

VERIZON MASSACHUSETTS

STATE OF MASSACHUSETTS

REBUTTAL TESTIMONY

OF

ROBERT MUDGE

Rebuttal Testimony

Of

Robert Mudge

1 Q. Please state your name and title.

2 A. My name is Robert Mudge and I am President of Verizon Massachusetts
3 (“Verizon MA”).

4 Q. Did you previously file testimony in this proceeding?

5 A. Yes. I submitted direct testimony in this proceeding on April 12, 2001.

6 Q. What is the purpose of this rebuttal testimony?

7 A. The purpose of my rebuttal testimony is to respond to the testimony of Dr.
8 Selwyn, Dr. Mayo, Mr. Fea, and Dr. Ankum. I explain that the data presented in
9 my original testimony properly reflects the significant presence of competition in
10 the Massachusetts telecommunications market. In addition, in response to the
11 criticism that Verizon MA has provided only statewide data, I present a detailed
12 profile of the Massachusetts competitive marketplace by Verizon MA wire center
13 or central office. This information demonstrates that competitors not only have
14 the capability to serve customers, but actually are serving customers in every
15 corner of the state.

1 Q. Dr. Selwyn and Dr. Mayo suggest that Verizon MA must be held to a market
2 power test on a wire center-specific basis in order to formally assess the extent of
3 competition in Massachusetts. Would you comment please?

4 A. As described in the testimony of Mr. Doane and Dr. Taylor, it is not necessary to
5 conduct a formal evaluation of market power on a wire center-specific basis in
6 order to conclude that Verizon MA does not have market power. That
7 notwithstanding, I have attached an analysis that demonstrates the level of
8 competitive entry in each office in the state. That analysis, labeled the
9 Massachusetts Competitive Profile, is Attachment 1 to my testimony. In light of
10 the Hearing Officer's ruling of September 14, 2001 concerning the confidential
11 treatment of similar highly competitive data, the Massachusetts Competitive
12 Profile is being provided only to the Department and those parties that execute a
13 mutually acceptable protective agreement.

14 Q. Would you provide a brief overview of the Massachusetts Competitive Profile?

15 A. The Massachusetts Competitive Profile consists of information detailing
16 competitive activity in each Verizon MA central office and is comprised of three
17 sections. The first section contains a summary by central office of the detailed
18 data contained in the second section. The second section contains Verizon MA's
19 estimates of the number of access lines served by competitors using the three
20 modes of entry described in my original testimony (*i.e.*, resale, unbundled
21 network element, and full facilities based competition) and a list of the
22 competitors that are providing services to customers in each central office. This

1 section provides information for both January 2001 and May 2001¹. The final
2 section displays the array of services that each active competitor represents that it
3 makes available to customers. The information used to compile the central office
4 profiles is from Verizon MA's internal sources, the E-911 database, Competitive
5 Local Exchange Carrier ("CLEC") tariffs, and their individual internet web sites.
6 A brief description of the Profile is included in the Introduction section of
7 Attachment 1.

8 Q. What does the Profile show?

9 A. The Profile reinforces my prior testimony that competition in the Massachusetts
10 telecommunications marketplace is widespread and vibrant. The Profile
11 demonstrates that competitors continue to expand their customer base in central
12 office after central office and are taking advantage of all three of the modes of
13 competitive entry. The Profile displays updated data for May 2001, which show
14 that competitors were serving over 964,000 lines – an increase of about 113,000
15 lines from the January 2001 data provided in my direct testimony. Over the same
16 period, Verizon MA's total retail access lines in service decreased by over 80,000
17 lines. The Profile also demonstrates that competitors are shifting from resale to
18 UNE's and full facilities based provisioning for their customers. While lines
19 served by resale decreased by about 34,000, the number of UNE platforms and
20 facilities based lines increased by over 147,000.

¹ The data for January 2001 are not provided at the same level of detail as that for May. For January, Facility Based UNE-P data were not available on a wire center basis by Residence and Business. In addition, the Facility Based CLEC Switch data can only be captured on a snap-shot basis and were collected only on a state-wide (as opposed to a central office basis) for January.

