

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Robert Mudge
Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE 1-1 Provide maps of Massachusetts indicating the exchanges where Verizon faces facilities-based competition for 1) residential customers; and 2) business customers.

REPLY: Please see the attached maps.

Please see the Company's reply to DTE 1-2 for the data used to generate the maps.

The first map indicates where carriers have collocation arrangements in a central office. These arrangements may serve both business and residential customers.

The second map indicates where E911 listings show CLECs serving business customers.

The third map indicates where E911 listings show CLECs serving residential customers.

The fourth map combines the first three maps into one and shows the full reach of facilities-based competition across the state.

The last map indicates where CLECs are providing UNE-P service. Although this was not specifically requested, this information is useful in determining where CLECs are providing other UNE based dial tone services not captured on the previous maps.

VZ # 1

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Robert Mudge
Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 8, lines 7-12: Provide a chart listing the following information for 1-2 each exchange in Massachusetts: 1) presence of resale competition; 2) presence of unbundled network element ("UNE")-based competition; and 3) presence of facilities-based competition. Indicate with "Y" for yes, and "N" for no.

REPLY: Please see the attached table which indicates the presence of competition on a

central office basis.

Central office serving areas are classified as containing facility based competition where end users within the area are provided dial tone from a CLEC's switch. The source of the data used for determining facility-based competition is E911 listings. Listings may include full facilities-based services and those served by a combination of a CLEC's switch and a UNE loop.

VZ # 2

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Robert Mudge

Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE 1- See p. 10, lines 21-22: Indicate how many of the 85,000 UNE loops are
3 being used for DSL service.

REPLY: Of the 85,000 stand alone UNE loops installed, 23,548 were provided by Verizon MA as xDSL loops.

Also as of January 2001, there were an additional 50,553 line sharing arrangements that were likely used in xDSL applications. These lines were not included in the 85,000 UNE loops referenced above.

VZ # 3

Verizon New England Inc.
d/b/a Verizon Massachusetts
Commonwealth of Massachusetts
D.T.E. 01-31

Respondent: Robert Mudge
Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 16, lines 15-17: What is Verizon's market share for intraLATA
1-4 calling, measured in 1) pre-subscribed lines; 2) minutes-of-use; and 3)
revenues?

REPLY: 1. In January 2001, Verizon MA had about 4.3 million access lines and approximately 637,000 were pre-subscribed to carriers other than Verizon MA. In addition, there are an estimated 850,000 competitors' lines in service. These figures do not include customers who have various special access arrangements connecting them directly to other carriers. The testimony noted above inadvertently combined the percentage of retail access lines pre-subscribed to

another carrier with the estimated percentage of competitive lines. In fact, the actual number of pre-subscribed lines and competitive lines should have been added and then compared to the estimated total market of Verizon MA and other carriers. The correct number on line 15 of the testimony should be 29%.

2. In February 2001, lines served by Verizon MA generated approximately 433 million minutes of intraLATA toll use (non-800 and 800) in Massachusetts. In that same period, approximately 174 million end-to-end switched access minutes of use were generated in Massachusetts. This number includes intrastate, interLATA switched access minutes of use. A special study would be required to determine the intraLATA portion. By combining these minutes of use it is estimated that lines served by Verizon MA generated approximately 71% of intraLATA toll usage. The Company is unable to determine the level of intraLATA toll usage generated by customers served by special access arrangements or competitors using their own networks.

3. For calendar year 2000, Verizon MA's booked revenues associated with intraLATA toll usage were approximately \$262.7M. Verizon MA has no information regarding the level of revenue its competitors realized for the same period.

VZ # 4

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Robert Mudge
Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE 1- See p. 21, line 13: What was Verizon's retail revenue in Massachusetts
5 for calendar year 2000?

REPLY: Verizon's retail revenue in Massachusetts for calendar year 2000 was
\$1,841,856,308.

VZ # 5

Verizon New England Inc.

