. Yet in the fifteen or so years since the Department began authorizing competition at the local level and in the five-and-a-half years since the enactment of the federal *Telecommunications Act,* Verizon still overwhelmingly dominates this market. Fifteen years after the onset of "equal access," the then-dominant interexchange carrier, AT&T, today controls well below 50% of the nation's long distance market.[86] *The fact that Verizon's Massachusetts market share remains as high as it is underscores just how inconsequential the present level of competition is in constraining Verizon's exercise of market power.* In this proceeding, Verizon must show not just that *some* competition is present (which it is), but that sufficient competition exists to justify the Department's reliance upon market forces to regulate VMA's prices. As my testimony reflects, the Company

85. The Department noted in its *Vote and Order to Open Investigation* in DTE 01-34 that the FCC does not consider the provisioning of special access services in its investigation of 271 compliance (*See* footnote 2).

86. Federal Communications Commission, Industry Analysis Division, *Trends in Telephone Service*, August 2001, at 10-2 and Table 10.8.

has failed to make such a showing, choosing instead to rely upon data that merely shows some presence of competitors in the local market.

Q. Has the DTE made any prior assessments as to the presence of competitors and their impact on the competitiveness of telecommunications markets?

A. Yes. In DPU 90-133, a proceeding in which AT&T sought non-dominant carrier status as an IXC, the Department found that "[a] combination of many facilities-based carriers and resellers serve the market. However, the presence of many telecommunications providers does not necessarily detract from AT&T's market power, especially if the vast majority of the firms are fringe companies with *de minimus* market shares who pose inconsequential competition."[87] These same conclusions apply in the context of the current proceeding; that is, notwithstanding the presence of *competitors*, there is no presence of *effective competition*, and it is the presence of effective competition that must be demonstrated prior to the significantly reduced level of regulatory oversight that has been proposed by Verizon.

87. DPU 90-133, at 42.

Q. In his testimony, Mr. Mudge alleges that "competing carriers are using all three modes of entry — interconnection, access to UNEs, and resale — to provide services throughout the Commonwealth."[88] Would you agree with his sentiments?

A. While I do not disagree with Mr. Mudge that "hundreds of telecommunications providers" are *authorized* to provide service in Massachusetts,[89] the fact that the "hundreds" of carriers together serve only a small percentage of the telecommunications lines in the state is certainly less than a comforting statistic. And even though there may be "hundreds" of carriers "authorized" to provide service in this state, far fewer are actually providing service to customers.[90] Moreover, when one considers that the minimal competitor market shares that have arisen are being divided up among these "hundreds of competitors," it becomes clear how economically powerless any single "competitor" actually is when compared with Verizon.

88. Mudge (VMA), at 7.

89. Mudge (VMA), at 7.

90. In fact, the number of carriers is almost a moot point when one considers the low market penetration of CLECs. If only 2 or 3 CLECs operating in Massachusetts had garnered 16% of the local market in five years, the same conclusion regarding the lack of competition would likely be drawn.

In point of fact, Mr. Mudge himself states that "[t]he ease of entry and the discount levels established by the Department made resale a quick and attractive option for competitors...,"[91] yet he also indicates that of the "hundreds" of "authorized" carriers, only 54 CLECs currently provide service via resale.[92] If Mr. Mudge's statements are accurate such that barriers to entry actually *are* low, and resale margins actually *are* adequate, then this begs the question as to why haven't these carriers succeeded in capturing more than the tiny fraction of the retail market that VMA itself concedes its rivals currently serve?[93] If Mr. Mudge is correct about "east of entry," then one would expect that in the five years since passage of the *Telecommunications Act of 1996*, the competing carriers would have succeeded in capturing far more customers across the Commonwealth than VMA's own inflated statistics would indicate. Since that is not the case, one must conclude that entry and survival in the resale market is far more difficult than Mr. Mudge would have the Department believe.

It is also important, in assessing the economic significance of this "resale" competition, to bear in mind the fact that Verizon has asked the Department to reduce the Section 252(d)(3) "wholesale discount" from its present 25%/29% to 14%/16% (for Verizon/competitor operator services,

91. Mudge (VMA), at 8.

92. Mudge (VMA), at 9.

93. The exact "fraction" of CLECs is debatable: although Mr. Mudge claims there are "hundreds" of certificated CLECs, Verizon's response to AG-VZ 2-11 indicates that there are 161 CLECs authorized to provide service in Massachusetts.

respectively).[94] Cutting the wholesale discount by nearly half will work to erode reseller margins and will undoubtedly drive at least some resellers out of the market, thereby increasing VMA's already-dominant share of the retail market.

