AFFIDAVIT

STATE OF CALIFORNIA

COUNTY OF ALAMEDA

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Christopher J. Pleatsikas, who, being by me first duly sworn deposed and said that:

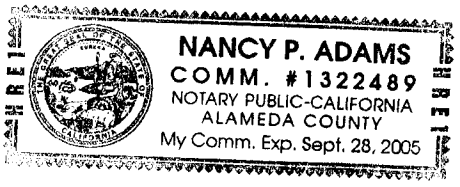
He is appearing as a witness before the Kentucky Public Service Commission in Case No. 2003-00379, Review of Federal Communications Commission's Triennial Review Order Regarding Unbundling Requirements for Individual Network Elements, and if present before the Commission and duly sworn, his surrebuttal testimony would be set forth in the annexed testimony consisting of 22 pages and 0 exhibits.

# of pages and # of exhibits to be filed in later

Christopher J. Pleatsikas

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 6th DAY OF APRIL, 2004

Nancy P Adams
Notary Public



BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE

KENTUCKY PUBLIC SERVICE COMMISSION

DOCKET NO. 2003-00379

SURREBUTTAL TESTIMONY OF

DR. CHRISTOPER J. PLEATSIKAS

APRIL 13, 2004

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is Christopher J. Pleatsikas.

Q. ARE YOU THE SAME CHRISTOPHER J. PLEATSIKAS WHO FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I respond to comments regarding market definition made by Dr. Bryant (on behalf of MCI), Mr. Gillan (on behalf of CompSouth), Mr. Klick (on behalf of AT&T), and Mr. Bradbury (on behalf of AT&T).

Q. PLEASE PROVIDE YOUR OVERALL VIEW OF THE COMMENTS MADE BY THESE PARTIES.

A. I have several general observations regarding the comments and recommendations made by these parties. First, the various CLEC recommendations are inconsistent with one another in terms of geographic area. Dr. Bryant claims that each individual customer represents the appropriate economic market, although, he contends, a wire center would be administratively simpler. In contrast, Mr. Gillan recommends that the entire service footprint, or else the LATA should be considered a market. Thus, while Mr. Gillan disparages the use of UNE Rate Zone/CEAs as "gratuitously granular," Dr. Bryant and Mr. Bradbury both appear to advocate the even more granular wire center-based definition.

Second, no witness proposing a wire center-based definition has provided a compelling economic rationale to explain why wire center boundaries should be used as the basis for defining relevant geographic markets in this instance. While there is no question that certain data are available by wire center, this does not constitute an economic rationale for defining a market, particularly when data are

as readily available for aggregations of wire centers. In addition, the FCC's guidance on this issue is inconsistent with the view that individual wire centers would generally be appropriate relevant markets. That is, no witness proposing the use of wire centers as a basis for defining geographic markets has explained how, absent any further market-based analysis, and as a general economic proposition, such a definition can be reconciled with the TRO's clear guidance that "[S]tates should not define the market so narrowly 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." (TRO 495 (emphasis added))

Third, some witnesses have responded to the UNE Rate Zone/CEA definition by separately criticizing the relevance of CEAs and of UNE Zones. In my opinion, these criticisms are misguided, because these concepts are not used *separately* to determine a relevant market. Instead, both concepts are used together to provide an economically reasonable definition of the market. Thus, any criticisms that either CEAs or UNE Zones are, by themselves, too "large," too "vast," or too "heterogeneous" [in demand] are not relevant to my analysis.

Finally, in my opinion, there is an undercurrent in the testimony of the CLEC witnesses that favor using wire center boundaries as the basis for defining the market that, unless all issues relating to the ability of a CLEC to compete profitably in each and every wire center are definitively resolved, markets must be defined

according to the smallest possible geography. In this manner, their testimony implicitly appears to seek to turn the impairment analysis on its head. In other words, they contend that one should conduct the impairment analysis at the wire center level first, then (possibly) decide, on the basis of those results, the extent of the geographic market. This is inconsistent with sound economic analysis and clearly at odds with the direction in the TRO that "State commissions *must first define the markets in which they will evaluate impairment* by determining the relevant geographic area to include in each market." (TRO 495 (emphasis added))

II. RESPONSE TO DR. BRYANT

Q. DR. BRYANT CLAIMS THAT A CEA IS OVERLY "BROAD." (BRYANT REBUTTAL 3) DO YOU PROPOSE USING A CEA AS THE RELEVANT MARKET DEFINITION?

