COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Proceeding by the Department of Telecommunications and Energy on its own Motion to Implement the Requirements of the Federal Communications Commission's Triennial Review Order Regarding Switching for Mass Market Customers	)))))))	D.T.E. 03.60 Filed: February 6, 2004

DIRECT TESTIMONY AND EXHIBITS OF JOSEPH GILLAN ON BEHALF OF BROADVIEW NETWORKS, INC., BULLSEYE TELECOM, INFOHIGHWAY COMMUNICATIONS CORPORATION, MCGRAW COMMUNICATIONS, INC. AND METROPOLITAN TELECOMMUNICATIONS INC. (CLEC COALITION)

AND DSCI CORPORATION

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I. Introduction and Witness Qualification

Q. Please state your name and address.

A. My name is Joseph Gillan. My business address is P.O. Box 541038, Orlando, Florida 32854. I am an economist with a consulting practice specializing in telecommunications.

Q. Please briefly outline your educational background and related experience.

A. I am a graduate of the University of Wyoming where I received B.A. and M.A. degrees in economics. From 1980 to 1985, I was on the Staff of the Illinois Commerce Commission ("ICC") where I had responsibility for the policy analysis of issues created by the emergence of competition in regulated markets, in particular the telecommunications industry. While at the ICC, I served on the Staff subcommittee for the NARUC[1] Communications Committee, and was appointed to the Research Advisory Council overseeing the National Regulatory Research Institute.

In 1985, I left the ICC to join U.S. Switch, a venture firm organized to develop interexchange access networks in partnership with independent local telephone

[1] National Association of Regulatory Utility Commissioners.

companies. At the end of 1986, I resigned my position of Vice President-Marketing/Strategic Planning to begin a consulting practice. Over the past 20 years, I have provided testimony and/or sworn affidavits before more than 35 state commissions, five state legislatures, the Commerce Committee of the United States Senate, the Federal Communications Commission, and the Federal/State Joint Department on Separations Reform. In addition, I have provided expert reports to the Canadian Radio-Television and Telecommunications Commission, as well as the Finance Ministry of the Cayman Islands. I currently serve on the Advisory Council to New Mexico State University's Center for Regulation. A complete listing of my qualifications is attached as Exhibit JPG-1.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of Broadview Networks, Inc., BullsEye Telecom, InfoHighway Communications Corporation, McGraw Communications, Inc. and Metropolitan Telecommunications, Inc. (the "CLEC Coalition") and DSCI Corporation.[2] It is through the competitive energy of companies such as these that the intended benefits – i.e., the choices, savings, innovations and jobs – of the federal Telecommunications Act of 1996 (the "Act") are realized.

[2] The CLEC Coalition has filed testimony in other Verizon states and is joined in Massachusetts by DSCI Corporation. For purposes of this testimony, DSCI Corporation is a part of the CLEC Coalition.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to address the Federal Communications Commission's Triennial Review Order[3] ("TRO") as it applies to unbundled local switching and its use as part of the unbundled network element platform ("UNE-P") to serve "mass market" customers. The TRO lays out a complex path to a simple conclusion, namely that conditions in Massachusetts do not warrant reversal of the FCC's national finding that competitive local exchange carriers ("CLECs") are impaired without access to unbundled local switching to serve the "mass market."

This is not an abstract debate with intellectual appeal but little practical effect – the decisions that the Massachusetts Department of Telecommunications and Energy ("Department") reaches in this proceeding will have a real and immediate impact on the choices available to Massachusetts consumers and business customers, on the quality and type of services they have access to, and on the prices that they pay. The stark reality is that before UNE-P became generally and operationally available to CLECs, there was no meaningful mass-market competition. If UNE-P is eliminated prematurely, competition among companies

[3] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98; Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978 (rel. Aug. 21, 2003) ("Triennial Review Order" or "TRO").

offering POTS (plain old telephone service, i.e., analog voice service) would likely disappear, with the wireline market reverting back to something similar to the integrated monopoly (albeit on a regional scale) enjoyed by the Bell System prior the initiation of the nation's competitive policies, more than 20 years ago.

Q. Please summarize the principal conclusion of your testimony.

A. The focus of my testimony concerns the so-called "triggers" outlined in the TRO that are designed to use actual marketplace evidence to determine whether impairment exists. As the FCC explained: "If the triggers are satisfied, the states need not undertake any further inquiry, <u>because no impairment should exist in that market</u>."[4] The trigger claims made here by Verizon New England Inc. ("Verizon") here fail this federal standard.

The FCC provided the states with the guidance and latitude to apply the triggers to determine whether non-impairment within a specific market exists. A faithful application of the triggers should produce outcomes consistent with the FCC's own findings – that is, where a state commission observes facts that are comparable to data that the FCC used to <u>find</u> impairment, then that *same* set of facts cannot be abused in a "trigger analysis" to <u>reverse</u> that finding. The FCC was clear that the states were to apply judgment in the same manner as the FCC:

[4] TRO ¶ 494.

"To ensure that the states implement their delegated authority in the same carefully targeted manner as our federal determinations, we set forth in this Order federal guidelines to be applied by the states in the execution of their authority pursuant to federal law."[5] Arriving at consistent decisions when presented with consistent facts is an important feature of the TRO.

The level and form of competitive activity cited by Verizon in this proceeding – even if all of their data is accepted as accurate – is no different than that which the FCC rejected in the TRO as being adequate proof of non-impairment. Verizon alleges that the triggers are satisfied based on two basic claims: (1) that a handful of carriers that collectively serve less than 3% of the lines statewide "demonstrates" that CLECs experience no impairment serving the mass market using Verizon's loops, and (2) that cable-based providers should be given probative weight in a trigger analysis. As to Verizon's first claim, the FCC was well aware that *some* analog loops were being purchased by CLECs, but it nevertheless rejected (repeatedly) claims that trivial levels (including levels far larger than Verizon shows here) of unbundled network element loop ("UNE-L") activity justified a finding of impairment. Moreover, the FCC made clear that cable-based entrants should *not* be given full weight, for (among other reasons)

[5] TRO ¶ 189.

[7] There is only a single very small exchange (less than 100 total lines) that is part of the Vermont LATA that is not benefiting from UNE-P based competition.

their entry proves nothing about the operational impairments related to the hot cut.

Although I address each of Verizon's claims in more detail below, it is important to scale its allegations in the appropriate context. As I explain below, unbundled local switching (and UNE-P) is bringing mass market competition to every Verizon exchange in Massachusetts,[7] and is responsible for 90% of the growth in UNE-based competition during the first half of 2003.[8] Against this competitive success, Verizon argues that the Department should rely on a handful of carriers that collectively serve less than 3% of the market to foreclose UNE-P in areas that represent approximately 90% of the addressable market in the state. The effect on mass market competition in Massachusetts if UNE-P were no longer available would be catastrophic and long-lasting.

The Department should appreciate that the process of establishing a competitive local market requires a long-term commitment. There is no miracle technology that offers an immediate solution to overcoming the incumbent's entrenched advantages in the mass market. The incumbent's inherited network represents the cumulative product of decades of monopoly protection. For the foreseeable future, the Verizon loop network (which represents a footprint created over decades, assisted by governmental protection and the negotiating leverage with

[8] Source: Verizon Form 477 (Local Competition Reports) filings with the FCC. Data for the first half of 2003 is the most recent data available.

property owners that a monopoly enjoys) is the only viable means to access the mass market. Commercially meaningful access to the legacy loop network is obtained through the use of Verizon's unbundled local switching because this is the means to provide electronically-controlled access to Verizon's analog loop plant through the combination known as UNE-P.

The Department is seeing emerge in Massachusetts exactly the type of statewide competition hoped for when local competition first moved onto the nation's policy agenda. The Department should take great care in how it approaches the trigger analysis to ensure that before any "trigger" reduces Verizon's federal unbundling obligation, there is compelling evidence that "new entrants, as a practical matter, have surmounted barriers to entry in the relevant market,"[9] and "…it is feasible to provide service without relying on the incumbent LEC."[10]

Q. How is the remainder of your testimony organized?

A. The remainder of my testimony is organized as follows. Section II discusses two preconditions to conducting a "trigger analysis" of the mass market: the DS0/1 cut-off and the appropriate geographic market. Section III describes the necessary criteria that a trigger candidate must satisfy in order to be counted as evidence of

[9] TRO ¶ 99.

[10] *Id.* at ¶ 93.

non-impairment, while Section IV of the testimony discusses the specific trigger claims of Verizon in Massachusetts. Finally, in Section V of the testimony, I discuss how the Department should address future challenges by recommending a short (two-year) quiet period consistent with the similar action of the FCC.