1 The Profile further demonstrates that competitors are serving customers in every
2 central office in the state including the smallest and most rural offices. As noted
3 by Mr. Doane, competitors are serving almost [BEGIN PROPRIETARY END
4 PROPRIETARY] of the business lines in the smallest ten percent of Verizon
5 MA's central offices.

6 When evaluated on a broader level, competitors are serving over [BEGIN
7 PROPRIETARY END PROPRIETARY] of the business access lines in the 413
8 and 508 area codes, [BEGIN PROPRIETARY END PROPRIETARY] in the
9 978 area code and over [BEGIN PROPRIETARY END PROPRIETARY] in
10 the 617 and 781 area code.

11 Finally, the Profile clearly demonstrates that competitors have multiple means to
12 serve any and all customers in any central office. Contrary to claims by Dr.
13 Selwyn that "a business in downtown Boston may have the ability to price shop, a
14 residential customer in a small town in western Massachusetts may have
15 absolutely no alternative to taking service from Verizon" (Selwyn Testimony at
16 page 24), customers in every city and town throughout the state do have
17 alternatives for their local phone service, and as the most recent numbers show,
18 those customers are choosing such alternatives.

19 Q. Dr. Selwyn, Dr. Mayo and Dr. Ankum question the use of the E911 database to
20 determine the number of lines served by competitors in Massachusetts. Would
21 you please respond to their criticisms, beginning with Dr. Mayo?

22 A. Dr. Mayo questions how the E911 database accounts for CLEC services provided
23 through the use of non-switched Special Access lines (Mayo Testimony at page

1 34). His concern is unfounded because of the way non-switched Special Access
2 lines are treated. Verizon MA does not provide dial tone or assign telephone
3 numbers to these services and, therefore, does not list them in the E911 database.
4 The only time an access line served by Special Access would be counted would be
5 if a CLEC provided a dial tone service over the Special Access connection and
6 entered a specific telephone number in the E911 listing database. If a CLEC were
7 to do that, it would be serving that customer in competition with Verizon MA and,
8 therefore, the listing is properly counted in the profiles.

9 Dr. Mayo also suggests (Mayo testimony at page 33) that an FCC report indicates
10 that CLECs reported that they served 509,731 end-user lines in Massachusetts.
11 What Dr. Mayo fails to indicate is that only 11 CLECs reported data to the FCC,
12 while there are over 60 CLECs providing service to customers in Massachusetts.
13 In fact, even the FCC's report notes that the lines reported by CLECs are
14 understated.² In addition, the FCC's News release that accompanied that report³
15 notes that the states with Long Distance approval (as of the report date of
16 December 2000) show the greatest competitive activity. For example, according to
17 the release, CLECs captured 20% of the access lines in New York, reporting an
18 increase of over 130% of lines served between December, 1999 and December,
19 2000. And in Texas, CLECs captured 12% of the lines, with an increase of over
20 60% in customer lines served in just six months. Interestingly, Massachusetts data
21 show that, in January 2001, even before Long Distance approval, CLECs were

² See "Local Telephone Competition: Status as of December 31, 2000," Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, May 2001, fn 4.

³ "Federal Communications Commission Releases Latest Data on Local Telephone Competition," FCC News Release dated May 21, 2001.

1 already serving almost 20% of the lines served by Verizon MA. And between
2 January 2001 and May 2001 that increased to almost 23%. There is no reason to
3 believe that, just as in New York and Texas, the approval of Long Distance in
4 Massachusetts in April 2001 will not bring greater competitive activity to the
5 marketplace.

6 Q. What are Dr. Ankum's and Dr. Selwyn's concerns?

7 A. Dr. Ankum suggests that he cannot validate the numbers in Verizon MA's
8 testimony because the data in the E911 database are proprietary (Ankum
9 Testimony at page 16). Verizon MA has made the data available to the
10 Department and will provide the data to intervenors under a mutually acceptable
11 protective agreement, consistent with the Hearing Officer's Ruling of September
12 14, 2001.

