

Information Request DTC-AG-1-1

Referring to page 13 of the Testimony in which Ms. Baldwin states “the Attorney General suggested that the standards may be outdated because most of the metrics were based on 1992-1993 performance data.” Does Ms. Baldwin agree with the Attorney General’s statement? If yes, identify which of the existing metrics are outdated and need to be removed from the existing SQI and the new metrics that could be added to the SQI to make them relevant and appropriate in the current environment. Also explain how the foregoing changes to the SQI would lead to an improvement in the measurement of the service quality in Massachusetts.

Response

On page 17 of her Testimony Ms. Baldwin states “the Attorney General suggested that the standards may be outdated because most of the metrics were based on 1992-1993 performance data.” In retrospect, Ms. Baldwin’s Testimony may have been unclear. In D.T.E. 01-31 Phase II, the Attorney General argued “that the current service quality plan containing twelve service quality categories and mandated service thresholds is outdated and does not reflect changing markets or Verizon’s ability to provide increasingly higher quality service. *Appropriate Regulatory Plan to succeed Price Cap Regulation for Verizon New England, Inc.*, D.T.E. 01-31-Phase II (2003), p. 98. The Department’s Order regarding this issue stated:

“However, the Department will consider the Attorney General’s contention that Verizon’s current service quality plan may be outdated. A majority of the existing service quality standards are based on 1992-1993 performance data (Exh. DTE-VZ 1-5), and, therefore, may be set at a level below that which is reasonable in today’s marketplace. In the years since the development of the current service quality plan in the Department’s Price Cap Order in 1995, the telecommunications industry has undergone significant changes, including the introduction of new technologies and an increase in the importance of network reliability. Therefore, the Department agrees with the Attorney General that it may be appropriate to conduct a comprehensive review of Verizon’s retail service quality and service delivery throughout the state. The Department will consider whether opening such an investigation is appropriate.”

Id., p. 100.

Ms. Baldwin has not reviewed the testimony in that proceeding and does not know if the Attorney General put forth specific recommendations.

In general, Ms. Baldwin recommends that that Department consider whether the current metrics (that is the measurements that the Department uses to monitor Verizon's service quality) are appropriate. As a separate matter, in Ms. Baldwin's opinion, the standard and threshold levels are, at least for some metrics, too lenient and therefore fail to protect consumers adequately. And as a third matter, the SQI, as it is presently structured, fails to protect consumers as is evidenced clearly by the fact that Verizon meets the SQI minimum of 33 points yet consistently fails to meet either the target or the threshold for clearing troubles within 24 hours.

The existing targets and standards for clearing troubles (70% and 60% for residential customers and 85% and 75% for business customers) are woefully low. For example, as Attachments A and B show, AT&T is required to clear 95% of out-of-service troubles within 24 hours in Illinois and is required to clear 90% of out-of-service troubles within 24 hours in Connecticut. Ms. Baldwin has several recommendations regarding this aspect of Verizon's service quality:

1. The metric should be modified: Out-of-service (OOS) should be measured separately from service-affecting (SA), with clear definitions for each separate metric.
2. The standard should protect consumers better from the harms of the loss of dial tone: 95% of OOS should be cleared within 24 hours, measured separately for residence and for business.
3. The standard should protect consumers better from the harm of service affecting troubles such as static and cross talk: 85% of SA should be cleared within 24 hours, measured separately for residence and business.
4. There should be a financial consequence if Verizon fails to meet the standards set for this metric (in contrast with the present system whereby Verizon can consistently fail to meet the target and standard for clearing troubles without any consequence).

This area of concern was highlighted in Ms. Baldwin's testimony. For example, Ms. Baldwin analyzes clearance times for out-of-service troubles separately from other troubles at pages 35 through 41 (based on the confidential pagination) and explains why such a distinction is warranted. As noted at footnote 75, Verizon has indicated (in its

response to AG-VZ 1-11) that Massachusetts is the only state in which it operates as the incumbent local exchange carrier that has a metric for percentage of all troubles cleared versus out-of-service troubles. Ms. Baldwin recommends that the Department consider adopting two separate metrics: out-of-service troubles and service affecting troubles (see, e.g. pages 79-80 of confidential testimony). If the Department continues to rely on a combined metric, it should raise the standard and target to better protect consumers.

Ms. Baldwin also recommends that the Department consider including a repeat trouble metric in the SQI, as discussed in more detail in DTC-AG-1-3 below.