II. Establishing the Preconditions to a Trigger Analysis: Defining the Mass Market

Q. Did the FCC conduct a comprehensive evaluation of the impairment that limits mass market local competition?

A. No. It is important to remember that the FCC focused its analysis – and rested its conclusion – on only <u>one</u> source of impairment, which is the manual hot cut process used to provision analog loops to CLEC switches. Based on this single factor, the FCC concluded that impairment exists on a national scale.[11] Significantly, the FCC did not determine that the hot-cut process was the <u>only</u> source of impairment. Rather, having already found impairment nationally, the FCC left it to the states to evaluate whether any exceptions to this national finding were locally appropriate.

[11] TRO ¶ 423.

Q. How does the "trigger" analysis called for by the TRO relate to the FCC's national finding of impairment?[12]

A. It is useful to think of the "trigger analysis" as an "actual competition" test. Its basic role is to determine if there are markets where the level of actual competition is so vigorous that the national finding of impairment must be wrong. The FCC believed that the "principal mechanism" to judge impairment should be actual marketplace activity.[13] Such an approach does make sense, but only so long as the analysis is conducted in a fashion structured to determine whether potential trigger candidates do, in fact, provide evidence of non-impairment.

Q. What threshold questions must the Department address in order to apply the "actual competition test" to the "mass market"?

A. The first layer of the actual competition test is the definition of the "mass market." As noted earlier, the mass market is generally defined by the FCC as the POTS market – that is, the market of customers obtaining analog voice service. There are two parameters, however, that the FCC has asked the state commissions to establish in order to define the "mass market" in each particular

[12] There are other areas of inquiry raised by the TRO (such as the potential deployment analysis) that I understand Verizon is not pursuing in this state (Conroy and White Testimony, page 7). Because Verizon intends to only address whether the "triggers" are satisfied in Massachusetts at this time, I will not address other aspects of the TRO.

[13] TRO ¶ 498.

state. The first is to determine the "cross-over" that will define the upper boundary of the mass market in terms of the number of voice lines a customer may have before the customer should be viewed as an "enterprise customer." Second, the FCC has asked the states to determine the appropriate "geographic boundary" of the mass market in which it will conduct its impairment analysis.

Q. How does the TRO define the mass market customer?

A. The TRO provides a basic definition of the "mass market customer" and contrasts it with the "enterprise customer." The mass market customer is (a) primarily interested in basic voice-grade POTS service; (b) widely geographically dispersed; and (c) unaccustomed to complex or disruptive provisioning schemes. As the FCC explains, "mass market customers are analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 lines."[14] Unlike enterprise customers, mass market customers are not concentrated in particular geographic locations, such as within central business districts. Rather, mass market residential and small business customers in the are spread across all urban, suburban, and rural locations. These customers expect that using their telephone services, as well as changing service providers, will be a seamless transaction, without a disruption to their service or their lives.[15]

[14] *Id*. at ¶ 497.

[15] *Id*. at ¶ 467 ("Most importantly, mass market customers demand reliable, easy-to-operate service and trouble-free installation.").

Q. Does the mass market include both residential and business customers?

A. Yes. Perhaps because we are all residential customers, we intuitively appreciate the fact that the residential marketplace is part of the mass market. The forgotten customer of telecommunications policy, however, is the average (which is to say in this context, voice-centric) small business customer. There are many business customers that still rely on traditional POTS service for their telecommunications needs (for example, restaurants, garages, plumbers, florists, and others for whom higher speed enterprise services are simply unnecessary).

One of the important roles for local competition is to eliminate discrimination by driving prices towards their costs. Traditionally, an artificial price difference has been used to separate the residential POTS customer from the business POTS customer. One benefit of local competition will be that this price differential will decline, as competitors offer more cost-based products to both the residential and small business market. Small businesses will benefit from lower prices, while residential customers will see more value-laden offerings, such as MCI's Neighborhood product, or Z-Tel's and InfoHighway's Voice Mail service using innovative Unified Messaging technology. These competitive offerings are already at work erasing the artificial boundary in the POTS marketplace between the residential and small business customer, as the technological boundary

separating the analog (POTS) and digital (i.e., enterprise) market emerges in its place.

A. The DS0/DS1 Cutover

Q. What is the DS0/DS1 cutover called for by the TRO?

A. The TRO permits states to artificially cap, through regulatory rule, the upper bound of the mass market (in terms of voice lines at a customer premise) where the state commission determines that "it is economically feasible for a competitive carrier to provide voice service with its own switch using a DS1 or above loop. We determine that this includes all customers that are served by the competing carrier using a DS1 or above loop and all customers meeting the DS0 cutoff."[16] The cutoff is defined as "the point where it makes economic sense for a multi-line customer to be served via a DS1 loop."[17]

Q. Has Verizon requested that the Department establish a "regulatory cap" on the mass market in Massachusetts?

A. No. It is my understanding that Verizon has acknowledged that the best bright line between the enterprise and the mass market is the line between analog voice

[16] *Id*. at ¶421, n.1296.

[17] *Id*. at ¶497.

loops (which define mass market services) and digital loops (which define the enterprise services). There is no need for the regulator to step in and "decide" that some customers that are part of the mass market through their own choice should instead be deemed enterprise customers through the application of a regulatory rule. As explained by Verizon:

> At its simplest, this "cutoff" should be between customers actually being served with one or more voice grade DS0 circuits and customers actually being served by DS-1 loops…. This objective test is more reliable, and grounded in the realities of the marketplace, than an arbitrary "cutoff" at a particular number of lines regardless of whether a customer is actually being served as a DS-1 customer.[18]

This is essentially the only area in my testimony where I will agree with Verizon (albeit for a very different reason). The "cutover" described in the TRO is a governmentally drawn upper boundary to the mass market that, in effect, substitutes the regulator's judgment of how a customer should be served (via a DS-1) for the customer's judgment of how it has chosen to be served (multiple analog loops). I agree with Verizon, however, that the customer is in the best position to know what type of service it needs and, therefore, the most accurate dividing line between the analog mass market and the digital enterprise market tracks the service choice of the customer.[19]

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[18] Direct Testimony of Conroy and White, page 14.

[19] Although Verizon's testimony suggests that the CLEC decides what the customer wants, the reality is that CLECs (as well as ILECs) offer various products designed for different customer interfaces (such as analog phone service or a DS-1 to a PBX) and the *customer* decides whether it is to be an enterprise customer or part of the mass market.

Of course, I disagree with Verizon that, after properly defining the mass market, CLECs should be denied access to unbundled local switching to compete within it. Presumably, Verizon has adopted its position in an attempt to inflate CLEC UNE-L numbers to bolster its trigger claims (claims which are not satisfied even by the help of this strategy). It is important, however, that the Department make clear to Verizon that having now defined the mass market as comprising all analog loops (a wise approach), that it must make unbundled local switching available to serve all analog loops wherever switching is unbundled (which, consistent with the FCC's national finding of impairment, should be statewide).

Q. Why would a customer with multiple analog voice loops choose to remain a mass market customer?

A. There are a number of reasons why a customer may not desire a DS1-based service. As a practical matter, in the real world, customers are not likely to purchase a DS-1 service unless they are using a PBX that supports a digital interface. In such real-world situations, it is the customer that chooses to become an enterprise customer by the customer premise equipment it selects. This is quite different than the "theoretical customer" suggested by the TRO that is assumed to be served by a DS-1, even though it has no PBX on its premise. For this customer, a DS-1 based service would require that the customer make space available for channel bank equipment on its premises. Customers may not want

to give up the space for such equipment, or may resist the telecommunications provider's need to have access to the premises to maintain or repair the equipment. Alternatively, because of provisioning problems or the customer's individual traffic patterns, the CLEC might need to use higher priced special access rather than UNE DS-1 facilities (which would significantly reduce the economic attractiveness of a DS-1 service). In these circumstances, the customer would have good reasons to preserve its analog POTS service, even if it were at or above the point at which a DS-1 would theoretically be less expensive. In addition, a customer served by multiple analog lines is less vulnerable to a total loss of service than a customer whose entire service is being provisioned over a single DS-1.

B) The Appropriate Geographic Area for the Evaluation of Impairment

Q. What general approach should the Department use in selecting the geographic area for its impairment analysis?

A. The basic approach should be to look at areas being served by a particular network element and determine whether an alternative could reasonably produce the same result. The basic approach described in the TRO is obviously (and correctly) customer-centric, with the states being directed to consider, among other things:

* The locations of customers actually being served (if any) by competitors;

* The variation in factors affecting competitors' ability to serve each group of customers; and,

* The competitors' ability to target and serve specific markets economically and efficiently using currently available technologies.[20]

The only bounds that the FCC placed on the state's discretion in determining the geographic contours of a "market" (or, more properly stated, an impairment evaluation zone) is that the area must be smaller than an entire state. At the same time, it must not be so small that "…a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market."[21]

Q. Do you support Verizon's proposal to adopt MSA boundaries as the geographic market for an impairment analysis?

A. No. The fundamental problem with an MSA approach is that the approach creates "orphan stepmarkets" of exchanges that today benefit from local competition, but which would be ignored by an impairment analysis that looked only at certain areas of select MSAs. With modest adjustment, the two principal

[20] TRO ¶ 495.