Q. What is your assessment of the manner in which Verizon presented data regarding competitive entry?

A. Verizon's witnesses consistently address competitive entry data on a statewide basis, irrespective of whether they are addressing resold lines, UNE loops, facilities-based loops, or collocation arrangements. When assessing the extent of competitive entry (and from there the presence of competition), the relevant geographic area to consider is at the wire center level rather than the state as a whole. This is so because evidence of the presence of competition in one community does nothing to protect consumers in a different community in which alternative providers are not available.[95] In presenting statewide head-count data, VMA glosses over the fact that a competitive presence in a particular wire center may in many cases amount to a fraction of one

94. This issue is being addressed by the Department in DTE 01-20.

95. This position was corroborated in an recent Hearing Examiner's Proposed Order with respect to Ameritech Illinois' attempt to reclassify business and residence services as competitive. Illinois Commerce Commission On Its Own Motion vs. Illinois Bell Telephone Company, Investigation into Specified Competitive Tariffs to Determine Proper Classification of the Tariffs and to Determine Whether Refunds Are Appropriate, Illinois Commerce Commission Docket No. 98-0860, *Hearing Examiners' Proposed Order*, March 30, 2001, at 11.

percent of the total lines served in that wire center, and thus do not currently demonstrate the existence of price-constraining competitive alternatives to VMA services. Indeed, the Company's response to AG-VZ 2-10 (my Attachment 2) demonstrates that this is in fact the case. Should VMA achieve its goal of deregulating all business services, customers in those regions without sufficient competition would be held hostage to whatever rate changes VMA deemed appropriate.

Competitive market share at the wire center level in Massachusetts is critical to the Department's assessment as to whether or not the local service market *that customers participate in* exhibits the characteristics of price-constraining competition. In assessing the level of competition on the wire center basis, one must examine the number of lines served by competitors in each wire center.

Q. Does Verizon attempt to make such a demonstration?

A. No. Although Verizon has provided resale and UNE loop data at the wire center level (but only in response to data requests), the Company's analysis and conclusions contained in its pre-filed testimony rely solely upon an aggregation of the data points in an effort to demonstrate the ubiquity of competitive entry in Massachusetts. It is insufficient to simply show that most of the wire centers have a CLEC collocated there, or that at least one line is served via resale or some form of

facilities-based competition,[96] because the presence of competitors in wire center B on the other side of the state has no relevance when assessing the competitive choices faced by the consumer whose service is furnished out of wire center A.

Verizon's "head count" data fails to properly demonstrate that sufficient competition exists in the relevant market (i.e., at the wire center level), which is the appropriate standard when considering service reclassification. The data on resale and UNE lines appearing in my Attachment 2 definitively demonstrates that for the vast majority of wire centers, CLECs have had little success in capturing market share, with the exception of resold business lines — yet that number (in the aggregate) appears to be on the decline,[97] and would surely further decline if the wholesale discount is further reduced. Additionally, the E911 data upon which Verizon relies in demonstrating the presence of facilities-based carriers has not been provided at the wire center level; thus, this data teaches nothing about the *distribution* of CLEC-served customers in the various parts of the state.

Verizon has provided the Department with a "50,000-foot view" of the state of competition in Massachusetts, but what is relevant is what is going on "on the ground." The Department must instead require that data on competition in the local exchange market be provided and examined at

96. *See, e.g.*, Taylor (VMA), at 6-7.

97. *See* the attachment to AG-VZ 1-6.

the wire center level. The data should also be subjected to the Department's stringent criteria prior to addressing the significantly reduced level of regulatory oversight that has been proposed by Verizon.

Conclusion

Q. Dr. Selwyn, what is your overall conclusion regarding the level of competition in local exchange service markets in Massachusetts?

A. For all of the reasons set forth in my testimony, it should be patently obvious to the Department that Verizon has failed to provide adequate evidence demonstrating the existence of sufficient competition in the local exchange market. Verizon only provides head-count data at an aggregated statewide level, with no economic analysis to back up its conclusions that the "competitive markets" that exist in Massachusetts will limit Verizon's ability to vary prices from competitive levels. Not only has Verizon ignored the three most relevant standards for review — market share, supply elasticity and demand elasticity — but it has ignored *all* of the Department's prior standards for finding a market to be sufficiently competitive. As my testimony demonstrates, when Verizon's filing is held up to these three standards, only one conclusion can be drawn: Verizon maintains significant market power in the Massachusetts local telecommunications market, market power that will be abused *to the detriment of local competition* if the Company is provided with the service reclassifications and regulatory flexibilities that it seeks.