Many states also include an installation interval metric in their service quality standards. See the discussion in the Attorney General's response to DTC-AG-1-2 below for more information regarding installation intervals.

Whether changes in the SQI would lead to an improvement in service quality in Massachusetts depends on: (1) the specific metrics included; (2) the minimum performance threshold (or standard level) that Verizon MA is required to meet; and (3) whether adequate financial incentives exist so that Verizon MA meets the Department-established requirements. See also Attachments A and B to this response for metrics and service quality regimes about which Ms. Baldwin is familiar.

If the Department determines that a comprehensive review of Verizon MA's Service Quality Plan and level of service quality it is providing throughout Massachusetts is warranted, Ms. Baldwin recommends that the Department ensure that the concerns of consumers in western Massachusetts that are at issue in the instant proceeding are addressed in the interim so as not to delay relief for those consumers. Such relief could come in the form of a pilot program of consumer credits as proposed by Ms. Baldwin based, preferably, on more stringent standards that would correspond with more timely repair.

Of utmost importance in this proceeding is to provide immediate relief from the harm that consumers in western Massachusetts are enduring. Therefore, while more comprehensive efforts to improve the SQI may be appropriate it is important in this proceeding to provide specific and timely relief for Verizon's customers in western Massachusetts. The Attorney General is prepared to supplement her recommendations regarding the SQI in her rebuttal testimony.

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The primary focus of Ms. Baldwin's testimony is the quality of service provided by Verizon MA to its customers in Western Massachusetts. The scope of her testimony did not include the SQI as it relates to Verizon MA's service quality throughout Massachusetts. In response to certain questions from the Department Ms. Baldwin has formulated preliminary recommendations for improving the SQI for all of Massachusetts based on her analysis of service quality results in Western Massachusetts and her work on service quality issues in other states. These issues can be discussed in more depth in Ms. Baldwin's rebuttal testimony.

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Referring to pages 25 and 26 of the Testimony in which Ms. Baldwin analyzed the average installation intervals based on ARMIS data, does Ms. Baldwin believe there is any metric in the existing SQI which captures the same information as the ARMIS “average installation intervals” metric and whether it is appropriate to include the “average installation intervals” metric in the Massachusetts SQI? If yes, explain how it would qualitatively improve the measurement of service quality in the context of the alleged service quality problems in Western Massachusetts identified in the Testimony.

Response

The metrics in the SQI that measure the percentage of installation appointments met provide a measure of one aspect of the quality of Verizon’s installation of service. Indeed, all else being equal, as the percentage of appointments that Verizon meets increases, the installation interval will decline. However, the percentage of installation appointments missed does not provide any specific information about the actual duration of time before appointments are scheduled (and therefore does not shed light on the installation interval). Therefore, the average installation interval is an important separate metric. Many states do include installation intervals in their service quality standards. See Attachment A to the Attorney General’s response to DTC-AG-1-1. Examples include Connecticut, Florida, Illinois, Maryland, New Jersey, New York, Ohio, Pennsylvania, Texas, and Virginia.

The California Public Utilities Commission has described the importance of installation intervals:

“While G.O. 133-B requires carriers to track access line installation commitments met, this measure provides no indication of *how long* it takes a carrier to meet its commitments (i.e., installation intervals). Thus, a carrier can ensure it meets its commitments merely by advising customers that installation of service will require an extended period of time, and committing to a date sufficiently far into the future.

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Where customers have few or no alternatives, customers have little or no bargaining power and are left with the choice of either accepting an installation date far into the future, or not receiving service at all. Thus, merely measuring the percent of commitments met fails to provide any useful information on another important measure of service quality; the interval of time required to install service.”

Order Instituting Rulemaking on the Commission's into the Service Quality Standards for All Telecommunications Carriers and Revisions to General Order 133-B, California Public Utilities Commission, R. 02-12-004 (December 5, 2002) at pp. 30-32.

Information Request DTC-AG-1-3

Referring to pages 32 through 34 of the Testimony in which Ms. Baldwin analyzed the initial and repeat trouble reports based on ARMIS data, how would Ms. Baldwin distinguish this metric from the Network Trouble Report Rate in the existing SQI? Also state whether it would be appropriate to replace the current Network Trouble Report Rate metric with two metrics, one to measure initial trouble reports and another for repeat trouble reports, and whether it would lead to an improvement in the measurement of the service quality in Massachusetts.