[21] *Id*. at ¶ 495.

LATAs in Massachusetts can be designated as markets that include each and every exchange in the state.

Table 1: Distribution of Access Lines in MSAs and LATAs

MSA	LATA			
	East	West	VT	RI
Barnstable Town	211,725			
Boston-Cambridge-Quincy	2,522,762			
Pittsfield		98,355		
Providence-New Bedford-Fall River	269,134			23,276
Springfield	5,673	390,269		
Worcester	487,993	3,980		
Not in a MSA	41,868		98	

The adjustments I would recommend would be to include the Massachusetts wire centers currently considered parts of the Vermont and Rhode Island LATAs to the nearest Massachusetts LATA. By adopting the market areas I recommend here, every exchange in the state is covered by the impairment analysis (an outcome not possible with Verizon's MSA approach).

Q. Why is it important for the Department to also evaluate conditions in the residual markets that Verizon ignores?

A. Because mass market competition is *interdependent* – that is, it is not possible to eliminate switching in one part of a state without there being collateral effects in other areas, including those "residual areas" that Verizon wishes the Department to ignore. The fact is that UNE-P is bringing competition to the mass market

across the entire state, without regard to wire center density or location. But this competitive profile is the result of UNE-P being available *throughout* the state, and not just in less dense markets.

Exhibit JPG-2 illustrates the competitive profile being achieved today in Massachusetts. The bar chart in Exhibit JPG-2 plots the competitive share achieved by UNE-P in each Verizon wire center, with the wire centers arranged according to size. Verizon's largest wire center is on the left and the wire centers become progressively smaller moving from left to right. Because of the large number of wire centers in Massachusetts, Exhibit JPG-2 is presented over two pages, with the largest 137 wire centers on the first page and continuing to the second page (where the second group of 137 wire centers is shown). Verizon's smallest wire center is shown at the right on the second page of Exhibit JPG-2.

As Exhibit JPG-2 demonstrates, UNE-P is bringing competitive choice statewide. What is important to understand is that even if Verizon does not challenge switching impairment in *every* exchange in the state, the competitive fate of mass market competition throughout the state is nevertheless at issue. This is because Verizon is proposing such a massive reduction in the mass market that the residual areas it ignores are unlikely to sustain competition on their own.

Table 2: Market Foreclosure Under Verizon Proposal

MSA	UNE Zone	Access Lines in:[22]	
		Open Markets	Closed Markets
Barnstable Town	3	211,725	
Boston-Cambridge-Quincy	1		272,821
	2		1,260,032
	3		986,990
	4	2,919	
No MSA	3	37,101	
	4	4,865	
Pittsfield	3	42,090	
	4	56,265	
Providence-New Bedford	3		272,807
	4	19,603	
Springfield	2		145,900
	3		183,889
	4	66,153	
Worcester	2		124,844
	3		304,690
	4	62,439	
Statewide Total		503,160	3,551,973
Statewide Reduction			-88%

Any residual area must also satisfy the FCC requirement that the area is not so small that "…a competitor serving that market alone would not be able to take advantage of available scale and scope economies from serving a wider market."[23] My recommendation is that the Department establish the market areas

[22] The terms "open markets" and "closed markets" refer to whether unbundled local switching would be available as a section 251 network element under Verizon's proposal.

[23] TRO ¶ 495.

comprehensively, to eliminate the orphan step markets inherent in Verizon's proposal.

Q. Do you believe that statewide competition was intended by the Act?

A. Yes. It is clear that one of the goals of the Act is to encourage broad competition throughout an entire state. For instance, the Act fundamentally judges whether local markets are open (in Section 271) on a state-by-state basis:

> The requirement of an operational competitor is crucial because ... whatever agreement the competitor is operating under must be made generally available throughout the State. Any carrier in another part of the State could immediately take advantage of the "agreement" and be operational fairly quickly. By creating this potential for competitive alternatives to flourish rapidly throughout a State, with an absolute minimum of lengthy and contentious negotiations once an initial agreement is entered into, the Committee is satisfied that the "openness and accessibility" requirement is met.[24]

The Department should take great care that it not take any action to curtail the availability of unbundled local switching (and UNE-P) unless it is confident that an alternative would produce the same result.

[24] *Ameritech Georgia Order*, Federal Communications Commission, CC Docket 97-298, Footnote 169, *citing* House Report, emphasis added.

Q. Are there other reasons to use the LATA boundaries as the starting point in the impairment analysis?

A. Yes. To begin, LATAs are well understood within the industry, and have been used to define the exchange market for roughly two decades. In addition, wire center boundaries conform to LATA boundaries, thereby eliminating the need to arbitrarily assign wire centers that straddle the border into/out-of the MSA. Consequently, subject to the modest consolidation I propose above, I recommend LATAs as providing the best vehicle to achieve a comprehensive market definition (i.e., a market definition that includes all exchanges) for Massachusetts.

Q. Is it appropriate to subdivide markets by UNE Rate Zones as proposed by Verizon?

A. No. UNE Rate Zones fundamentally affect the rate for the unbundled loop. Deaveraged loop rates, however, should have little effect on the *relative* ability of a CLEC to use (or not use) its own switching to compete. Whether a CLEC is using UNE-P or UNE-L, the constant is the need to purchase the unbundled loop. In other words, while UNE Rate Zones may affect competition overall, the issue here concerns the relative operational and other barriers to competition for mass market customers that are mitigated by access to unbundled local switching.

UNE Rate Zones should not be superimposed on an impairment analysis as it relates to the availability of unbundled local switching.

Q. Should the Department expect UNE-L to have an ability to serve the mass market in the manner achieved by UNE-P?

A. No. There are material differences that cause UNE-L to be ill-suited to the type of broad entry that is necessary to address the mass market. To begin, as noted by the FCC, the manual provisioning (i.e., the "hot cut") processes used with UNE-L do not have the scale, reliability or cost structure necessary to support mass market services. Equally important, however, are the additional costs that the FCC did not expressly evaluate, and which add significantly to CLECs' economic impairment. These include a CLEC's costs to extend an analog loop from the wire center where it is currently located to the CLEC's switch location.

The UNE-L business strategy fundamentally requires that CLECs can efficiently access loops at the wire center and transport those loops back to their switch without incurring a cost penalty so large that they may not reasonably compete with the incumbent local exchange carrier ("ILEC") (that incurs none of these costs). However, even if all of these costs could be wiped away, CLECs would still have to deal with the fact that the incumbent LEC's network was never designed to provide a few locations where all the loops may be accessed.

III. The Criteria Necessary to Evaluate Potential Trigger Candidates

Q. Do you believe that Verizon has reasonably interpreted the trigger analysis called for in the TRO?

A. No. Verizon mischaracterizes the rigor needed to conduct a reasoned trigger analysis with its characterization that it is a mere counting exercise:

> The self-provisioning trigger is deliberately objective. It is assessed entirely through the application of data, rather than by the consideration of more subjective experiences, theories, estimates, opinions, and predictions.[25]

It is true that the trigger analysis is different from a potential deployment analysis in that it requires that the Department to focus on an objective standard (i.e., three self-providers), but that does not mean that the Department is not expected to apply judgment in making sure that the proffered trigger candidates are a "true alternative" that are "…actively providing voice service to mass market customers in the market."[26]

The TRO calls for the application of common sense alongside arithmetic by providing guidance as to the type of carriers and services that can legitimately be

[25] Conroy and White Direct, page 7.

[26] TRO ¶ 499.

considered "actual marketplace evidence" that "…new entrants, as a practical matter, have surmounted barriers to entry in the relevant market."[27]

The reviewing criteria that I outline below are drawn directly from the TRO and parallel comparable findings and analysis used by the FCC. This is precisely the type of guidance that the FCC intended, with the states evaluating local conditions and, where those conditions and/or circumstances are comparable to the FCC's national review, reaching similar findings:

> For example, we note that CMRS does not yet equal traditional incumbent LEC services in its quality, its ability to handle data traffic, its ubiquity, and its ability to provide broadband services to the mass market. Thus, just as CMRS deployment does not persuade us to reject our nationwide finding of impairment, at this time, we do not expect state commissions to consider CMRS providers in their application of the triggers.[28]

The FCC clearly expects the states to apply the same type of analysis to *local* conditions that the FCC used in reaching its *national* finding. Where Massachusetts-specific data is comparable to the data used by the FCC in finding impairment, the Department is "expected" to reach a similar finding here. The trigger analysis must be applied in a manner that makes sure that a state commission reviewing local (i.e., more granular) data that *confirms* the FCC's finding of impairment does not invoke a trigger that *reverses* the FCC's

[27] *Id*. at ¶ 93, emphasis removed.