A. No, I do not. Dr. Byant contends that "[i]f a market as broad as a CEA is defined, differences in profitability in wire centers will be obscured, and the impairment analysis will thus fail to capture any areas where the CLECs cannot profitably provide service." (Bryant Rebuttal 3) There are two problems with this statement. First, it is irrelevant to my analysis, because I did not propose the CEA as an appropriate geographic market – rather, I proposed the intersection of CEAs and UNE Zones, which leads to a smaller area than the CEA as a whole. Second, Dr.

Bryant seems to imply that there is an additional test in the TRO that CLECs must be able to profitably provide service to all customers within the geographical area. The FCC's explicit *Errata* to the Order clarified that the TRO does *not* require that, for the purposes of the switching triggers, self-provisioning competitors must be ready and willing to serve all retail customers in the market.

Q. DR. BRYANT CONTENDS THAT THE USE OF WIRE CENTERS PROVIDES MORE ACCURACY REGARDING THE ABILITY OF CLECS TO OFFER SERVICE. (BRYANT REBUTTAL 7-8) PLEASE COMMENT.

A. In my opinion, Dr. Bryant's reasoning is faulty on this point. The economies of scale and scope available to CLECs in providing switch-based services are not, in general, consistent with using wire center boundaries as the basis for defining markets in this case. Therefore, by defining markets in this manner, the analysis would simultaneously become more complex and less accurate (as the market definition would obscure supply-side substitutability). Defining markets in this manner could also be more time consuming and costly. Disagreement would inevitably arise as at least some parties would attempt to compensate for the overly-narrow market definition by citing factors that reflected supply-side substitutability over a broader area, particularly factors associated with some of the scope and scale economies that would be available to efficient CLECs.

In any case, Dr. Bryant's contentions regarding the use of wire center boundaries as the basis for market definition appear to be based in large part on his view that location specificity is an important factor for defining markets in this case. However, while location specificity may be relevant to understanding the interface between the end user and the local loop, it is not particularly relevant to understanding the interface between the end user and switching, which is the focus of the impairment analysis. Stated more simply, Dr. Bryant's discussion of location specificity is not relevant to the end user when choosing a vendor of switching services because the location of the switch providing those services is not constrained (except by transport costs) by the location of the end user or the location of the wire center serving the end user. Thus, Dr. Bryant's discussion of location specificity seems more directed to the market for loop services than the market for switching services.

Q. DOES THE FACT THAT AT LEAST SOME CLECS MAY EVALUATE INVESTMENTS IN EACH WIRE CENTER TO DETERMINE THE POTENTIAL PROFITABILITY OF THESE INVESTMENTS IMPLY THAT EACH WIRE CENTER MUST BE A RELEVANT ECONOMIC MARKET?

A. No, it does not. Any company evaluates discrete investments to determine their expected contribution to profits. The task in defining relevant markets goes beyond such simple evaluations to discern factors and information in the firm's decision-

making process that may relate to economic substitutability. It is these factors and information (along with information about demand characteristics) that must be utilized in conjunction with economic principles and theory to enable the analyst to identify relevant economic markets. Thus, as I have emphasized in my testimony, relevant economic markets are determined based on demand- and supply-side substitutability. While substitutability can, in some instances, be informed by the nature and content of the financial analyses conducted by firms, the nature and content of these financial analyses are insufficient in and of themselves to establish the boundaries of relevant markets.

To understand this more fully, an example is useful. Consider a gasoline retailer deciding whether to develop a new site for a retail outlet. The retailer will likely evaluate the potential contribution to profits of any individual site before deciding to expand its operations. However, the area served by any particular site bears no necessary relationship to the relevant geographic market for gasoline retailing.

Q. DR. BRYANT SUGGESTS THAT BECAUSE IT MAY BE UNECONOMIC FOR CLECS TO PROVIDE SELF-PROVISIONED SWITCHING TO SOME SMALLER WIRE CENTERS, THIS IMPLIES THAT WIRE CENTERS CONSTITUTE RELEVANT MARKETS. PLEASE COMMENT.