Response

The network trouble report rate measured in the current SQI combines both initial and repeat trouble reports. The ARMIS data cited measures the two types of trouble reports separately. Ms. Baldwin does recommend that the Department consider replacing the current trouble report rate measurement with two standards: one for initial and one for repeat trouble reports. A repeat trouble measurement identifies whether the company is able to permanently resolve an issue after it first becomes aware of the maintenance issue (*i.e.*, can Verizon MA correctly solve a problem once it is identified?). It would identify instances where inappropriate “band aids” are utilized to resolve trouble reports rather than permanent, and perhaps more expensive, solutions.

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Referring to pages 35 and 36 of the Testimony in which Ms. Baldwin analyzed “out-of-service” trouble reports based on ARMIS data, does Ms. Baldwin believe that it would be appropriate for the Department to include this metric in Verizon’s SQI? Also state whether, in the context of the alleged service quality problems in Western Massachusetts identified in the Testimony, the inclusion of an “out-of-service” metric in the existing SQI qualitatively improves the measurement of service quality in Massachusetts.

Response

Yes, Ms. Baldwin recommends that the Department consider adding an out-of-service trouble report metric and a service affecting trouble report metric to the current SQI in place of the current network trouble report rate which combines the two types of troubles. In response to data requests, Verizon MA provided data which indicated whether trouble reports were out-of-service troubles or service-affecting troubles, thus Verizon MA is already able to track such data easily. (See Verizon MA response to AG-VZ 6-26 attachment reproduced as Baldwin Exhibit SMB-6).

Information Request DTC-AG-1-5

Referring to page 50 of the Testimony in which Ms. Baldwin contends that the use of a rolling average in the SQI masks poor performance in certain months. Is it Ms. Baldwin's recommendation that the existing Service Quality Plan be modified such that all performance metrics must be met on a month-to-month basis? If yes, explain how it would improve the Service Quality Plan.

Response

Yes. Such a modification would create more incentive to improve and maintain service quality. See, the example provided on page 51 of Ms. Baldwin's testimony.

A rolling average is used to even out extremes and fluctuations in data and to illustrate broad trends. However, the standard metrics in the SQI are supposed to be minimum standards and should always be met except in extraordinary circumstances. The Retail Service Quality Plan already contains an exceptions and waiver process (See Part E of the Plan) that accounts for "periods of emergency, catastrophe, natural disaster, severe storms, or other events beyond Verizon MA's control."

Furthermore, the standard for the metrics may be low. Please see the DTE 01-31-Phase II Order discussed in Ms. Baldwin's response to DTC-AG-1-1. The 33 point threshold in the SQI is certainly a minimum threshold.

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Referring to Ms. Baldwin's statements on pages 54 and 59 (of the confidential version) of the Testimony in which Ms. Baldwin states, respectively, that "the average results for Eastern Massachusetts likely mask a wide range of service quality throughout the area" and that "these data are regional averages, and, therefore, mask any "hot spots" in specific communities[,] is it correct to conclude that the existing service quality measures, which are calculated for wide geographical areas, tend to hide specific and localized problems in smaller communities and regions? If yes, explain how it does so.

Response

Yes. Averages for wide geographic areas hide disparities among smaller subgroups within the region. Any average service quality results, by definition, contain results that are both higher and lower than the average. As noted at pages 58-59 of my testimony (pagination refers to the confidential version), the trouble report rate ranged from 1.17 to 2.68 and the OOS troubles per hundred lines ranged from 0.70 and 2.16. The SBUs contain many wire centers and thus the SBU regional average may allow poor service quality for individual wire centers to go undetected and for Verizon MA to meet its SQI while consistently provided sub-par performance to one or many wire centers within an SBU. Rural areas, by definition, contain far fewer lines than urban ones and therefore the level of service quality provided in rural areas is masked by statewide averages.

Information Request DTC-AG-1-7

Referring to page 77 ****refers to confidential**** of the Testimony in which Ms. Baldwin states that “geographic aggregation allows for a lack of penalty for poor performance in one region or wire center[.]” should the Department modify the existing service quality plan to require Verizon to meet the SQI metrics for smaller geographic areas within Massachusetts? If yes, explain the methodology Ms. Baldwin believes the Department should use to organize Massachusetts into different SQI reporting areas. Also explain whether Ms. Baldwin recommends an approach in which metrics are applied locally, regionally, and statewide; if yes, the mechanics of this approach; and whether any metrics can be applied at the municipal level given Verizon’s contention that it does not gather data at that level. In addition, indicate and explain whether there is a mechanism to measure “hot spots.”