[28] *Id*. at ¶ 499, n. 1549, footnotes omitted, emphasis added.

conclusion. The criteria I outline below are designed to assure that the trigger analysis respects the logic used by the FCC to find impairment, and only removes unbundled switching where local conditions *contradict* the national analysis conducted by the FCC.

In contrast to this approach, Verizon would have the Department ignore the TRO in how it applies the triggers. In effect, Verizon presents data that essentially parallels information that the FCC used to reject the ILECs' claims of non-impairment, claiming that the TRO compels the Department to overturn the FCC's finding of impairment here. But such a result is absurd – how could the FCC possibly insist that the states reach opposite conclusions simply by reviewing local (i.e., more granular) data that confirms the same data the FCC used to determine that switching continue to be unbundled?

When the FCC asked the states to look at actual competitive activity, it did so with the expectation that the states would apply the "trigger test" with judgment as well as actual data. As the FCC indicated, "We find that giving the state this role [as fact-finder on triggers and other impairment issues] is most appropriate where, in our judgment, the record before us does not contain sufficiently granular information and the states are better positioned than we are to gather and assess the necessary information."[29] Guidance is provided to "…ensure that the states

[29] *Id.* at ¶ 188.

implement their delegated authority in the same carefully targeted manner as our federal determinations," with the FCC setting forth "…federal guidelines to be applied by the states in the execution of their authority pursuant to federal law."[30]

The FCC is relying on the states to examine local markets based on each state commission's knowledge and familiarity with local conditions. The Department's role in this context obviously is not merely to review the data that was already provided to the FCC regarding the deployment of CLEC switches, but rather to conduct a full inquiry into whether the trigger criteria set forth in the TRO are satisfied.

Q. Verizon claims that the Department is precluded from evaluating "any other factors, such as the financial stability or well-being of the competitive switching providers" in conducting a trigger analysis.[31] Do you agree?

A. Obviously I agree that the sentence is in the TRO. Where I part company with Verizon, however, is with its interpretation that this single sentence wipes away every other statement in the TRO that explains how the trigger analysis is to be conducted. Consider the paragraph that this sentence introduces in its entirety:

[30] TRO ¶ 189.

[31] Conroy and White Direct page 7, citing TRO ¶ 500.

> For the purposes of these triggers, we find that states shall not evaluate any other factors, such as the financial stability or well-being of the competitive switching providers. Competing carriers in Chapter 11 bankruptcy protection are often still providing service. Regardless of their financial status, the physical assets remain viable and may be bought by someone else and remain in service. We note that requiring states to determine the financial ability of competitive wholesale providers to provide service in the future could hamper economic recovery efforts of companies in financial distress. The key consideration to be examined by state [c]ommissions is whether the providers are currently offering and able to provide service, and are likely to continue to do so.[32]

Within the same paragraph that the FCC directs the states to not evaluate any other factor – a directive that, importantly, does not exclude all of the other factors identified in the TRO. The FCC also indicates that "the key consideration" is whether a provider is likely to continue to offer mass market service. The only way that this paragraph is internally consistent is if it explains that a past bankruptcy is not to be considered, but that any factor that would likely affect the future actions of the CLEC must be part of the analysis. Moreover, there is nothing in the passage that suggests that the FCC was directing the states to ignore all the other guidance it provided, including requirements that enterprise switches not be counted, that CLECs relying on their own loops should be afforded less weight, etc.…[33]

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[32] TRO ¶ 500, footnotes omitted.

[33] *Id*. at ¶ 508 ("switches serving the enterprise market do not qualify for the triggers"), and footnote 1560, emphasis added, ("when one or more of the three competitive providers is also self-deploying its own local loops, this evidence may *bear less heavily* on the ability to use a self-deployed switch as a means of accessing the incumbent's loops.")

The application of the triggers gets at the central question of whether actual, non-UNE-P based competition for mass market customers exists in a given market, sufficient to show that CLECs have been able to overcome impairment.

Q. What criteria are included in the FCC's framework for the "Self-Provisioning Trigger"?

A. The TRO provides guidance and criteria as to the basic qualities a CLEC must exhibit in order to be considered a legitimate candidate for the "self-provisioning" trigger. At each step, these criteria are designed to conform to the touchstone purpose of the trigger evaluation – to determine whether there is sufficient actual mass market competition being offered by switch-based CLECs to justify a "no impairment" finding in a market in spite of the national finding of mass market switching impairment.

The self-provisioning trigger criteria can generally be organized into six categories. Before a "trigger candidate" can be found to qualify as satisfying the self-provisioning trigger, the criteria contained in the TRO for each of these categories must be satisfied. The six categories are as follows:[34]

[34] As the Department is well aware, the page-length of the TRO is matched only by its potential importance to local competition. While I believe that these 6 categories are the core requirements needed to qualify a carrier as a Self-Providing Trigger candidate, additional issues may arise after I review the testimony of Verizon and the other parties in this proceeding that would require additions to this preliminary list.

* The self-provisioning trigger candidate's switches must be "mass market," not "enterprise" switches.

* The self-provisioning trigger candidate must be actively providing voice service to mass market customers in the designated market, including residential customers, and must be likely to continue to do so.

* The self-provisioning trigger candidate should provide services exhibiting a ubiquity comparable to UNE-P within the area chosen for the analysis.

* The self-provisioning trigger candidate should be relying on ILEC analog loops to connect customers to its switch or, if offering a claimed "intermodal" alternative, such service must be comparable to that offered by the ILEC in terms of cost, quality, and maturity.

* The self-provisioning trigger candidate may not be affiliated with the ILEC or other self-provisioning trigger candidates.

* The existence of the self-provisioning trigger candidate should be evidence of sustainable and broad-scale mass market competitive alternatives in the designated market.

Only if <u>each</u> of these trigger criteria is met does a candidate qualify as one of the three self-provisioning providers necessary to satisfy the FCC's self-provisioning trigger.

Criterion 1: Enterprise Switches Do Not Qualify as Triggers

Q. You identify the first criterion as requiring that the self-provisioning trigger candidate's switches be "mass market" switches rather than "enterprise" switches. Please describe the FCC's discussion of this criterion in the TRO.

A. The analytical importance of the distinction between the "mass market" and "enterprise market" pervades the TRO. The FCC found that, even based on the limited record before it, there was a clear distinction between the mass market and the enterprise market, both in terms of customer profile and the state of CLEC switch deployment.

I have already explained the difference between mass market and enterprise customers. Similarly, the FCC found that CLEC switch deployment is significantly different in the mass market and the enterprise market:

> [W]e find that the record demonstrates significant nationwide deployment of switches by competitive providers to serve the enterprise market, but extremely limited deployment of competitive LEC circuit switches to serve the mass market.[35]

Based on the demonstrated differences between mass market and enterprise switches deployed in the marketplace, the FCC specifically rejected the incumbent LECs' arguments that mass market switches and enterprise switches

[35] TRO ¶ 435.

should be reviewed together in the mass market triggers analysis.[36] While the FCC allows deployment of an enterprise switch to be considered as a factor in the mass market "potential deployment analysis,"[37] the FCC recognized that the existence of an enterprise switch has no weight in determining whether a mass market switching trigger has been satisfied: "[S]witches serving the enterprise market," the FCC held, "do not qualify for the triggers" applicable to mass market switching.[38] The TRO thus directs the Department to consider only mass market switches (i.e., switches predominately used to serve mass market customers) in the mass market switching trigger analysis.

Q. Should the Department expect that enterprise switches will have some analog lines?

A. Yes. There are a variety of reasons why a CLEC serving the enterprise market with its own switch may provide some analog service, and therefore obtain some analog loops as an ancillary extension of its operations. For instance, this could occur if a CLEC's enterprise customer requests fax lines (which require use of an analog line to meet a data need, but do not provide evidence that a mass market POTS service is provided). Similarly, a large, multi-location enterprise customer may require a package of services from a CLEC that includes some analog lines for a particular branch office. It would be contrary to common sense, as well as to

36 *Id*. at ¶ 441.

37 *Id*. at ¶ 508.