13 Dr. Selwyn makes a number of claims about the E911 database and Verizon MA's
14 use of the number of listings in that database as a surrogate for lines served by
15 competitors' switches. Dr. Selwyn puts forward a number of theories that attempt
16 to demonstrate that, in his opinion, Verizon MA's estimate of competitive activity
17 is "likely exaggerated by several hundred thousand lines or more" (Selwyn
18 Testimony at 39). Dr. Selwyn bases his conclusion on the number of Special
19 Access and UNE T1s provided by Verizon MA. While Dr. Selwyn accurately
20 states the number of Special Access and UNE T1s provided by Verizon MA to
21 competitors (as provided to him in AG VZ-MA 1-11), he incorrectly assumes that
22 all of these circuits are supporting voice services. Besides the voice services
23 mentioned by Dr. Selwyn, Special Access and UNE T1 services are utilized by

1 providers for other applications, including private line data services, Internet data
2 services, and long distance services, none of which would likely result in an E911
3 listing. In addition, Dr. Selwyn provides a hypothetical example of a PBX
4 customer that implies that the numbers provided by Verizon MA are exaggerated.
5 Since the E911 database contains fewer than [BEGIN PROPRIETARY END
6 PROPRIETARY] CLEC listings for PBX services, a relatively small percent of the
7 total CLEC listings, Dr. Selwyn's suggestion that Verizon MA's estimate of
8 competitive lines is "exaggerated by several hundred thousand lines" is not correct.

9 Q. Dr. Selwyn (Selwyn Testimony at page 44) also suggests that the quantity of
10 facilities based CLEC lines reported by Verizon MA is overstated because of
11 alleged inconsistencies among numbers produced in Verizon MA's annual price
12 cap filings. Please comment.

13 A. Dr. Selwyn's alleged inconsistencies are the result of his misinterpretation of the
14 data. First, Dr. Selwyn fails to note that the annual filings do not include data on
15 all of Verizon MA's lines. For example, the annual filings excluded several
16 hundred thousand Centrex lines because they are classified as sufficiently
17 competitive. Even so, Dr. Selwyn's Table 1 is not even an accurate depiction of
18 what Verizon MA does include in those annual filings. Dr. Selwyn fails to note
19 that the test period data used for all annual filings represents periods prior to the
20 actual filings. For example, the filing made in June 1996 used access line data
21 from June 1995, and the last annual filing (October, 2000) used access line data
22 from June 1999. Shown below is a table that represent the actual access lines
23 presented in the Annual Price Cap filings including an update to reflect the most

recent two years. Dr. Selwyn's suggestion that the level of growth of CLEC access lines is "dubious" (Selwyn Testimony at page 45) is belied by the facts. The table demonstrates that since 1997 the total annual growth rate for access lines served by Verizon MA has fallen. In fact, in 2000 and 2001, the number of access lines served by Verizon MA has actually decreased.

Actual Test Period	Total Access Lines	Total Annual Growth Rate
June, 1994	3,502,883	NA
June, 1995	3,580,443	2.2%
June, 1996	3,674,381	2.6%
December, 1997	3,918,045	4.4%
June, 1998	3,919,388	0.1%
June, 1999	3,969,389	1.3%
December, 2000	3,913,901	-0.9%
June, 2001	3,757,279	-8.0%

Q. Dr. Selwyn opines that customers may resist taking new local phone service from a competitor because they may not be able to obtain a telephone number in a "traditional" area code (Selwyn testimony at page 23). Would you please comment?

A. Dr. Selwyn ignores several facts. First, Verizon MA does not currently hold a large inventory of numbers in Dr. Selwyn's so-called "traditional" area codes. In fact, in three of these area codes (508, 781 and 978) CLECs hold at least one half of all possible three digit exchange or "NXX" codes. In area code 617, CLECs hold about 35% of all possible exchange codes. But even this large number does not speak to the total quantity of telephone numbers that CLECs hold compared to those held by Verizon MA. Second, thousand block number pooling will be introduced in Massachusetts beginning in the first quarter of 2002, thereby spreading the number of "traditional" area code telephone numbers among all

1 carriers. And finally, with number portability available throughout the state, all
2 customers have the opportunity to keep their current telephone number when they
3 switch carriers.