Response

Ms. Baldwin has not formulated a specific recommendation at this time, but the question is of interest in obtaining improved service quality and could be further addressed in Ms. Baldwin’s rebuttal testimony. At a minimum, Verizon should be required to meet any SQI separately for Western Massachusetts.

Information Request DTC-AG-1-8

Referring to page 77 of the Testimony in which Ms. Baldwin contends that the 33 point threshold is too low as evidenced by Verizon's continued achievement of 33 points despite ongoing alleged service quality problems in Western Massachusetts, provide Ms. Baldwin's recommendations generally on how the existing SQI measures can be improved and/or overhauled to overcome these alleged deficiencies. Specifically, and consistent with earlier Department questions, explain whether Ms. Baldwin has a recommendation for comprehensively updating the SQI to address the alleged problems identified in the Testimony with respect to existing measurements and their limitations in ensuring reasonable service quality in Western Massachusetts and other parts of the state. This should include, but not be limited to, an explanation of her recommendations for metrics; measurement standards; changes to the point scale; the application the point scale locally, regionally, and statewide; and the structure of the "standard miss" mechanism. Also discuss whether and how changes to the existing SQI should account for areas of the state where competition is robust, and identify any service quality plans in other states that she believes are improvements over Verizon's Massachusetts SQI which could serve as models for a new SQI plan in this state.

Response

Ms. Baldwin's primary recommendation is that the Department adopt service quality credits for customers on a pilot basis in Western Massachusetts, which could be implemented in a timely manner. Subsequently, the Department could modify the SQI as it applies to Western Massachusetts. Ms. Baldwin has not developed a stand-alone alternative service quality plan for Verizon MA, but can elaborate on this topic in her rebuttal testimony or provide supplemental testimony as is appropriate. At a minimum, the attribute of the existing SQI that enables Verizon to consistently miss the standard for clearing residential troubles within 24 hours and yet confront no regulatory or financial consequences should be modified.

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With respect to the Department's question as to whether the plan should account for areas of the state where competition is robust: Where service quality is purported to be robust, there is no need to eliminate standards or the SQI, because the regulatory and marketplace incentives should be identical – to yield adequate service quality. In other words, if and where competition is robust, presumably Verizon MA would be allocating sufficient resources to meet Department standards. Indeed, any service quality plan should ensure that there is enough geographic disaggregation in quality measurement such that any company cannot simply focus all resources on areas experiencing competition and still be able to meet service quality standards.

Information Request DTC-AG-1-9

Referring to page 91 of the Testimony in which Ms. Baldwin recommends that the Department require a comprehensive audit of the telecommunications infrastructure and resources available in Western Massachusetts, explain how an audit can lead to quality of service improvements in Western Massachusetts. State whether the Department has the necessary authority to direct Verizon to take the necessary corrective action if such an audit identifies deficiencies in the allocation of resources or in the state of network infrastructure. Also state whether Ms. Baldwin recommends that the audit be conducted prior to the Department determining whether to make any changes to Verizon's SQI.

Response

In response to IBEW-AG-9-8 and in explanation as to how an audit can lead to quality of service improvements in Western Massachusetts, Ms. Baldwin responded:

A network infrastructure audit could include cataloging and analyzing the age and condition of Verizon's infrastructure in Western Massachusetts. Service quality problems could be mapped to the infrastructure where they occur (including the entire path from the customer's telephone to the central office serving that customer), and the result would be examined to identify the underlying causes of these problems. Service outages reported to the Department and to the FCC could be examined. The maintenance and replacement of outside plant could be compared to any industry standards that may exist. The audit could also examine those specific communities and addresses that are associated with consumer complaints. The audit could identify specific areas that merit particular attention. Ms. Baldwin will further develop her recommendation as is appropriate, based on the evidence provided in this proceeding.

The Department has broad statutory authority in determining appropriate remedies once equipment and/or services, inter alia, of a telecommunications company are determined to be "unjust, unreasonable, unsafe, improper or inadequate." G.L. c. 159, §16. *See also* G.L. c. 159, §12. Immediately upon such a finding by the Department, Ms. Baldwin recommends that the audit occur in conjunction with such other remedies including modifications applicable to the existing SQI in Western Massachusetts as determined to be appropriate by the Department. Consumers in Western Massachusetts, in particular, have been harmed by delays in relief and an audit with a clear blueprint for remedial action should occur in a timely manner.