38 *Id.*

the FCC's trigger criteria, to declare that a switch serves the mass market when the number of analog loops provisioned to that enterprise switch is minimal compared to the number of digital loops serving enterprise customers. Consequently, the Department must examine the type of customer loops (analog versus DS-1 and above) being provisioned to a CLEC switch to determine whether the switch is reasonably categorized as a "mass market switch" that potentially satisfies the requirements for the self-provisioning trigger.

Q. Did the FCC recognize that enterprise switches would include some analog lines?

A. Yes. The FCC understood that enterprise switches would serve some analog lines, but that did not change its conclusion that enterprise switches should not be counted in a trigger analysis.[39] For instance, the FCC specifically recognized data that showed enterprise switches serving analog lines, and cited that data as evidence that simply counting switches did not address the critical distinction between the enterprise and mass markets:

> Incumbent LECs claim that the Commission should remove virtually all unbundling obligations regarding local switching on a national basis simply because competitive carriers have deployed 1,300 switches and are serving, according to the BOC UNE Fact Report 2002, over 16 million lines with those switches. This argument, however, ignores significant differences in the evidence concerning the enterprise market and mass market. The record is

[39] Id.

> replete with evidence showing that competitive LECs are successfully using their own switches to serve large business customers that require high-capacity loops (which can be connected to competitive carrier switches with few of the obstacles that affect voice-grade loops). For example, BiznessOnline.Com cites data compiled by a coalition of competitive carriers which examined six representative markets and found that approximately 90 percent of the loops used by competitive carriers in these markets are DS1 capacity or higher loops.[40]

As the above paragraph makes clear, the FCC was under no delusion that carriers serving the enterprise market would do so perfectly. Rather, it understood that such carriers would be predominately using DS-1 loops, even though some amount of analog activity would occur. Generally, the carriers cited by the FCC as evidence that CLECs were using their switches to compete in the enterprise (but not mass) market relied on digital loops for 80% to 90% of their connectivity. The specific study referenced by the FCC is attached as Exhibit JPG-3 (see Table 4).

Criterion 2: Self-Providers Must Be Actively Providing Mass Market Service

Q. The second trigger criterion you describe requires that the self-provisioning trigger candidate must be actively providing voice service to mass market customers in the designated market, including residential customers, and is likely to continue to do so. Please identify the provisions of the TRO that discuss this criterion.

[40] *Id*. at ¶ 437, emphasis added.

A. This measure summarizes several criteria that the FCC requires before a CLEC may satisfy the self-provisioning trigger. To break this category into its component parts, the TRO requires: (a) that the self-provisioning trigger candidate provides voice service to mass market customers;[41] (b) that the self-provisioning trigger candidate is "actively" providing such service;[42] and (c) that the self-provisioning trigger candidate is likely to continue to actively provide voice service to mass market customers in the future.[43]

Q. How should the Department determine whether a CLEC is providing "voice service to mass market customers"?

A. In determining whether this criterion is met, the Department must first exclude potential trigger candidates who do not provide stand-alone voice service and who do not serve mass market customers, including those that do not serve residential customers. For example, as noted above, some analog loops that have been provisioned to a CLEC switch are used for purely data purposes (e.g., DSL or fax lines), and thus do not provide voice service. Such lines should not be included in determining whether the self-provisioning trigger candidate provides voice services to the mass market.

41 *Id*. at ¶ 499.

42 *Id.*

43 *Id*. at ¶ 500.

Perhaps more significantly, the Department must ensure that the voice services provided by self-provisioning trigger candidates are being provided to mass market customers rather than to enterprise customers. A customer purchasing voice and data services provisioned by a DS-1 loop is by definition an enterprise customer[44] and not a mass market customer (even if a few voice lines are being served along with the data circuit). The Department's trigger analysis must focus on the appropriate customer market, and accordingly must exclude self-provisioning trigger candidates that are not serving customers who are the focus of the mass market switching impairment analysis.

Moreover, to satisfy the self-provisioning trigger analysis, a potential trigger candidate should be serving the core of the mass market – the residential customer. In Massachusetts, approximately 75% of the analog lines in Verizon's territory are purchased by residential customers.[45] It makes no sense to qualify a potential self-provisioning trigger candidate as providing "mass market" service if it does not even offer service to the largest portion of the mass market, i.e., residential customers.

Q. How should the Department determine whether a self-provisioning trigger candidate is actively providing voice service to mass market customers?

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44 *Id*. at ¶ 451.

45 Source: ARMIS 2001.

A. The FCC recognized the importance of evidence that a CLEC is actually in the marketplace and actively marketing POTS services to mass market customers. Without evidence that a self-provisioning trigger candidate is actively providing POTS services, a CLEC that no longer serves mass market customers could satisfy a trigger that is intended to assess actual competition in the present rather than the past. In the real world (the world the triggers seek to analyze), this is a significant concern. There are CLECs who attempted to serve mass market customers using their own switches, but found the operational and economic impairments too formidable to overcome. As a result, these CLECs essentially abandoned the mass market. Those CLECs' switches may still serve some "legacy" analog loops connected to customers who took advantage of an early CLEC offering, even though the CLEC is no longer adding mass market customers generally. It would be nonsensical for such legacy analog lines (which are remnants of business plans scrapped precisely because of impairment) to serve as evidence that the CLEC's switch today is being used to "actively" serve the mass market. The FCC captures this concern by requiring that self-provisioning in the mass market must be occurring in an active manner today, and that the providers "are currently offering and able to provide service."

One way to assess whether a self-provisioning trigger candidate is "actively" serving mass market customers is to review the types of unbundled loops recently provisioned to the CLEC's switch (for instance, in the last 6 month period). If the

loops provisioned to the switch in the last 6 months are predominantly DS-1 and above, that is strong evidence that the self-provisioning trigger candidate is not actively providing POTS services to mass market customers. Moreover, as previously discussed, even where there are analog loops being provisioned to the CLEC's switch, the Department should evaluate whether the carrier is actively marketing to mass market customers, or whether the analog lines that it is adding are the by-product of sales to enterprise customers, pre-existing UNE-L customers, or some other anomaly.[46]

Q. How should the Department determine that the self-provisioning trigger candidate is <u>likely to continue</u> actively providing POTS services to mass market customers in the future?

A. The TRO asks the Department to determine whether the self-provisioning trigger candidate is "likely to continue" offering, and likely to be able to provide voice POTS services to mass market customers in the future. This determination requires that the Department make an informed assessment of the viability of the self-provisioning trigger candidate's mass market offerings in the future. This assessment, if it is to be meaningful, should include evidence regarding the CLEC's future business prospects. If a CLEC is on the verge of exiting the market for providing mass market services (or has already left it), then it is

[46] One sign of a CLEC's intention to serve mass market customer would be that it actively engages in marketing to such customers, such as print, radio and mass media advertising.

demonstrably not "likely to continue" providing POTS services to mass market customers in the future. Moreover, if a CLEC is competing using a mix of its own facilities and UNE-P, then the Department cannot determine that it would "likely continue" to offer voice POTs service to mass market customers if UNE-P were no longer available.

Criterion 3: Self-Providers Should Exhibit a Ubiquity Comparable to UNE-P

Q. Why is it important that a self-provisioning trigger candidate exhibit a geographic reach (i.e., ubiquity) comparable to UNE-P?

A. The purpose of a qualifying trigger candidate is to demonstrate, through actual marketplace behavior, that other carriers are not impaired without access to unbundled local switching because the qualifying candidate has demonstrated an ability to serve the same market without the element. In order for the comparison to be valid, it is important that the trigger candidate actually cover a comparable geographic area with its services.

Q. Does the TRO draw conclusions about impairment by evaluating whether alternatives exhibit a ubiquity comparable to that of the element under consideration?

A. Yes. In a number of instances, the FCC applied this reasoning in determining why an alternative claimed by the ILECs to demonstrate non-impairment should be rejected. For example, the ILECs argued that, wherever a particular ILEC qualifies for special access pricing flexibility, the FCC should find non-impairment for transport. The FCC rejected this reasoning because its special access pricing flexibility scheme did not assure the availability of a ubiquitous alternative:

> [T]he pricing flexibility trigger based on alternative transport-based collocation requires no consideration of the ubiquity of the competitive transport facilities throughout an MSA.[47]

In addition, the FCC determined that CMRS is not an intermodal alternative to unbundled local switching, in part based on its view that CMRS is not sufficiently ubiquitous:

> [W]e note that CMRS does not yet equal traditional incumbent LEC services in its quality, its ability to handle data traffic, its ubiquity, and its ability to provide broadband services to the mass market.[48]

Ubiquity is clearly a critical dimension in the mass market, as the FCC already recognized with respect to unbundled local switching. A state clearly would be incorrect to count as a mass market trigger any provider with a ubiquity materially

[47] TRO ¶ 397 (emphasis added).