D/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Robert Mudge

Title: President Verizon MA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See Att. 1: Refer to the chart "Massachusetts SQI Performance." Provide 1-6 the data in the chart listing Verizon's achieved SQI number for each month listed in the chart.

REPLY: Please see the attached spreadsheets.

This data is included in the monthly Quality of Service reports filed by Verizon MA with the Department.

The attachment provides the Company's performance for each year under the SQI plan since its beginning in May 1994. (A plan year runs from May through the following April.) It contains spreadsheets that provide overall SQI performance on a statewide basis and for the three operating geographies. The data used to generate the chart "Massachusetts SQI Performance" is taken from each of the statewide results sheets (pages 1, 5, 9, 13, 17, 21, and 25 of the attachment) and is provided in the row labeled "Total SQI Points for Mass." The individual sheets for the operating geographies are also provided because they show how each area contributed to the overall total of SQI points scored in a given month.

VZ # 6

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Paula L. Brown
Title: Vice President-Regulatory

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See pp. 8-9: Does the Plan's pricing flexibility allow Verizon to charge 1-7 different rates in different geographic areas for the same service? Please answer for all residential, business, and access services.

REPLY: Changes in rates that produced different rates in different geographic areas for the same service could be accomplished under the various pricing rules contained in the plan for either residential, business or access services.

For individual services with rate caps (Residence Dial Tone Line, Local usage, and Switched Access), this could be accomplished by selectively reducing rates in specific geographic areas without increasing them in other areas.

For services with an aggregate rate cap, this could be accomplished by selectively raising and/or lowering rates in specific geographic areas on a revenue neutral basis.

For services subject to market-based pricing, this could be accomplished by selectively raising and/or lowering rates in specific geographic areas.

VZ # 7

Verizon New England Inc.

D/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Paula L. Brown
Title: Vice President-Regulatory

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 10, line 11: What is the exact percentage of Verizon's residential
1-8 lines in Massachusetts that do not pay for Touch Tone service?

REPLY: As of December 2000, Verizon MA had a total of 2,858,056 Residence Access
Lines in service. Of those lines, 263,121 or 9.21% did not subscribe to
TouchTone service.

VZ # 8

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Paula L. Brown
Title: Vice President-Regulatory

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See Att. II, Workpaper 5: What is Verizon's present ARPM for interstate
1-9 access services? Describe the expected changes in ARPM for interstate
access services over the term of the FCC's CALLS plan.

REPLY: The most recent interstate Switched Access average traffic sensitive (ATS) revenue per minute of use (ATS rev/MOU), from the 2000 Annual Filing, is \$0.006877 for the former BA-North. The ATS rev/MOU would vary by state, based on the distribution of demand, by rate element. This calculation was not broken down to the state level.

Verizon will be required to reduce its interstate switched access rates for the former BA-North no later than July 3, 2001, at which point we anticipate that the ATS rev/MOU will be approximately \$.0055. At that point, Verizon will not be required to take any further reductions in interstate switched access rates.

VZ # 9

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: William E. Taylor
Title: Senior Vice President, NERA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 17, lines 4-6: Does the increase of \$1.63 for a Residence Dial Tone
1-10 Line incorporate any increased demand for switched access services
resulting from rate decreases? If not, recalculate the \$1.63 increase to be
revenue-neutral using your best estimate of price elasticity for access
services.

REPLY: No, the \$1.63 increase for a Residence Dial Tone Line does not incorporate any increased demand for switched access services resulting from the assumed reduction in switched access charges. There are several reasons why a demand response adjustment in this calculation is inappropriate.

First, "The Department has consistently rejected estimates of elasticity of demand as inherently speculative in nature and not subject to reasonable estimation, a position upheld by the Supreme Judicial Court." See D.P.U. 85-266-A/85-271-A at page 56 footnote 8.

Second, strictly speaking, there should be negligible response in the demand for switched access services stemming from a change in the price of switched access services exclusively. Only if interexchange carriers passed through switched access price reductions in the form of lower toll prices would there be a measurable change in the volume of switched access minutes. There would be no demand response from a reduction in switched access charges by themselves.