4 Q. Dr. Selwyn (Selwyn Testimony at page 48) also claims that you name
5 AT&T/TCG, Worldcom, Winstar and Teligent as the principal facilities based
6 providers of business services in Massachusetts. He then suggests that since
7 Winstar and Teligent have filed for Chapter 11 bankruptcy protection they should
8 not be considered strong competition for Verizon MA. Would you please
9 comment?

10 A. Dr. Selwyn misstates my testimony. On the pages cited by Dr. Selwyn, I provide
11 a description of full facilities based competition and how competitors are using
12 many different models to reach and serve a variety of customers in the
13 Massachusetts marketplace. I never suggest that the companies mentioned are
14 “the principal” providers of “business services.” On the contrary, I provided
15 examples of a number of “business models” used by CLECs to serve both
16 residence and business customers throughout the state. The models cited include
17 fixed wireless carriers such as Teligent or Winstar, the telecommunications
18 subsidiaries of the major electric companies, and AT&T’s telephony and Internet
19 services provided over its cable broadband network. My testimony also cites pure
20 backbone networks built to serve other carriers, and other companies that focus on
21 providing telecommunications services solely to tenants of specific buildings in
22 Massachusetts.

1 The bankruptcy filings by Teligent⁴ and Winstar are irrelevant to the point that
2 companies are actively using a variety of technologies, marketing approaches, and
3 business plans to attract and serve customers in Massachusetts. While the
4 wireless carriers Teligent and Winstar may have failed, others today are
5 successfully expanding their fixed wireless models in Massachusetts. Most
6 recently, a partnership of Global Crossing and Equal Access was selected by
7 Franklin-Hampshire Connect⁵ to serve businesses in those two counties. This
8 partnership also serves customers in Berkshire County, the Monadnock and North
9 County regions of New Hampshire, and has its sights set on expanding its
10 wireless model to others parts of New England as well.⁶ So although individual
11 companies or technology models may enter or leave the Massachusetts
12 marketplace, or merge, consolidate or even fail, the fact remains that the
13 competitive marketplace in Massachusetts is growing. This is evidenced by the
14 latest results which show that as of May 2001 competitors served over 964,000
15 lines, an increase of about 113,000 lines since January. In addition, the number of
16 lines served by full facilities based CLECs has grown by about 105,700 in that
17 same period.

⁴Teligent has since received court approval to auction its domestic assets by October 2 to bring it out of bankruptcy. "Teligent Up for Grabs," Telephony, September 3, 2001. One bidder has said it would continue operations in 11 key markets – including Boston – if its bid is successful.

⁵ Franklin-Hampshire Connect is a consortium of businesses and non-profits in Franklin and Hampshire Counties, led by, among others, the Franklin County Regional Council of Governments and the Massachusetts Technology Collaborative, a state agency. On June 4, 2001, Franklin-Hampshire Connect issued an RFP for local, toll, Internet, long distance and data services on behalf of its members. Verizon, Equal Access/Global Crossings, WorldCom, ChoiceOne, and ION consulting and e-Tropolis Partners Inc. all responded to the RFP.

⁶ "Equal Access for N.E. Communities," Mass High Tech, July 30-August 5, 2001.

1 Q. Dr. Selwyn also testifies that CLECs are “enormously dependent “ on Verizon MA
2 for network facilities in order to provide service to their customers (Selwyn
3 Testimony at page 63). As evidence of this dependence Dr. Selwyn points to the
4 large number of interconnection agreements that Verizon MA has with CLECs and
5 the fact that Verizon MA has not sought a request for interconnection with a
6 CLEC. Would you comment?

7 A. The fact that there are a large number of interconnection agreements between
8 Verizon MA and other CLECs simply speaks to the high level of competitive
9 activity that exists throughout the state. Under the Telecommunications Act of
10 1996, Verizon MA (as an incumbent LEC) is required to negotiate an
11 interconnection agreement with any requesting telecommunications carrier that
12 seeks interconnection, unbundled access or resale at discounted rates. CLECs, on
13 the other hand, are not subject to the same duties and obligations. In addition, it is
14 only natural that those entering the market approach those already in the market,
15 not the converse.