Q. Does this conclude your direct testimony at this time?

A. Yes, it does.

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Attachment 1

Statement of Qualifications

LEE L. SELWYN

Dr. Lee L. Selwyn has been actively involved in the telecommunications field for more than twenty-five years, and is an internationally recognized authority on telecommunications regulation, economics and public policy. Dr. Selwyn founded the firm of Economics and Technology, Inc. in 1972, and has served as its President since that date. He received his Ph.D. degree from the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. He also holds a Master of Science degree in Industrial Management from MIT and a Bachelor of Arts degree with honors in Economics from Queens College of the City University of New York.

Dr. Selwyn has testified as an expert on rate design, service cost analysis, form of regulation, and other telecommunications policy issues in telecommunications regulatory proceedings before some forty state commissions, the Federal Communications Commission and the Canadian Radio-television and Telecommunications Commission, among others. He has appeared as a witness on behalf of commercial organizations, non-profit institutions, as well as local, state and federal government authorities responsible for telecommunications regulation and consumer advocacy.

He has served or is now serving as a consultant to numerous state utilities commissions including those in Arizona, Minnesota, Kansas, Kentucky, the District of Columbia, Connecticut, California, Delaware, Maine, Massachusetts, New Hampshire, Vermont, New Mexico, Wisconsin and Washington State, the Office of Telecommunications Policy (Executive Office of the President), the National Telecommunications and Information Administration, the Federal Communications Commission, the Canadian Radio-television and Telecommunications Commission, the United Kingdom Office of Telecommunications, and the Secretaria de Comunicaciones y Transportes of the Republic of Mexico. He has also served as an advisor on telecommunications regulatory matters to the International Communications Association and the Ad Hoc Telecommunications Users Committee, as well as to a number of major corporate telecommunications users, information services providers, paging and cellular carriers, and specialized access services carriers.

Dr. Selwyn has presented testimony as an invited witness before the U.S. House of Representatives Subcommittee on Telecommunications, Consumer Protection and Finance and before the U.S. Senate Judiciary Committee, on subjects dealing with restructuring and deregulation of portions of the telecommunications industry.

In 1970, he was awarded a Post-Doctoral Research Grant in Public Utility Economics under a program sponsored by the American Telephone and Telegraph Company, to conduct research on the economic effects of telephone rate structures upon the computer time sharing industry. This work was conducted at Harvard University's Program on Technology and Society, where he was appointed as a Research Associate. Dr. Selwyn was also a member of the faculty at the College of Business Administration at Boston University from 1968 until 1973, where he taught courses in economics, finance and management information systems.

Dr. Selwyn has published numerous papers and articles in professional and trade journals on the subject of telecommunications service regulation, cost methodology, rate design and pricing policy. These have included:

"Taxes, Corporate Financial Policy and Return to Investors"
National Tax Journal, Vol. XX, No.4, December 1967.

"Pricing Telephone Terminal Equipment Under Competition"
Public Utilities Fortnightly, December 8, 1977.

"Deregulation, Competition, and Regulatory Responsibility in the Telecommunications Industry"
Presented at the 1979 Rate Symposium on Problems of Regulated Industries - Sponsored by: The American University, Foster Associates, Inc., Missouri Public Service Commission, University of Missouri-Columbia, Kansas City, MO, February 11 - 14, 1979.

"Sifting Out the Economic Costs of Terminal Equipment Services"
Telephone Engineer and Management, October 15, 1979.

"Usage-Sensitive Pricing" (with G. F. Borton)
(a three part series)
Telephony, January 7, 28, February 11, 1980.

"Perspectives on Usage-Sensitive Pricing"
Public Utilities Fortnightly, May 7, 1981.

"Diversification, Deregulation, and Increased Uncertainty in the Public Utility Industries"
Comments Presented at the Thirteenth Annual Conference of the Institute of Public Utilities, Williamsburg, VA - December 14 - 16, 1981.

"Local Telephone Pricing: Is There a Better Way?; The Costs of LMS Exceed its Benefits: a Report on Recent U.S. Experience."
Proceedings of a conference held at Montreal, Quebec - Sponsored by Canadian Radio-Television and Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, May 2 - 4, 1984.