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State whether Ms. Baldwin believes it is possible to improve the quality of service in Western Massachusetts without having to resort to a system of customer credits, including whether service quality could be improved through an enhanced SQI measurement system along with making the existing penalty mechanism more stringent, and explain the basis for her belief. In addition, indicate and explain what Ms. Baldwin believes would be the financial impact on Verizon from her recommended “customer credit” penalty mechanism as compared to the existing penalty mechanism and a more stringent penalty mechanism.

Response

Customer specific credits are not the only option to address service quality problems. In fact, the statewide Service Quality Plan under which Verizon MA currently operates does provide for credits if Verizon MA fails to meet the Department’s standards. However, the standards are lax and the credits are apportioned to all consumers (rather than specifically compensating those customers that are harmed).

Ms. Baldwin believes that service quality could also be improved through an enhanced SQI measurement system along with more stringent penalty mechanisms. Another drawback of the SQI is that it fails to create financial accountability for Verizon’s failure to clear troubles reported on customers’ lines in a timely manner.

The merit of customer credits for individual consumers in Western Massachusetts is that those consumers affected by poor service quality receive compensation for that poor service. Furthermore, the customer credits that Ms. Baldwin proposed in her testimony were based specifically on concerns about the quality of service in Western Massachusetts. Ms. Baldwin’s proposed customer credit for consumers in Western Massachusetts is intended to achieve the following:

- To establish an economic incentive for Verizon to improve service quality;
- To compensate consumers that are harmed by out-of-service and by service affecting troubles on their basic local lines; and
- To establish an administratively straightforward system that Verizon could implement in a timely manner.

The Department also asks: “In addition, indicate and explain what Ms. Baldwin believes would be the financial impact on Verizon from her recommended ‘customer credit’

penalty mechanism as compared to the existing penalty mechanism and a more stringent penalty mechanism.

The existing penalty mechanism allows for a maximum of 1% of Verizon MA's total annual retail revenue to be paid as a one-time credit apportioned to each line in service (see Service Quality Plan, part D). According to Verizon's response to AG-VZ 3-6, Verizon's total intrastate regulated revenues were \$1.163 billion in 2008. Ms. Baldwin is not aware of information in this proceeding regarding the portion of total intrastate regulated revenues that corresponds with retail revenues.

At pages 80-81 of her testimony, Ms. Baldwin discusses two different ways to establish customer credits. Under one approach that she describes, Verizon would pay a customer credit ranging between \$15 and \$75 for out-of-service troubles (depending on the repair interval) and between \$15 and \$45 for service affecting troubles (also depending on the repair interval). Under the second approach that she describes, a customer credit of \$30 would be provided to any customer waiting longer than 36 hours for repair (regardless of whether the trouble is out-of-service or service affecting), with a possible increase in the credit corresponding to the duration of time that a consumer must wait.

Based on data included in Exhibits 6 and 7 to Ms. Baldwin's testimony, as well as Verizon's response to AG-VZ 3-24, Ms. Baldwin has prepared some illustrative calculations of the aggregate impact of the first approach for credits, but additional information is necessary to provide more accurate estimates. Specifically, the data in Ms. Baldwin's Exhibits 6 and 7 (Verizon's responses to AG-VZ 6-26 and AG-VZ 1-5) show the monthly quantities of OOS and SA troubles for a 12-month period and also show the percentage of OOS cleared within 24 hours. Verizon's response to AG-VZ 3-24 shows the percentage of OOS cleared with 24 hours; within 48 hours; within 72 hours; and within 96 hours. Data that would be necessary to refine the estimates of credits for both approaches that Ms. Baldwin describes include the percentage of SA cleared within 24 hours; within 36 hours, within 48 hours, within 72 hours, and within 96 hours. The attached spreadsheet, which is based on data from September 2008 through August 2009, provides general estimates. The spreadsheet shows that annual OOS credits could be between \$282,000 and \$1,400,000 and SA credits could be as high as \$580,000, though most likely would be far less. For the period September 2008 through August 2009, under the credit system proposed by Ms. Baldwin, Verizon MA would have paid \$516,351 in customer credits to consumers (both residential and business) in western Massachusetts for OOS troubles. See the attached spreadsheet for additional detail and calculations.