A. A fundamental problem in Dr. Bryant's assertions in this regard is that he seeks to define markets based on the outcome of some type of impairment analysis rather than, as I have done, based on economic substitutability and the guidance provided by the FCC. As I noted above, Dr. Bryant's views are contrary to sound economic principles, which require one to define a relevant market before assessing conduct and/or structure within any markets. Also as I have noted above, neither Dr. Bryant nor others have provided a sound economic basis for using wire center boundaries as the basis for defining relevant geographic markets for the purpose of conducting the impairment analysis.

Q. DR. BRYANT CONTENDS THAT THERE ARE COSTS THAT ARE NOT CAPTURED BY THE UNE RATE ZONE/CEA CONCEPT, AND THAT THESE COSTS SHOULD AFFECT THE MARKET DEFINITION. (BRYANT REBUTTAL 3) PLEASE RESPOND.

A. Dr. Bryant lists a number of features that may vary across different areas within the same geographic market, such as the number of addressable lines, the number of lines that are accessible by DSL or that are served by DLC, the relative number of business and residential lines, and customer demographics. While I do not seek to comment on all of the technical issues here, I will state that it is normally the case that different parts of the same economic market are not, and need not be, homogeneous in all respects.

Moreover, not all of Dr. Bryant's items necessarily have to do with market definition. Some of his factors appear to have more to do with market structure. For example, an area with a large number of customer lines (or a large number of lines accessible by DSL) may allow *more firms* to economically enter than would an area with a smaller number of lines (that is, the area with more lines may allow more firms to achieve minimum efficient scale), but this variation would not necessarily be a factor in determining the geographic contours of the relevant market (or markets).

The UNE Rate Zone concept, as I understand it, is designed to capture the variation in the cost of the loops. To the extent that other costs or revenues vary systematically with UNE Rate Zone, they will also be accounted for, at least in part. More importantly, from the perspective of supply-side substitutability, BellSouth's witness Wayne Gray has stated that some of the most important wire center-related cost factors for an efficient CLEC to consider in deciding whether to offer switched-based mass-market services are (1) loop costs, (2) transport costs and (3) collocation costs.

The UNE Zone concept, of course, captures the variation in loop costs directly. Furthermore, Mr. Gray has also stated that transport costs exhibit economies of scale and collocation costs do not vary much across different wire centers. Thus,

wire centers with higher line densities and higher customer counts would tend, all other things being equal, to have lower per customer transport and collocation costs. Since line counts and densities tend to be higher in UNE Zone 1 than in UNE Zone 2 and in UNE Zone 2 than UNE Zone 3, the UNE Zone concept tends to capture at least some of the variation in per customer transport and collocation costs across the State.

Finally, certain cost factors are not noted in Dr. Bryant's list of factors. For example, he does not include the costs of marketing and advertising, which tend to support wider areas than wire centers as relevant economic markets.

My recommendation to define the market as the intersection of the UNE Rate Zone and the CEA is a reasonable "middle ground" attempt to balance both the community-of-interest aspect of, for example, marketing/advertising costs as well as some of the network-oriented cost factors that can influence substitutability in supply. Dr. Bryant's definition appears to focus on some network-oriented factors that relate more to market structure than demand- or supply-substitutability, virtually ignoring such "community-of-interest" factors as mass-market marketing and advertising costs.

III. RESPONSE TO MR. GILLAN

Q. MR. GILLAN CLAIMS THAT HE HAS "NEVER COME ACROSS ANY MENTION" OF CEAS (GILLAN REBUTTAL 9) AND THAT THEY "HAVE NOTHING TO DO WITH TELECOMMUNICATIONS." (GILLAN REBUTTAL 4, 9) PLEASE RESPOND.