"Long-Run Regulation of AT&T: A Key Element of A Competitive Telecommunications Policy"
Telematics, August 1984.

"Is Equal Access an Adequate Justification for Removing Restrictions on BOC Diversification?"
Presented at the Institute of Public Utilities Eighteenth Annual Conference, Williamsburg, VA - December 8 - 10, 1986.

"Market Power and Competition Under an Equal Access Environment"
Presented at the Sixteenth Annual Conference, "Impact of Deregulation and Market Forces on Public Utilities: The Future Role of Regulation" Institute of Public Utilities, Michigan State University, Williamsburg, VA - December 3 - 5, 1987.

"Contestable Markets: Theory vs. Fact"
Presented at the Conference on Current Issues in Telephone Regulations: Dominance and Cost Allocation in Interexchange Markets - Center for Legal and Regulatory Studies Department of Management Science and Information Systems - Graduate School of Business, University of Texas at Austin, October 5, 1987.

"The Sources and Exercise of Market Power in the Market for Interexchange Telecommunications Services"
Presented at the Nineteenth Annual Conference - "Alternatives to Traditional Regulation: Options for Reform" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1987.

"Assessing Market Power and Competition in The Telecommunications Industry: Toward an Empirical Foundation for Regulatory Reform"
Federal Communications Law Journal, Vol. 40 Num. 2, April 1988.

"A Perspective on Price Caps as a Substitute for Traditional Revenue Requirements Regulation"
Presented at the Twentieth Annual Conference - "New Regulatory Concepts, Issues and Controversies" - Institute of Public Utilities, Michigan State University, Williamsburg, VA, December, 1988.

"The Sustainability of Competition in Light of New Technologies" (with D. N. Townsend and P. D. Kravtin)
Presented at the Twentieth Annual Conference - Institute of Public Utilities Michigan State University, Williamsburg, VA, December, 1988.

"Adapting Telecom Regulation to Industry Change: Promoting Development Without Compromising Ratepayer Protection" (with S. C. Lundquist)
IEEE Communications Magazine, January, 1989.

"The Role of Cost Based Pricing of Telecommunications Services in the Age of Technology and Competition"
Presented at National Regulatory Research Institute Conference, Seattle, July 20, 1990.

"A Public Good/Private Good Framework for Identifying POTS Objectives for the Public Switched Network" (with Patricia D. Kravtin and Paul S. Keller)
Columbus, Ohio: *National Regulatory Research Institute,* September 1991.

"Telecommunications Regulation and Infrastructure Development: Alternative Models for the Public/Private Partnership"
Prepared for the Economic Symposium of the International Telecommunications Union Europe Telecom '92 Conference, Budapest, Hungary, October 15, 1992.

"Efficient Infrastructure Development and the Local Telephone Company's Role in Competitive Industry Environment" *Presented at the Twenty-Fourth Annual Conference, Institute of Public Utilities, Graduate School of Business, Michigan State University, "Shifting Boundaries between Regulation and Competition in Telecommunications and Energy"*, Williamsburg, VA, December 1992.

"Measurement of Telecommunications Productivity: Methods, Applications and Limitations" (with Françoise M. Clottes)
Presented at Organisation for Economic Cooperation and Development, Working Party on Telecommunication and Information Services Policies, `93 Conference "Defining Performance Indicators for Competitive Telecommunications Markets", Paris, France, February 8-9, 1993.

"Telecommunications Investment and Economic Development: Achieving efficiency and balance among competing public policy and stakeholder interests"
Presented at the 105th Annual Convention and Regulatory Symposium, National Association of Regulatory Utility Commissioners, New York, November 18, 1993.

"The Potential for Competition in the Market for Local Telephone Services" (with

David N. Townsend and Paul S. Keller)
Presented at the Organization for Economic Cooperation and Development Workshop on Telecommunication Infrastructure Competition, December 6-7, 1993.

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," *Utilities Policy*, Vol. 4, No. 1, January 1994.

The Enduring Local Bottleneck: Monopoly Power and the Local Exchange Carriers, (with Susan M. Gately, et al) a report prepared by ETI and Hatfield Associates, Inc. for AT&T, MCI and CompTel, February 1994.

Commercially Feasible Resale of Local Telecommunications Services: An Essential Step in the Transition to Effective Local Competition, (Susan M. Gately, et al) a report prepared by ETI for AT&T, July 1995.