16 Dr. Selwyn also argues (Selwyn Testimony page 63) that Verizon MA should need
17 to interconnect with facilities owned and operated by a CLEC where a CLEC
18 serves a new office building, apartment complex or housing development. Such
19 situations have arisen in Massachusetts. In Charlestown, for example, RCN has
20 entered into an exclusive agreement with the developer of a new condominium
21 complex. In that case, Verizon MA was excluded from serving customers because
22 the carrier and property owner entered into an exclusive agreement to serve
23 customers in the condominium. In contrast to Dr. Selwyn’s pronouncements that

1 the lack of a request from Verizon MA to negotiate an interconnection agreement
2 with a CLEC demonstrates a lack of competition, market realities demonstrate that
3 there is considerable competition.

4 Q. Dr. Selwyn provides information on a service issue that ETI encountered when
5 attempting to have a T-1 line installed in its offices (Selwyn testimony at page 67).
6 Would you please provide an overview of Verizon MA's analysis of that service
7 issue.

8 A. Attachment 2 contains a summary of the facts surrounding this particular order
9 from Verizon MA's records. The facts demonstrate that the length of time
10 required to install the service for ETI was not the result of inadequate service on
11 the part of Verizon MA.

12 Dr. Selwyn comments on other unsubstantiated accounts of end users who
13 claimed to have had service issues with installations of advanced services
14 (Selwyn Testimony at page 68). I have not investigated those allegations, but as
15 is clear from the ETI experience, what might appear to the end user to be a
16 Verizon MA issue is not always the case.

17 Q. Mr. Fea addresses the alleged difficulties in building facilities and how those
18 difficulties affect AT&T's ability to enter the market. Would you please respond?

19 A. Mr. Fea's attempts to downplay the extensive CLEC networks currently in place,
20 and the capabilities of those networks, do not reflect the reality of the situation in
21 Massachusetts. While Mr. Fea attempts to present his testimony from the
22 perspective of a network engineer, many of his claims are either misstatements of
23 Verizon MA's testimony or are broad, theoretical comments without reference to

1 the Massachusetts market. On the contrary, as the senior executive responsible
2 for Verizon MA's operations in Massachusetts, I have seen first hand the network
3 build that has taken place by the CLEC industry in Massachusetts.

4 Q. How does Mr. Fea misstate your testimony?

5 A. Mr. Fea testifies that I, along with Ms. Brown and Dr. Taylor, conclude that "the
6 presence of a limited amount of fiber and switching facilities transforms any and
7 all CLECs into ubiquitous providers of local services capable of serving each and
8 every business customer in all corners of the state" (Fea Testimony at page 5,
9 lines 18-20). He goes on to say that that conclusion stems either from ignorance
10 or is "results-driven." Mr. Fea's suggestion that Verizon MA is ignorant of the
11 market place reality or would, in some way, alter facts to get results is mistaken.
12 Verizon MA's testimony discusses the fiber and switching capability of CLECs
13 and other facility based providers but does not suggest that such factor alone
14 "transforms any and all CLECs into ubiquitous providers." However, Verizon
15 MA's testimony does demonstrate that with all the options available to CLECs,
16 they do have the capability to serve any and all customers in the state. In fact, the
17 Competitive Profile included in Attachment 1 establishes that CLECs are serving
18 customers in every central office in the state.

19 Q. Mr. Fea also suggests that CLECs remain heavily dependent on Verizon MA for
20 facilities necessary to serve local business customers and that there are constraints
21 in AT&T's attempt to serve customers entirely on its network (Fea Testimony at
22 page 6). Would you comment?

1 A. It is interesting that Mr. Fea does not cite any Massachusetts specific conditions in
2 which CLECs remain dependent on Verizon for facilities to serve business
3 customers, or where his so-called “constraints” exist in Massachusetts. He also
4 neglects to mention that the FCC has found that sufficient competition exists to
5 provide Verizon MA with pricing flexibility in its provision of interstate special
6 access and dedicated transport in the Boston Metropolitan Statistical Area. The
7 FCC granted this flexibility based on Verizon’s showing that “competitors have
8 made irreversible, sunk investments in the facilities needed to provide the services
9 at issue.”⁷