A. Mr. Gillan may not be familiar with the term, but the FCC uses the CEA concept in connection with telecommunications. According to 47 CFR 101.1401, multichannel video distribution and data service (MVDDS) was set to be licensed on the basis of CEAs. That rule stated in part that "Each CEA consists of a single economic node and the surrounding counties that are economically related to the node." In July 2003 the FCC ultimately decided to adopt a proprietary geographic area called "Designated Market Areas" ("DMAs") for licensing MVDDS. (Third Report and Order, FCC ET Docket No. 98-206, FCC 03-152, Released July 7, 2003). In discussing its decision, the FCC found that, with regard to fixed (as opposed to wireless) services, "DMAs and CEAs are equally advantageous because they are both local in nature." (Third Report and Order, p. 4). Thus, the FCC recognizes the economic basis for markets defined using the CEA concept. In addition, the FCC's Wireless Bureau provides some tools for those interested in bidding for wireless spectrum to map the CEAs as well as other geographic areas, such as MSAs. (These are found online at www.fcc.gov/oet/info/maps/areas/.) Thus, contrary to Mr. Gillan's assertions, the FCC considers CEAs to be useful for defining markets in telecommunications. In any event, whether Mr. Gillan is

familiar with the CEA concept is hardly a reasonable basis for critiquing a proposed market definition. A concept should be evaluated on its own merits, and not on whether a particular party happens to be familiar with the concept. In my opinion, the relevant consideration in this instance is whether the intersections of UNE Rate Zones and CEAs reasonably represent the relevant markets for the purposes of conducting the requisite impairment analyses. Finally, I note that Dr. Robert Loube (on behalf of the Public Service Commission of South Carolina) agrees that the markets should be defined as the intersections of UNE Rate Zones and CEAs. (Loube South Carolina Rebuttal 2)

Q. MR. GILLAN CLAIMS THAT CEAS ARE NOT THE BUREAU OF ECONOMIC ANALYSIS'S "FINAL PRODUCT" AND ARE NOT SUFFICIENTLY LARGE FOR THE BEA'S ECONOMIC PROJECTIONS. (GILLAN REBUTTAL 9-10) PLEASE COMMENT.

A. In making this claim, Mr. Gillan confuses the different purposes of CEAs and the (generally) larger BEA "Economic Areas." As the article appended to Mr. Gillan's rebuttal testimony ("Redefinition of the BEA Economic Areas," by Kenneth P. Johnson, *Survey of Current Business*, February 1995, pp. 75-81) notes, CEAs were defined as "a single economic node and the surrounding counties that are economically related to the node." Thus, CEAs are not, in an economic sense, "middle step[s]" but rather defined areas with an economic community of interest.

Most are defined with MSAs as their core. The CEAs were then combined into BEA Economic Areas so that "each economic area is economically large enough to be part of BEA's local area economic projections program." In other words, the BEA determined that, for the purposes of its own particular economic forecasts, many of the CEAs were too small to permit the development of reliable forecasts. However, this does not in any way undermine the economic rationale for using CEAs to define relevant geographic markets in this context. In fact, if anything this usage may be supported by footnote 5 in the Johnson article, which states: "Data for CEAs can be used by government agencies for administering regulatory programs for small areas and by businesses for developing marketing programs for small areas."

Q. PLEASE COMMENT ON MR. GILLAN'S CRITIQUE OF UNE RATE ZONES. (GILLAN REBUTTAL 10-11.)

A. Mr. Gillan claims that UNE prices vary modestly between UNE-L and UNE-P and so UNE price variation has little effect on the relative ability of a CLEC to use its own switching. (Gillan Rebuttal 10-11.) However, this criticism ignores two important issues relevant to market definition. First, of course, I have not defined markets *solely* on the basis of UNE Rate Zones. The rationale for my use of CEAs in conjunction with UNE Rate Zones was to account for factors that affect supply-side substitutability, including, but not limited to, the differences in loop costs

captured by the intersection of UNE Rate Zones and CEAs, and also to recognize that there is a broader set of costs such as marketing and advertising costs that affect the relevant geographic scope of the market.

Second, the objective of the market definition exercise in this case is to provide an appropriate economic context in which to evaluate whether CLECs are impaired in offering switch-based services to mass-market customers, not to carry out a hypothetical comparison between UNE-L and UNE-P CLECs. As I noted in my comments on Dr. Bryant's testimony, this objective is relevant to the market definition exercise. For this reason, the fact that UNE prices do not vary significantly for UNE-L as compared with UNE-P is not an important consideration in market definition in this case. What is important is that supply-side substitutability will likely be affected for CLECs offering UNE-L as a result of the differences in costs associated with offering service in different UNE Zones. Mr. Gillan's criticism appears to ignore this issue.