[48] *Id.* at n. 1549 (emphasis added).

less than UNE-P, where the FCC already rejected CMRS as qualifying service in the trigger analysis, partly on the basis of the limited ubiquity of that technology.

Criterion 4: Self-Providers Must Be Relying on ILEC Loops or Offer Service of Comparable Cost, Quality and Maturity

Q. The fourth criterion you reference is that self-provisioning trigger candidates should be relying on ILEC loops. What is the reference point in the TRO for this trigger criterion?

A. Although the FCC stated that the state commissions should "consider" intermodal alternatives in the switching trigger analysis, it also indicated the states should review them carefully before determining whether (and how) they may legitimately qualify under the trigger standard. The TRO recognizes that for most entrants in a world without unbundled local switching, access to the ILECs' loops will be critical. It would make little sense, therefore, to eliminate unbundled local switching and UNE-P if the only alternative in a market was, for example, an entity that utilizes its own loops. That atypical situation would provide no meaningful evidence of whether impairment no longer exists, or whether new entrants could compete on a UNE-L basis. The FCC made this point several times in the TRO. For example:

> Specifically, many of the [CLEC residential] lines cited by the incumbents are served by carriers that, for one reason or another,

> are able to use their own loops. We have made detailed findings that competitors are impaired without access to incumbents' voice-grade local loops. Indeed, no party seriously contends that competitors should be required to self-deploy voice-grade loops. Thus, for the typical entrant, entry into the mass market will likely require access to the incumbents' loops, using the UNE-L strategy. … Indeed, as discussed above, a crucial function of the incumbent's local circuit switch is to provide a means of accessing the local loop.[49]
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> ***
>
> We note that an important function of the local circuit switch is as a means of accessing the local loop. Competitive LECs can use their own switches to provide services only by gaining access to customers' loop facilities, which predominantly, if not exclusively, are provided by the incumbent LEC. Although the record indicates that competitors can deploy duplicate switches capable of serving all customer classes, without the ability to combine those switches' with customers' loops in an economic manner, competitors remain impaired in their ability to provide service. Accordingly, it is critical to consider competing carriers' ability to have customers' loops connected to their switches in a reasonable and timely manner.[50]
>
> ***
>
> We are unaware of any evidence that either [cable or CMRS] technology can be used as a means of accessing the incumbents' wireline voice-grade local loops. Accordingly, neither technology provides probative evidence of an entrant's ability to access the incumbent LEC's wireline voice-grade local loop and thereby self-deploy local circuit switches.[51]

Q. What does the TRO direct the Department to do when considering evidence regarding switch-based CLECs that do not rely on ILEC unbundled loops?

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[49] *Id*. at ¶ 439, emphasis supplied

[50] *Id*. at ¶ 429, emphasis supplied.

[51] *Id*. at ¶ 446, emphasis supplied.

A. The TRO notes that the Department may give such evidence less weight in the trigger analysis than evidence regarding a self-provisioning trigger candidate that relies on ILEC unbundled analog loops (i.e., a UNE-L based provider). In describing the self-provisioning trigger, the TRO states: "We recognize that when one or more of the three competitive providers is also self-deploying its own local loops, this evidence may bear less heavily on the ability to use a self-deployed switch as a means of accessing the incumbents' local loops."[52] Notably, a self-provisioning switch trigger candidate that does not rely on the ILECs' loops would provide no evidence that problems with the hot-cut process (which formed the basis of the FCC's national finding of impairment) have been addressed.

Q. If the Department does evaluate whether to include a provider using its own loop facilities, what factors must it consider?

A. The TRO does permit states to consider intermodal alternatives, but it advises that: "In deciding whether to include intermodal alternatives for purposes of these triggers, states should consider to what extent services provided over these intermodal alternatives are comparable in cost, quality, and maturity to ILEC services."[53] Thus, any time an intermodal trigger candidate is considered, the

[52] *Id*. at ¶ 501, n.1560.

[53] TRO ¶ 499, n.1549, emphasis supplied.

Department must first examine the nature of the mass market voice services it offers before declaring the company has satisfied the self-provisioning trigger.

As noted above, the FCC already conducted such an analysis in the TRO with respect to CMRS (wireless services) as an intermodal alternative. The FCC found that CMRS services do not meet the trigger standard. Accordingly, the FCC held, "just as CMRS deployment does not persuade us to reject our nationwide finding of impairment … at this time, we do not expect state commissions to consider CMRS providers in their application of the triggers."[54]

Criterion 5: Incumbent LEC Affiliates Do Not Qualify as Triggers

Q. The fifth trigger criterion you identify is that the self-provisioning trigger candidate not be affiliated with the ILEC or other self-provisioning trigger candidates. Please explain the TRO basis for this criterion.

A. The FCC held that the "competitive switch providers that the state commission relies upon in finding either trigger to be satisfied must be unaffiliated with the incumbent LEC and with each other."[55] The FCC added that affiliated companies will be counted together as a single entity in the trigger analysis. The FCC held

[54] Ibid.

[55] TRO ¶ 499.

that this restriction is necessary to prevent the ILECs from "gaming" the trigger criteria. It is important that "CLEC affiliates" of nearby incumbent LECs also be carefully reviewed, to assure that the CLEC affiliate is not benefiting from its affiliation with an incumbent in a manner that no unaffiliated CLEC could match.

Criterion 6: De Minimis Competitive Activity Does Not Qualify as a Trigger

Q. Please explain the final trigger criterion you recommend the Department apply: "The self-provisioning trigger candidate should be sufficiently large to offer sustainable broad-scale mass market competitive alternatives in the designated market."

A. The TRO establishes the trigger analysis as something of a "sudden death" round of analysis, in which the outcome could potentially eliminate unbundled local switching and UNE-P in a market without further analysis of economic and operational impairment, at least under section 251 of the Act. When it established the trigger analysis, the FCC pointed out that it believed the application of the trigger-based analysis would identify where competition for mass market customers by CLECs using their own switches and ILEC analog loops was actually occurring, and thus it would achieve the policy goal of ensuring the continued existence of mass market competition.[56] Therefore, it is critical that the

[56] *See, e.g.*, TRO ¶ 501.

Department not undertake its "trigger analysis" untethered from the reality of the marketplace in Massachusetts.

In addition, the FCC rejected the ILECs' attempts to have it conclude that impairment had been overcome where there is only a relatively low level of competitive penetration. Specifically, the FCC rejected the ILECs' arguments that CLECs were not impaired in the mass market by noting the low relative number of residential lines served by CLEC-deployed switches.[57] The FCC expressly dismissed the ILECs' argument, finding that at best, "less than three percent of the … residential voice lines" were being served by CLEC switches. The FCC thus understood – and applied – the common sense notion that a de minimis level of competition is simply not a rational basis upon which to find that impairment has been overcome.

The need to recognize market reality in the trigger analysis is particularly acute here. Today, UNE-P (the bedrock of which is unbundled local switching) is responsible for the vast majority of the bundled services (local and long distance) competition that is reshaping the voice services marketplace. As shown above, only UNE-P has enabled competition to reach broadly into both urban and rural markets throughout Massachusetts. Before determining that UNE-P availability should be diminished or eliminated based on evidence of "triggers," the Department must have reasonable assurance from the record evidence that, in the

[57] *Id*. at ¶ 438.

real world, a UNE-L-only strategy would offer a comparable alternative (in terms of size and scale) to the statewide competitive choices that CLECs already offer to the mass market today using UNE-P.

The FCC could find no such assurances in its record when it rejected the ILECs' arguments that there is "no impairment" with respect to mass market switching based on the presence of existing CLEC switches. In that context, the FCC made clear that it would not eliminate access to local switching as a section 251 UNE when the record showed only de minimis levels of mass market competition were being provided by alternative approaches.

Q. Must each of the trigger criteria be met before the Department declares that the "Self-Provisioning Trigger" is satisfied in a market?

A. Yes. Each of the trigger criteria for self-provisioning are rooted in the TRO. Each of them is tied to one of the specific rationales or findings made by the FCC in establishing the trigger analysis as the "sudden death" playoff of the impairment analysis. It is up to the Department to give effect to the trigger framework, through informed analysis of the trigger criteria established by the FCC. Only by applying its own judgment, experience and knowledge of local competitive conditions can the Department implement the switching triggers as they are formulated in the TRO.

IV. An Evaluation of Verizon's Trigger Claims in Massachusetts

Q. Please summarize Verizon's basic claim regarding the self-provisioning switch trigger candidates in Massachusetts.

A. Although Verizon relies on sweeping statements of generality to portray its markets as highly competitive, the factual underpinning to its trigger case is quite limited and rests on two basic claims:

* A small amount of analog UNE-L activity that collectively represents a share of 2.8% of the lines in Massachusetts; and

* The claimed competitive activity of two cable providers.