10 While Mr. Fea discusses all of the difficulties associated with building a network,
11 he never mentions that in a recent presentation to market analysts, Dan Somers,
12 President and CEO of AT&T Broadband, noted that Boston “is our strongest
13 performing market and will continue to grow as advanced services penetration
14 increases.”⁸ In a slide from that presentation, Mr. Somers also notes that “plant
15 upgrades nearly complete, able to offer complete bundle.” Apparently AT&T
16 Broadband, serving customers completely with its own facilities, is not
17 experiencing the problems Mr. Fea suggests. But it is not just AT&T Broadband
18 that is expanding; Mr. Fea also fails to mention that in AT&T’s Group Earnings
19 Commentary of July 23, 2001, the AT&T Business Segment Highlights noted
20 that: “[L]ocal access lines increased over 30% versus the prior year quarter with
21 nearly 300,000 lines added year to date.”

⁷ *Verizon Petitions for Pricing Flexibility for Special Access and Dedicated Transport Services*, CCB/CPD Nos. 00-24, 00-28, DA 01-663, adopted March 13, 2001 at paragraph 5.

⁸ <http://www.att.com/ir/>

1 AT&T Broadband also was recently granted its Petition for Determination of
2 Effective Competition in the City of Boston.⁹ In that petition AT&T Broadband
3 asserted that it is subject to LEC effective competition in its Boston,
4 Massachusetts franchise area because RCN is a “fast growing” multichannel
5 video programming distributor providing video programming, telephony and
6 Internet services to thousands of subscribers in Boston. In its petition, AT&T
7 Broadband further asserted that RCN has entered into a joint venture with the
8 Boston Energy Technology Group, a wholly-owned subsidiary of Boston Edison
9 Company, and that the venture will invest \$300 million to upgrade Boston
10 Edison’s existing 200-mile ring of fiber optic cable, which will serve as a delivery
11 route for RCN’s video and telephony services.¹⁰

12 In addition, AT&T Broadband stated that “RCN has obtained a 15 year cable
13 franchise from the City of Boston on July 27, 1999. According to the operator,
14 RCN’s franchise requires it to build a \$250 million network capable of serving
15 over 265,110 homes in Boston by the end of 2002 (approximately 90% of all
16 Boston households) and complete its city-wide system within six years.”¹¹ In
17 short, not only does AT&T Broadband proclaim that it seeks to expand its own
18 network, AT&T cites the large expansion of another LEC’s network. Again, Mr.
19 Fea’s broad accusations concerning the difficulty of building a network are in
20 stark contrast to the reality that networks are being built by AT&T and others in
21 Massachusetts today.

⁹ The original petition was filed by Cablevision of Boston, Inc. but Cablevision subsequently transferred its Boston cable franchise to AT&T Broadband. See DA 01-1731, adopted July 18, 2001.

¹⁰ Id at paragraph 5.

¹¹ Id at paragraph 9, footnotes omitted.

1 Q. Mr. Fea also suggests that AT&T is unable to serve customers because there is
2 insufficient traffic volume in a number of Verizon MA central offices to justify
3 building a DS-3 facility (Fea Testimony at page 10). Please comment.

4 A. Mr. Fea neglects to mention that Verizon MA also offers DS-1 transport services
5 through its wholesale tariff. If a CLEC does not have sufficient capacity to utilize
6 a DS-3, it could purchase a DS-1 at a much lower rate.

7 Q. Mr. Fea states that Verizon MA's hot-cut performance "has resulted in
8 unacceptably poor service quality during the provisioning process, including
9 significant service outages, higher costs, gated volumes, and customer
10 dissatisfaction" (Fea Testimony at 7) which has caused AT&T to use a UNE-P
11 product in place of unbundled loops. Would you care to comment?