"Efficient Public Investment in Telecommunications Infrastructure"
Land Economics, Vol 71, No.3, August 1995.

Funding Universal Service: Maximizing Penetration and Efficiency in a Competitive Local Service Environment, Lee L. Selwyn with Susan M. Baldwin, under the direction of Donald Shepheard, A Time Warner Communications Policy White Paper, September 1995.

Stranded Investment and the New Regulatory Bargain, Lee L. Selwyn with Susan M. Baldwin, under the direction of Donald Shepheard, A Time Warner Communications Policy White Paper, September 1995

"Market Failure in Open Telecommunications Networks: Defining the new natural monopoly," in *Networks, Infrastructure, and the New Task for Regulation*, by Werner Sichel and Donal L. Alexander, eds., University of Michigan Press, 1996.

Establishing Effective Local Exchange Competition: A Recommended Approach Based Upon an Analysis of the United States Experience, Lee L. Selwyn, paper prepared for the Canadian Cable Television Association and filed as evidence in Telecom Public Notice CRTC 95-96, Local Interconnection and Network Component, January 26, 1996.

The Cost of Universal Service, A Critical Assessment of the Benchmark Cost Model, Susan M. Baldwin with Lee L. Selwyn, a report prepared by Economics and Technology, Inc. on behalf of the National Cable Television Association and submitted with Comments in FCC Docket No. CC-96-45, April 1996.

Economic Considerations in the Evaluation of Alternative Digital Television Proposals, Lee L. Selwyn (as Economic Consultant), paper prepared for the Computer Industry Coalition on Advanced Television Service, filed with comments in FCC MM Docket No. 87-268, In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, July 11, 1996.

Assessing Incumbent LEC Claims to Special Revenue Recovery Mechanisms: Revenue opportunities, market assessments, and further empirical analysis of the "Gap" between embedded and forward-looking costs, Patricia D. Kravtin and Lee L. Selwyn, In the Matter of Access Charge Reform, in CC Docket No. 96-262,

January 29, 1997.

The Use of Forward-Looking Economic Cost Proxy Models, Susan M. Baldwin and Lee L. Selwyn, Economics and Technology, Inc., February 1997.

The Effect of Internet Use On The Nation's Telephone Network, Lee L. Selwyn and Joseph W. Laszlo, a report prepared for the Internet Access Coalition, July 22, 1997.

Regulatory Treatment of ILEC Operations Support Systems Costs, Lee L. Selwyn, Economics and Technology, Inc., September 1997.

The "Connecticut Experience" with Telecommunications Competition: A Case in Getting it Wrong, Lee L. Selwyn, Helen E. Golding and Susan M. Gately, Economics and Technology, Inc., February 1998.

Where Have All The Numbers Gone?: Long-term Area Code Relief Policies and the Need for Short-term Reform, prepared by Economics and Technology, Inc. for the Ad Hoc Telecommunications Users Committee, International Communications Association, March 1998.

Broken Promises: A Review of Bell Atlantic-Pennsylvania's Performance Under Chapter 30, Lee L. Selwyn, Sonia N. Jorge and Patricia D. Kravtin, Economics and Technology, Inc., June 1998.

Building A Broadband America: The Competitive Keys to the Future of the Internet, Lee L. Selwyn, Patricia D. Kravtin and Scott A. Coleman, a report prepared for the Competitive Broadband Coalition, May 1999.

Bringing Broadband to Rural America: Investment and Innovation In the Wake of the Telecom Act, Lee L. Selwyn, Scott C. Lundquist and Scott A. Coleman, a report prepared for the Competitive Broadband Coalition, September 1999.

Dr. Selwyn has been an invited speaker at numerous seminars and conferences on telecommunications regulation and policy, including meetings and workshops sponsored by the National Telecommunications and Information Administration, the National Association of Regulatory Utility Commissioners, the U.S. General Services Administration, the Institute of Public Utilities at Michigan State University, the National Regulatory Research Institute at Ohio State University, the Harvard University Program on Information Resources Policy, the Columbia University Institute for Tele-Information, the International Communications Association, the Tele-Communications Association, the Western Conference of Public Service Commissioners, at the New England, Mid-America, Southern and Western regional PUC/PSC conferences, as well as at numerous conferences and workshops sponsored by individual regulatory agencies.