I address each of these claims below.

A. The UNE-L Based Candidates

Q. What carriers does Verizon claim qualify as self-providing mass market switching trigger candidates in Massachusetts?

A. The carriers on which Verizon is basing its impairment challenge in Massachusetts are listed in Proprietary Exhibit JPG-4, which includes (for each

carrier) the number of analog loops that Verizon claims demonstrates that these companies qualify as self-provisioning mass market switch trigger candidates. As Proprietary Exhibit JPG-4 demonstrates, Verizon has based its claim on the thinnest of evidence – the total competitive activity of its trigger candidates combined is approximately 3%, eight years after the federal Act was passed.

Q. Did the FCC repeatedly reject that market activity on the level claimed by Verizon here proves non-impairment?

A. Yes. For example, consider the following claims of low-level competitive activity that all ended with the FCC national finding of impairment for mass market switching:

> …the record indicates that competitive LECs have self-deployed few local circuit switches to serve the mass market. The BOCs claim that, as of year-end 2001, approximately three million residential lines were served via competitive LEC switches. Others argue that this figure is significantly inflated. Even accepting that figure, however, it represents only a small percentage of the residential voice market. It amounts to less than three percent of the 112 million residential voice lines served by reporting incumbent LECs.[58]
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> ***
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> We determine that, although the existence of intermodal switching is a factor to consider in establishing our unbundling requirements, current evidence of deployment does not presently warrant a finding of no impairment with regard to local circuit switching. In

[58] TRO ¶ 438, footnotes omitted, emphasis added.

> particular, we determine that the limited use of intermodal circuit switching alternatives for the mass market is insufficient for us to make a finding of no impairment in this market, especially since these intermodal alternatives are not generally available to new competitors.[59]
>
> ***
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> The Commission's *Local Competition Report* shows that only about 2.6 million homes subscribe to cable telephony on a nationwide basis, even though there are approximately 103.4 million households in the United States [2.6 percent]. Moreover, the record indicates that circuit-switched cable telephony is only available to about 9.6 percent of the total households in the nation … it is difficult to predict at what point cable telephony will be deployed on a more widespread and ubiquitous basis.[60]
>
> ***
>
> Current estimates are that only 1.7% of U.S. households rely on other technologies to replace their traditional wireline voice service.[61]
>
> ***
>
> We also find that, despite evidence demonstrating that narrowband local services are widely available through CMRS providers, wireless is not yet a suitable substitute for local circuit switching. In particular, only about three to five percent of CMRS subscribers use their service as a replacement for primary fixed voice wireline service, which indicates that wireless switches do not yet act broadly as an intermodal replacement for traditional wireline circuit switches.[62]

Thus, the ILECs have already tried to use low levels of competitive activity as marketplace evidence of non-impairment, and the FCC's rejected those attempts

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[59] TRO ¶ 443, footnotes omitted, emphasis added.

[60] TRO ¶ 444, footnotes omitted, emphasis added.

[61] TRO ¶ 443, n. 1356, emphasis added.

[62] TRO ¶ 445, footnotes omitted, emphasis added.

with a national finding of impairment. Obviously, it would be inconsistent for the FCC to delegate to the states a trigger analysis that, when applied to data showing the same *de minimis* levels of competitive activity reviewed and rejected by the FCC, produced findings that reversed the FCC's national finding of impairment.

Q. Are there reasons to also disqualify individual UNE-L based carriers in Exhibit JPG-4?

A. Yes. Recent information indicates that Allegiance Telecom ("Allegiance") is very likely to cease competing for end-user services in the future. Even before its bankruptcy (and expected exit from the end-user business), Allegiance's principal focus was on providing "small to medium sized business and government organizations a complete package of telecom services, including local, long distance, and international calling as well as high-speed data transmission and internet services,"[63] and not on servicing the mass market. For instance, it is my understanding that Allegiance does not offer any residential service, which represents the largest segment of the mass market. Most importantly, however, recent events indicate that the Department cannot conclude that Allegiance is "likely to continue" to offer (even those limited) services that may be considered mass market today.

[63] Source: http://www.algx.com/about/investor_faq.jsp.

Q. Why is it uncertain that Allegiance will continue to offer service in the future?

A. On December 18, 2003, Allegiance announced that as part of its plan to emerge from Chapter 11 bankruptcy protection, the company was being put up for auction with Qwest designated the "stalking horse" bidder for its assets.[64] Significantly, analysts predict a very different use for Allegiance's assets if acquired by Qwest than as they were used by Allegiance. As reported by TR Daily:

> Analysts from 2 Wall Street investment firms said the deal would give Qwest strategic access and cost advantages, viewing the proposed purchase more in terms of reducing access costs. "We view this as purely an access [reduction]-driven move and would not be surprised if significant portions of Allegiance's business fall off over time and Qwest simply utilizes the assets for its own purposes" Frank Louthan of Raymond James & Associates.
>
> Frank Governali, telecom analyst with Goldman Sachs & Co. said "Qwest's long-term benefit from the acquisition would come mainly from lowered access costs, rather than revenue generated by Allegiance, which has mainly targeted smaller business accounts. From Qwest's perspective, Allegiance's attractiveness is on the cost savings side, not the revenue side. We would expect Allegiance's $550 million of revenues [from the smaller business accounts] to deteriorate quickly, as the target markets of the two companies do not overlap."[65]

Consequently, the expected outcome should Allegiance's assets be acquired by Qwest is that the company will shift its focus from end-user local services (which

[64] The initial bidder with whom the debtor negotiates a purchase agreement is called the "stalking horse" bidder.

[65] TR Daily, December 19, 2003.

are generally enterprise in any event), and will instead concentrate on providing local connectivity for Qwest's interLATA network.

Q. Has Verizon counted carriers as potential switch triggers that do not appear to be actively providing service?

A. Yes. As Exhibit JPG-4 demonstrates, a number of carriers, in one or other of the markets (or both), purchase virtually no analog loops at all. One such carrier is SBC Telecom. As Exhibit JPG-4 demonstrates, SBC Telecom is serving only a handful of lines in Massachusetts. In addition, it is useful that the Department consider the circumstances that led to SBC Telecom's "entry" into the Massachusetts market. SBC Telecom is a wholly owned subsidiary of SBC Communications that was formed in the fall of 1999 as a condition of SBC's merger agreement with Ameritech. As a part its merger approval, SBC made specific commitments to provide local telephone services in 30 markets outside of its 13 state region. Specifically, SBC agreed to do the following in those out-of region markets:

* Install a local telephone company exchange switch;

* Provide facilities-based local exchange service to at least one unaffiliated business customer or one non-employee residential customer in that market. The term "facilities-

based service" means service provided by SBC utilizing its own switch;

* Collocate facilities in at least 10 wire centers that can be used to provide facilities-based service to customers served by those wire centers; and

* Offer facilities-based local exchange service to all business and residential customers served by the wire centers in the market where SBC is collocated.

Failure to meet the FCC's requirements could result in a payment of up to $40 million for each market.[66] Obviously, a company that is (in effect) bribed to enter a local market under a multi-million dollar penalty structure cannot reasonably be used as evidence of non-impairment by other providers, particularly when the company's "competitive activities" are as trivial as SBC Telecom's.

In addition, SBC has made clear that its interest is with serving enterprise customers, not the mass market.

> Whitacre said the company's main focus in the business market is large enterprise customers.
>
> SBC will aggressively target the $140 billion enterprise market, of which the company controls a 10 percent share, Whitacre said. To better serve enterprises, SBC has built out-of-region networks and established itself in 30 markets outside of its 13-state territory, Whitacre said, and added single contracts and service level agreements.[67]

[66] SBC 2000 Annual Report, page 12.

[67] SBC Records Eighth Straight Quarter of Broadband Growth, Phoneplusmag.com, January 7, 2004 http://www.phoneplusmag.com/hotnews/41h784933.html.

SBC also recently announced a "new" national strategy to utilize a digital connectivity and Voice over Internet Protocol (VoIP) technology to provide data and voice services outside of its region. As SBC explained:

> VoIP could be introduced anywhere, just by purchasing special access [i.e. a DS1 or T-1] from carriers – ILECs or CLECs. This approach is a lot easier than trying to enter another ILEC territory with traditional circuit switched service. [68]

Whether SBC Telecom's "VoIP strategy" ultimately proves as empty as its circuit-switched "national local" plan remains to be seen. What is clear, however, is that its current activities cannot plausibly be deemed "active competition" for mass market services.