12 A. Yes. Contrary to Mr. Fea's unsupported claim, Verizon MA's hot-cut
13 performance has been excellent. The Carrier to Carrier Guidelines adopted by the
14 Department in D.T.E. 99-271 establish several standards for hot-cut performance.
15 For the 18-month period from January 2000 through June 2001, Verizon MA met
16 the standard for hot-cut Installation Quality in every month and the standard for
17 On-time performance in all but three months. Two of the months missed were
18 August 2000 when Verizon MA experienced a work stoppage and the following
19 recovery month of September 2000. The third missed month was October 2000
20 when Verizon MA's performance was 94.2%, just 0.8% short of the standard. In
21 total, over the 18 months, Verizon MA completed 99.4% of all hot-cut
22 installations correctly and 96% of all hot-cut orders on time. When the two

1 months impacted by the work stoppage are removed from the calculation, on-time
2 performance climbs to 98.4%.

3 Q. Does that conclude your testimony?

4 A. Yes, it does.

SUMMARY OF ETI SERVICE ISSUE

The following outlines the events regarding the request for T1 service referenced in the testimony of Dr. Selwyn at page 67. The end-user customer, Economics and Technology, Inc. (ETI), is located at Two Center Plaza, Boston, MA:

- ?? The original Access Service Request (ASR) for the T1 service was submitted by ETI's carrier and received by Verizon MA on April 20, 2001.
- ?? When an ASR is submitted, Verizon MA reviews it for completeness and accuracy to ensure that all of the proper information is provided so that a service order can be issued. If the ASR is not complete, Verizon MA returns it to the customer (the carrier in this case) for correction.
- ?? The original ASR submitted by the carrier was not complete. A Verizon MA representative advised the carrier that there were incorrect assignments provided on the ASR on April 27th, May 4th and May 7th. The carrier responded by providing additional information on May 4th, May 8th and May 9th.
- ?? On May 10, 2001, Verizon MA accepted the ASR as complete (the "application" or "APP" date) and issued a service order (service order #1) for the T1 service with a due date of July 26th. This due date was established due to the lack of fiber facilities at the end user's (ETI's) location.
- ?? Verizon MA's local service engineer visited the end-user's location on May 22, 2001, to assess the need for fiber cable and electronic equipment to support the T1 service. Although there were no existing fiber facilities on the end-user's floor, the building had been designed with fiber facilities serving other floors. In this instance,

providing these facilities to the end-user's floor would take several weeks. During the site review, the end user expressed a desire for a quicker installation date and could not understand why fiber facilities were required when they only wanted one T1 circuit. Verizon MA's engineer explained that Verizon MA's regular practice is to provision T1 services via fiber and electronics whenever possible but, in this instance, he would investigate the use of copper facilities given that the end-user desired a quicker installation and needed only one T1 circuit.

- ?? On May 22, 2001, the carrier submitted another ASR for T1 service for ETI at the same location, Two Center Plaza, Boston. Verizon MA reviewed and accepted the ASR as complete on May 25th. A service order was then issued (service order #2) and forwarded to engineering for provisioning. The second order was also dated for completion on July 26th.
- ?? While working on the copper design and trying to expedite the installation of the first T1 request, the Verizon MA engineer received the second T1 request. Believing there to be some confusion, he contacted ETI for clarification. If only one circuit was needed, then copper could be used. If, however, two circuits were needed, the fiber alternative would be implemented. After working for several days with the end user and the carrier, it was determined that the second order was a "duplicate" request and was not needed. Verizon MA completed the copper design for the first request and established the needed priority to expedite the installation. At this time, it was expected that that T1 service would be provided by the end of June. The second T1 request was not designed since Verizon MA believed that it would be canceled by the carrier.

?? On June 19, 2001 the carrier issued an ASR supplement canceling the first (service order #1) T1 request, not the second (service order #2) request. This caused further delays.

?? When the carrier's mistake became apparent, Verizon MA worked with the carrier to complete the installation. In addition to canceling the wrong order, the carrier ordered the wrong signaling format causing further delays. The order was completed on July 25, 2001.

There are several factors that contributed to the delay in the T1 service for ETI. First, although the carrier may have first ordered the service on April 20, 2001, Verizon MA did not receive a complete and accurate service request until May 10th. Second, the duplicate T1 request delayed the design and issuance of the first request because it was not clear what the carrier had ordered to the site. Third, the carrier mistakenly canceled the first service request rather than the second. The carrier's error was significant because Verizon MA had already designed the first order and prioritized it as an expedited installation. Finally, the wrong signaling format was ordered.