Third, even if reasonable assumptions concerning the flow-through of access charges to toll prices could be made, demand response from a toll price change is difficult to measure. To measure accurately the revenue

effect of the proposed changes in Verizon-MA's service prices, we would first need to know how demand for Verizon-MA's

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services would change as their prices change and as the prices of Verizon-MA's competitors' services change. These parameters, in turn, depend on market conditions (e.g., the degree to which other services supplied by Verizon-MA and by competitors are substitutes or complements for the Verizon-MA services in question), and it is unlikely that econometric estimates of these parameters from other times and other geographic areas will be relevant. In particular, the market demand elasticities discussed in the econometric literature were measured from data which did not include competitors' offerings, substitute services such as Voice over Internet, or complex optional calling plans. Further, these elasticities were measured at a time when toll prices were much higher than current prices, and in most models of long distance demand, the effect of price changes on demand is smaller at lower levels of price. In addition, even if we knew the correct values of these effects, we would still need to make assumptions about the responses of Verizon-MA's competitors to its price changes. Knowing these responses is essential to determine the revenue effect of the assumed Verizon MA price changes, and competitors' responses are fundamentally unknowable and unpredictable from historical data. As a result, application of the traditional demand response formula does not yield the correct effect of the price change on revenue, and the information necessary to measure that effect is unavailable in fact and in principle.

REPLY
DTE 1-10
Con't:

With those caveats in mind, it is possible to determine a bound on the possible effect of demand response and to show that the Company's proposed \$1 plus \$1.63 per month residential dial tone line increase produces significantly less revenue than this conservative estimate of the revenue loss (net of demand stimulation) from the assumed switched access and toll reductions.

Ignoring demand response, the reduction in average access charges from \$0.03949 to \$0.01257 per minute produces an annual revenue reduction of \$51.947 million, which amounts to \$1.63 per month per residential access line. Assume a market own-price elasticity for intraLATA toll of -0.30. Assume further that the demand for switched access is exclusively derived from the demand for toll and that any change in switched access prices is fully passed through to customers in toll price changes. Under these simplistic assumptions, the corresponding own-price elasticity of the

demand for switched access is about -0.24, which is given by the product of the toll elasticity (-0.30) and the ratio of access and toll average revenues per minute. Note that these assumptions maximize the demand response from an access price change.

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Including demand response to the access price change then lowers the revenue reduction to \$44.434 million per year or \$1.39 per month per residential access line. Because the assumption of complete pass-through produces the largest measure of access demand response, this calculation of the expected revenue reduction net of demand stimulation is conservative: i.e., annual revenue losses from the assumed access price reduction would be at least \$44.434 million.

REPLY
DTE 1-10
Con't:

However, because we assume complete pass-through of access charge reductions, Verizon-MA's total revenue reduction from the access charge reduction would be much larger than \$44.434 million. If its competitors reduced their toll prices under the assumption of complete pass-through of access charges, Verizon-MA would be compelled to reduce its toll prices as well. Assuming a dollar-for-dollar reduction in Verizon-MA's toll prices would yield an additional reduction of \$82.709 million per year in Verizon MA's residential toll revenues (including the effect of toll demand stimulation). Thus, the total annual reduction in Verizon MA access and residential toll revenues under these assumptions (including the effects of demand stimulation) would amount to \$127.144 million or \$3.99 per month per residential access line.

Again, this accounting for demand stimulation rests on the assumption of (i) complete pass-through of access charge reductions by all competitors and (ii) a market own-price elasticity for toll of -0.30. If pass-through is less than complete, demand stimulation will be smaller and Verizon-MA's revenue losses will be larger. In that sense, \$3.99 per month per residential access line is a conservative estimate of the revenue loss (net of stimulation) associated with the proposed access charge reduction.

VZ # 10

Verizon New England Inc.