Attachment 2

AG-VZ 2-10

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Attachment 3

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Attachment 4

“Struggling to Make the Connection”

Struggling to make the connection

Why businesses are having difficulty getting telecom service in a timely way

By *Micky Baca*

Feature from the July 30, 2001, *Worcester Business Journal*

SCT Group Inc., a Northboro marketing and communications firm, lost phone service for one week last February because, Michael Toomey, SCT director of business development, says, New York City-based Verizon Communications Inc. dropped the ball in hooking up service between his company's new headquarters and Verizon competitor Choice One Communications Inc.Gregory Korn, vice president of business development at GIA Mortgage Corp. in Holden, says he waited two months for Verizon to bring an added voice phone line into his business after switching to Rochester, NY-based Choice One.
Robert Ansin, CEO of the Massachusetts Innovation Center in Fitchburg, says he's tried repeatedly to get Verizon to stop directory assistance from giving out his company's old phone number in the wake of switching to Verizon competitor AT& T.

Jacob Leifman, president of Bitwise Internet Technology, currently moving its operations from Boston to Fitchburg, says he's been unable to get reasonably priced multiple T-1 lines installed to his new offices there, and will have to maintain a satellite office in the Boston area for data operations due to Verizon's continued monopoly on services.

These local business customers are not convinced that a federal mandate five years ago to open up the local telephone-services monopoly to competition has been a success in our region. They and other critics say Verizon — which is one of the Baby Bells that enjoyed a monopoly on phone service for a century — is still able to thwart competitors because it still controls the so-called "last mile" linking customers to competing telecom-service providers. And, they say, many telecom-service competitors themselves suffer from lack of experience, poor service operations, over-zealous growth strategies, and an overly optimistic view of the market.

"In my opinion, it's been a colossal failure," Ansin says of the federal Telecommunications Act of 1996. "What's been accomplished? Where were we five years ago and where are we now? Certainly, here I don't see a lot of competition."

Conversely, some local telecom-service companies and business leaders say competition has emerged, despite a recent shake out among DSL (digital subscription line) providers and Wall Street's souring on telecom

investments. Thomas Ahern, the first-ever president of the new Worcester Infotech Corp., says area businesses do have a "better than average choice" of voice and high-speed data services. "Would we like it to be more? Absolutely," he says. He adds, however, that it's too early to tell if the Telecommunications Act of 1996 has been a success. "The fact that in Worcester there are other choices besides Verizon today, means it is a qualified success," he says. "We need to allow the shake-out to occur over the next few quarters and see who's left."

Overall, most observers interviewed for this story agree that telecom-service is a complex market in a state of transition, and its future inspires a lot more questions than answers. Some business customers have certainly faced frustration in trying to take advantage of so-called competitive telecom services. As providers and customers point out, most telecom-service competitors must rely on Verizon to provide the last "loop" connecting customers to providers. Whether or not Verizon is fairly accommodating competitors in the last mile continues to be the subject of debate among providers and a concern among customers.

Customer struggles

At SCT Group, Toomey says he was aware of the "horror stories" that could occur when he set out to change phone-service providers along with moving his marketing company's offices to Northboro. He says he wanted high-speed data access and decided to switch from Verizon to Choice One, to get DSL. He says he took every precaution to try to make sure the transition went smoothly, beginning the process well in advance. He says he made it clear that he wanted the phone system up and running before the move. Choice One assured him it had placed the work order for the last-mile connection with Verizon, he reports, and that the work was to be completed well before the end of January. He says he tried to double-check with Verizon on the status of the work order but was told he needed to deal with Choice One.

In the end, after months of planning, Toomey reports his fears were realized when he was forced to open his new offices in February with no phone services — voice or data. He notes that SCT — whose business is communication — had to make do for a week using cell phones.
Come to find out, Toomey says, Verizon had inexplicably put a hold on the work order for his phone-service connection to his new office without informing Choice One. What's more, he says, Verizon workers eventually showed up at his old offices to hook up lines there. "It was a comedy of errors," he says.

Regardless, Toomey says he thinks Choice One did its job the best it could under the circumstances.

Beyond the delayed connection, Toomey says, phone-service carriers failed to fully program his company's phone numbers into the local exchange network after the move, so some customers were unable to call his company from certain parts of the state and beyond. He explains that all carriers are supposed to monitor and update exchanges through a local-exchange regulatory guide system. This is another situation, he says, that businesses have no way of monitoring until they get complaints from people trying to call.