Q. Do several of the carriers listed by Verizon as mass market switch triggers actually operate enterprise switches?

A. Yes. As is clear by the carriers' responses to the Department's First Set of Information Requests, specifically D.T.E 1-17, that several of the alleged switch triggers (CTC and RNK) offer service to enterprise customers using DS-1 facilities. As I indicated earlier, it is unlikely that any enterprise carrier will lease not a single analog loop, because even enterprise customers are not "perfectly

[68] *Communications Daily*, December 10, 2003 (quoting SBC Senior Vice-President Dorothy Attwood).

enterprise" and completely digital. But the de minimis levels of analog activity cited by Verizon do not change the basic character of these carriers.

Q. Do the UNE-L based entrants satisfy the minimum criteria to be counted as mass market switching triggers?

A. No. As explained above, the total competitive activity of these claimed trigger candidates is not sufficient to qualify as triggers, as the TRO repeatedly found. Moreover, the total is inflated by loops sold to individual carriers that are disqualified on other grounds. Consequently, the first prong of Verizon's trigger case – the claimed competitive activity of carriers purchasing analog loops from Verizon – must be rejected.

B. The" Non-Loop" Trigger Candidates

Q. You explained earlier that a carrier should be relying on UNE loops in order to qualify as a self-providing switch trigger. Why is this criterion so important?

A. Although the FCC did provide discretion to the states when reviewing non-loop based carriers (consistent with its overall framework of relying on the state

commissions' judgment), there are clear and convincing reasons why the competitive actions of such providers are not useful measures of impairment:

> We find, moreover, that the BOCs' competitive LEC residential line count does not accurately depict the ability of an entering competitive LEC to overcome the barriers to entry generated by the hot cut process, and to serve the mass market using incumbent LEC loops. Specifically, many of the lines cited by the incumbents are served by carriers that, for one reason or another, are able to use their own loops. We have made detailed findings that competitors are impaired without access to incumbents' voice-grade local loops. Indeed, no party seriously contends that competitors should be required to self-deploy voice-grade loops. Thus, for the typical entrant, entry into the mass market will likely require access to the incumbent's loops, using the UNE-L strategy. As described below, this strategy raises operational and economic difficulties associated with accessing the loop. Indeed, as discussed above, a crucial function of the incumbent's local circuit switch is to provide a means of accessing the local loop.[69]

No matter what level of competitive entry the Department sees from cable-based providers, these carriers offer no proof that the impairments faced by other entrants are not preclusive. Consequently, Comcast and RCN do not qualify as self-provisioning switch triggers.

Q. Are there other reasons that would disqualify Comcast specifically?

A. Yes. To begin, Comcast does not generally "self-provide" its own local switching. Rather, in most instances, when Comcast acquired the cable properties

[69] TRO ¶ 439, footnotes omitted, emphasis added.

of AT&T Broadband it also acquired a cable telephony customer base that it serves through a switch-leasing arrangement obtained by AT&T Broadband from AT&T Local Services. That arrangement provides for AT&T Local Services to own and maintain the Local Class 5 circuit switch that previously served the AT&T Broadband (now Comcast) cable telephony customers. This unique circumstance is better seen as evidence of AT&T's withdrawal from cable telephony than Comcast's entry, which has been reporting a decaying telephony base for several quarters. Further, there is also the question as to whether Comcast is likely to continue offering POTs services (to the extent that it does so at all) in the future. Around the time of the announcement of Comcast's planned acquisition of AT&T Broadband it was reported:

> AT&T/Comcast should pass about 11.2 million telephony ready homes by the end of the year [2002]. Comcast, which is currently pushing video-on-demand, had been targeting telephony for 2003. 'They're not touching circuit switched telephony with a 10-foot pole … They'll maintain what AT&T has done because … the expense has already been incurred' [Kenneth Goodman, the Yankee Group]. That expense doesn't include buying switches, which Comcast has repeatedly disdained.[70]

By year-end 2002, Comcast's intention to essentially abandon the analog telephony business became even clearer with the report that:

[70] Jan 7, 2002, Telephony Online "Comcast Pulls Telephony Turnaround." To the extent that Comcast offers VOIP based services in the future, such services are unlikely to satisfy the FCC's requirements concerning quality, cost and maturity for some time. In any event, a debate concerning VOIP alternatives is not ripe for this proceeding.

> Comcast will reverse AT&T Broadband's aggressive telephony acquisition policies and implement its own corporate policy of trailing and then deploying voice over IP services, a senior executive said today. AT&T enlisted more than 1 million telephony customers using conventional constant bit rate [CBR] phone technology. Comcast will maintain these customers, but it won't go looking for more, John Alchin, Comcast's executive vice president and treasurer, said during luncheon presentation at the Warburg Media day in New York City. "There is an element of cutback on telephony," said Alchin, discussing Comcast's plans to spend more than $2 billion to upgrade AT&T Broadband plant next year. "While we haven't yet shared with you the details of the capital plans for 2003, you should not expect us to take the telephony product into a whole host of new markets. It will be a case of supporting the product where it is today without expanding."[71]

Comcast confirmed this view during the first quarter of 2003, announcing that the "number of Comcast Cable phone subscribers is expected to remain flat or decline by up to 150,000 during 2003.[72] In its Third Quarter 2003 Results, Comcast further reiterated its retrenchment from the provision of cable telephony utilizing circuit switched technology. "As a result of the Company's reduced marketing efforts and focus on telephone service profitability, Comcast now expects to lose approximately 175,000 Comcast Cable phone customers this year, a modest adjustment from the original expectation of up to a 150,000 telephone customer decline [announced in the February 27, 2003 guidance]."[73]

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[71] "Comcast Curtailing AT&T Telephony Deployments," Dec 12, 2002, Telephony Online.

[72] Source: http://www.cmcsk.com/phoenix.zhtml?c=118591&p=irol-newsArticle&t=Regular&id=445839&.

[73] 3 Q 2003 Earnings Release, October 30, 2003, at http://www.cmcsk.com/phoenix.zhtml?c=118591&p=irol-newsArticle&t=Regular&id=464588&.

In conclusion, neither the UNE-L based nor the cable-based carriers identified by Verizon satisfy the requirements to be considered self-provisioning switch trigger candidates in Massachusetts. In addition, cable-based providers are poorly situated to serve mass market business customers. As the FCC noted, cable systems do not have the capacity to service large numbers of business customers and were, for the most part, built to serve residential and suburban areas.

V. Next Steps

Q. Should the Department adopt procedures for subsequent hearings following this "9-month" case?

A. Yes. In addition to issues that the Department must address within the 9-month proceeding, the FCC has also requested that states develop procedures to conduct periodic review of the incumbent LECs' unbundling obligations.[74] Given the substantial requirements already outlined for the current proceeding, I recommend that the Department take two actions here, to set the stage for any subsequent investigation.

First, I recommend that the Department initiate a rulemaking to determine the "pre-filing" requirements that an ILEC must satisfy before requesting a reduction

[74] TRO ¶ 424.

in its unbundling obligations. Because the FCC generally requires that a state complete its review of any such request within six months, it will foster administrative efficiency to have agreement in advance as to the information needed to conduct such a review.

Second, I recommend that the Department adopt "prescribed filing windows" that specify when an incumbent LEC may first request a further reduction in its unbundling obligations. The FCC specifically invites states to establish "prescribed filing windows,"[75] and I recommend that the Department do so here. By establishing specific windows for additional review, the Department can provide needed certainty to the industry. Following the FCC's lead, I recommend a two-year quiet period, at the conclusion of this nine-month proceeding, during which the incumbent LEC may not seek further reduction of its unbundling obligations:

> We [the FCC] conclude that reopening every issue on a biennial basis is not in the public interest because it would increase regulatory uncertainty unnecessarily in this area. We also note that in the period between biennial reviews, it will be the policy of this Department not to entertain ad hoc motions or petitions to remove or add UNEs, and we will summarily dismiss such petitions to ensure certainty in the marketplace.[76]

[75] *See*, for instance, TRO, n.1291.

[76] TRO ¶ 710.

By establishing a prescribed filing window for the "next round" of impairment analysis, the Department and the industry can better anticipate their workload over the next two years.

VI. Summary

Q. Please summarize your testimony.

A. Massachusetts is seeing mass market competition emerge statewide, and Verizon is responding aggressively, with service bundles to preserve its market dominance. A very simple truth is captured by the following quotation from John Gaule:

> A complex system that works is invariably found to have evolved from a simple system that works.

The reason that UNE-P is under pressure from the incumbent LECs is because it works. Given time, local competition will transform industry pricing (through, for instance, the elimination of distance from telephone rates), and it will set the foundation for a competitive future using the legacy POTS network as its baseline.

The Department should stay the course. There is no reason – and no basis – to overturn the FCC's national impairment finding in Massachusetts.

Q. Does this conclude your initial testimony?

A. Yes.