D/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: Paula L. Brown
Title: Vice President-Regulatory

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 18: What would be the increase to the Residence Dial Tone Line if
1-11 the Eastern LATA toll rate schedule was changed, on a revenue-neutral
basis, to match the toll rate schedule for the Western LATA?

REPLY: In order to respond to this request, Verizon MA estimated the revenue impact of rate changes required to make the average revenue per minute of each Residential Eastern LATA toll and optional calling plan equal to the average revenue per minute of the equivalent Western LATA services. The estimated annual revenue impact is \$45.9 million. The monthly increase to the residence Dial Tone Line resulting from an across-the-board reduction in the Eastern LATA residence toll to the Western LATA rates is approximately \$1.44. The calculations are attached.

VZ # 11

Verizon New England Inc.

d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: William E. Taylor
Title: Senior Vice President, NERA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p.4, lines 7-10: Please explain how an increase in the "absolute"
1-12 margin, but not the fixed percentage discount, for resold services would
result in increased competitive pressure.

REPLY: The cited text makes the point that if Verizon MA increases its retail price, it will face increased competitive pressure because the absolute margin between Verizon MA's retail price and its wholesale (resale) price will increase. Competitors who resell Verizon MA's services pay a price determined by a percentage discount from Verizon MA's retail service price that is fixed at least in the short run. As Verizon MA's retail price increases, the dollar value (per unit of output) of that discount increases and exceeds the retail costs that Verizon MA avoids by selling wholesale rather than retail services. Verizon MA's competitors' costs per unit of providing retail services are unchanged, so potential entrants that were marginally unprofitable before Verizon MA's retail price increase would become profitable after that increase. Competitors who provide retail functions at the same cost as Verizon MA will either be able to extract above-normal profits (by increasing their retail prices) or increase market share (by keeping their retail prices fixed).

Verizon New England Inc.
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Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: William E. Taylor
Title: Senior Vice President, NERA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE 1-13 See p. 18, lines 19-22: What is the most efficient way to recover shared fixed and common costs, where some services have to be priced above forward-looking economic cost?

REPLY: To maximize economic efficiency when some services must be priced above incremental cost to recover shared fixed and common costs, there is general agreement that the correct mechanism is to mark up service prices above incremental cost following the Ramsey rule. The principle of Ramsey pricing generally provides that shared fixed and common cost be recovered based on the relative price elasticities of demand of the firm's services. This rule maximizes economic efficiency by minimizing the distortion in demand associated with the departure from marginal cost pricing to recover shared fixed and common costs.

VZ # 13

Verizon New England Inc.
d/b/a Verizon Massachusetts

Commonwealth of Massachusetts

D.T.E. 01-31

Respondent: William E. Taylor
Title: Senior Vice President, NERA

REQUEST: Department of Telecommunications and Energy, Set #1

DATED: April 25, 2001

ITEM: DTE See p. 23, lines 10-11: To what extent is Verizon's level of service quality
1-14 disciplined by market forces resulting from: a) resale; b) UNE-P or other
UNE-based competition; and c) facilities-based competition.

REPLY: Dr. Taylor's testimony is that "competition brings technical change, new products and services and levels of service quality in different dimensions that consumers value." Price and quality are both dimensions that consumers value, and market forces discipline Verizon MA's decisions regarding price and quality for a given service to the same extent. Under competition, the price and quality choices that consumers make may be very different from those observed

in regulated markets, where price and quality are regulated independently.

The degree to which the three methods of entry (resale, UNEs and own-facilities) discipline service quality is the same as the degree to which those entry methods discipline price, and that degree differs across the methods of entry. Think of an ILEC as vertically integrated across three functions: basic network operations, combining network elements into services, and retailing services to customers. Resale competition disciplines quality and price for only the retail function (billing, customer care, etc.). UNE competition disciplines quality and price for those functions necessary to turn unbundled elements into services and to retail those services to customers. Finally, facilities-based competition disciplines quality and price for the entire range of functions.

VZ # 14