Toomey says he also found, after signing up for DSL with Choice One that he couldn't get DSL at his location because the Verizon infrastructure wasn't in place. He says he hadn't been able to find that out until he actually signed up for DSL. "It's like, where's Waldo?" he says. "Where's DSL?" SCT finally had to go to the added expense of getting a T-1 line from Choice One.

Under the current system for acquiring telecom services with Verizon competitors, Toomey maintains, there is no way a business customer can track work orders, to determine if there are glitches in the process and who's responsible. "When you're trying to coordinate these things, you're dependent on Verizon," he says. "But there's no way to verify when the order was placed or how soon it was responded to. Verizon can play both sides against the middle."

Linda Mahoney, regional director of public affairs for Verizon, says she's not certain what happened in SCT Group's case. But, she says, Verizon cannot give out information on the status of work orders to competitors' customers because they are not Verizon's customers. The provider seeking the work order - in Toomey's case, Choice One - is the Verizon customer. Such providers, Mahoney says, do have the ability to track the status of work orders.

Regulators, Mahoney says, could choose to set up a monitoring system as Toomey suggests. But, she says, she hasn't seen any indication that regulators feel the current system isn't working. Toomey, who says he spoke to state and federal regulators and attended telecom hearings, says he's not optimistic that changes will be made unless business owner speak up. "We need to be heard loud and clear, and that will change the system," he says.

Voice bottleneck

Gregory Korn at GIA Mortgage says once his company switched from Verizon to Choice One for its voice services, adding voice lines to service his busy mortgage company became a painfully slow process. "It appears Verizon puts other providers in a back seat," he says, in adding new lines.

Korn says his seven-employee company switched to Choice One because it offered extremely competitive prices. GIA hooked up DSL and wanted to add

three local and long-distance voice lines. Only Verizon can add such lines, he observes. GIA expected the installation of new lines to take two weeks, he says, as it had in the past when his company was a Verizon customer. Instead, he says, each new line took much longer, with the most recent one taking nearly two months.

Each time Korn called Choice One about the delay, he says, the provider said the holdup was with Verizon. Choice One, he says, also told his company that if it needed to increase the speed of its DSL service, it would take only 24 hours to do so. Instead, he says, the process took one week business days. "I would like to see somebody being held accountable when you order a service as to when it's going to be delivered," he says. "Somebody needs to monitor Verizon."

Korn says he's heard the accusations that Verizon stalls order for its competitors' customers, but couldn't say if that is what happened in his case. He does wonder, he says, if Verizon is going to rush to install a line for a customer who is no longer using Verizon.

Verizon's Mahoney says regulators heavily monitor Verizon to insure it's handling competitors' orders as expeditiously as it handles its own. She points to the fact that the FCC and the state Department of Telecommunications and Energy concluded last April that Verizon met requirements to accommodate competitors in the Mass. telecom market in granting Verizon's bid to enter the long-distance phone service market. The FCC ruling is under appeal by the state Attorney General's Office, which contends Verizon's practices are still likely to discourage competitors. Mahoney says new voice lines generally take one week to install. But there are situations where Verizon runs out of facilities for added voice lines, she says, and must install a larger cable. In that case, she says, a new voice line could take a few months to acquire. She says she's not familiar with GIA Mortgage's case.

Leifman, whose Internet-service company, Bitwise, is moving to the Mass. Innovation Center, says he chose to move to Fitchburg because he lives in the area and feels it has good potential. But, he says, he found that in terms of high-speed data infrastructure, he had more options in the Boston area. Because his company needs to have reliable T-1 services, he says, he needed multiple lines into his Fitchburg office. He found, he says, that the infrastructure wasn't in place in the area to provide it and that the only T-1 option he has was Verizon "at an outrageous cost." Leifman says he could have obtained a T-1 line in the Greater Boston area, where there are competitors of Verizon offering such services, for about $200 a month. In Fitchburg, where Verizon is the only company now offering T-1 lines, he says it would have cost him from $700 to $1000 a month.

Leifman says he has no choice but to split up his operation and set up a data site in Greater Boston in order to get access to the necessary T-1 infrastructure. He says he is convinced that Verizon is deliberately trying to thwart competitors. "It doesn't matter how competitive you are, you're always dependent on Verizon at one point or other," he says. Asked if he thinks the telecom act of 1996 is working, Leifman says, "Well, it's working for Verizon."

Mahoney says it sounds as if, in Bitwise's case, Verizon was unable to accommodate multiple T-1 lines due to limitations on the capacity of the lines. "There is a lot of demand — in some areas data is now 50 percent of the traffic on our network," Mahoney says. "In some areas, we will run out of capacity for a line."

Misdirectory assistance

The Mass. Innovation Center's decision to switch telecom services from Verizon to New York City-based AT&T Corp. several years ago produced an annoying problem at the Fitchburg facility that keeps ringing on, Ansin reports, despite his best efforts to resolve it. He explains that when the center switched providers, it also switched phone numbers. But, he says, it kept one of the old numbers, whose phone is now kept in a closet, because that line was connected to the building's security system.

Ansin says he instructed Verizon to list his company in phone directories and in directory assistance under its new number, since the old number was kept active only for security purposes. However, he says, both directory assistance and the Yellow Pages list the old number first for his company. In fact, when we called information, we were given the old number for the center. Ansin says he's tried to straighten out the problem to no avail. "So we literally have an old phone the rings in a closet," he says.

"I'm not trying to beat up on Verizon," Ansin says. "I don't have any evidence that they do this stuff maliciously. The point is, there is a lot of confusion when you deregulate the local phone company."

Ansin says if he had it to do over again, he wouldn't have switched his phone services to AT&T. "It's been too much of a headache," he says. While AT&T's prices are better for data and voice services, he says because the company was newly into local services when he signed on there were experience gaps in AT&T's staff. Some of the staff, he says, were geared to local phone service and didn't know long distance, while others knew long distance but didn't know understand local services. "It was really a nightmare," he says.

Mass. Innovation Center has also had problems with people trying to call in to its new numbers, Ansin also reports, and having the phone number not be recognized in some areas because of exchange programming problems. "AT&T would say it was Verizon," he recalls, "and Verizon would say it was AT&T." Ultimately, he says, the price difference just wasn't worth it.

Mahoney says she will check into the Mass. Innovation Center's difficulties in getting the correct number listed with information. The security number, she says, could be made an unlisted number. As for programming new exchanges, she says, Verizon programs its switches with changes as needed and competitors must do the same in order to avoid such gaps.

On a broader scale, Ansin says the over-investment in the telecom industry, the subsequent failures in the telecom realm, and the financial repercussions of overestimating the telecom market could have far-reaching affects on the economy for years to come. "The telecom crisis rivals the S&L crisis," he says. "I guarantee you it's a bomb waiting to go off with the amount of debt these companies have had." He says the whole thing has him wondering if regulators should have left the Baby Bells alone in the first place.

Too early to tell

Despite the tribulations of some telecom-service providers and some customers, Ahern at the Worcester Infotech Corp., an arm of the Worcester Regional Chamber of Commerce, presents a positive view of the local infotech market. There are at least eight local competitors to Verizon, he observes, that provide voice, data and high speed Internet services. For the most part, he says, the competition seems to be advantageous to businesses seeking telecom choices. "We may wish service was a little bit better," he says, " but we're trying to work with them." Despite some recent telecom company failures, he notes that "some companies are well-funded and will be around for a while."

Over the last 18 months, Ahern notes that there has been an incredible buildup of capital and infrastructure in the telecom industry. "It kind of clouded the picture," he says. "People felt 12 months ago that this is what [telecom] deregulation was supposed to be all about. But there was an overbuilding."

Ahern says it's too early to tell how the telecom market will shake out. He predicts two or three CLECs (competitive local exchange carriers) will emerge to challenge the Baby Bells. In the meantime, he says, "I don't think (competing telecom) companies' biggest problems have been playing ball with Verizon. To me, that's too easy."

Ahern says he hasn’t been hearing complaints from local providers about Verizon. "And I ask," he adds. He says the Worcester Infotech Corp, geared to bringing infotech companies to the region, will continue to work with Verizon, to make sure everyone gets reasonable response times for telecom services. "We have a good relationship with Verizon," he says. "Where needed, we can prod them. Where needed, we can beg them."

Thomas Wharton, a local telecom consultant and founder of the Worcester Infotech Project, is less upbeat about the current market. He says he doesn’t see substantial competition in local telephone services but adds that the reason for the lackluster market isn’t black and white. "It’s one of those gray areas," he says. "Companies will say it’s Verizon (that’s causing the problems) and Verizon will say it works with everyone. The simple truth is, it’s somewhere in between."

"It’s not a good situation, anyway," Wharton says. "You’re forcing Verizon to give up assets that they own, to build competition against themselves. It’s sort of un-American."