Q. PLEASE COMMENT ON THE USE OF LATAS IN DEFINING GEOGRAPHIC MARKETS.

A. LATAs, by themselves, are unlikely to represent relevant geographic markets because it is likely that they do not adequately reflect differences in supply substitutability. For example, there may not be reasonable substitutability in supply

between UNE Zone 1 and UNE Zones 2 and 3 within a particular LATA. It is my understanding that LATAs, which were created by Judge Greene following the breakup of AT&T, correspond loosely to Standard Metropolitan Statistical Areas. An advantage of using UNE Rate Zones divided by CEAs rather than MSAs or LATAs (without reference to UNE Rate Zones) is that the UNE Rate Zone/CEA approach accounts for *both* differences in loop and other costs *and* for economies of scale and scope related to factors such as mass-market advertising costs.

IV. RESPONSE TO MR. KLICK

Q. MR. KLICK CLAIMS THAT THE "USE OF CEAS RESULTS IN A MARKET DEFINITION THAT IS NOT RELEVANT AND POTENTIALLY TOO BROAD." (KLICK REBUTTAL 22) PLEASE RESPOND.

A. Contrary to Mr. Klick's claims, I did not recommend the use of CEAs, by themselves, as an appropriate geographic market definition for assessing impairment in Kentucky. Instead, I recommend *UNE Rate Zones, subdivided by CEAs*, as an economically sound basis for defining geographic markets. The distinction is important, and Mr. Klick's arguments regarding CEAs, by themselves, are therefore not relevant to my analysis.

I also note that Mr. Klick apparently prefers the use of LATAs over the use of CEAs in conjunction with UNE Zones at least in part because the "use of CEAs results in a market definition that is not relevant and potentially too broad." (Klick Rebuttal 22) This is a curious preference since there are parts or all of eleven CEAs in Kentucky and parts or all of only seven LATAs. Therefore, simple mathematics determines that the average geographic area of a CEA in Kentucky is smaller than the average geographic area of a LATA in Kentucky. More relevantly, the market definition methodology I have developed defines the geographic markets as the UNE Zones subdivided by the CEAs. These Kentucky markets are clearly smaller on average in terms of geographic area than the average geographic area of a LATA in that state. As a consequence, Mr. Klick's assertion in this instance is factually incorrect and his preference for LATAs as the basis for defining relevant geographic markets, at least on this basis, is without foundation.

Q. MR. KLICK ASSERTS THAT YOU HAVE PROVIDED NO RATIONALE FOR USING THE CEA CONCEPT AS PART OF THE METHODOLOGY YOU USE TO DEFINE RELEVANT MARKETS "OTHER THAN (1) IT RESULTS IN MARKETS THAT ARE MORE GRANULAR THAN RELYING ON UNE ZONES, ALONE, AND (2) CEAS COVER AN ENTIRE STATE." (KLICK REBUTTAL 21). PLEASE RESPOND.

A. Mr. Klick's assertion is not correct. As I stated in my testimony, I defined relevant geographic markets in this case as UNE Zones subdivided by CEAs based on demand- and supply-side substitutability, the two paramount factors recognized by economists as the basis for market definition, and on the guidance provided by the FCC. It is certainly true that CEAs, in the aggregate, cover the entire state. More importantly, CEAs provide a consistent, economic basis for subdividing the state into different areas. This is one advantage of using CEAs as one element (the other being UNE Zones) of the methodology I used for developing the relevant geographic markets compared with using LATAs, as Mr. Klick prefers.

Moreover, and more importantly, the CEA concept has particular applicability to developing relevant geographic markets because CEAs conform much more closely to media markets than MSAs or LATAs, two other concepts that have been proposed as bases for defining relevant markets in this case. Media markets are an important determinant of geographic market definition because the costs suppliers incur to obtain customers (which are related to marketing and promotional costs) are an important factor when CLECs decide whether to offer service in a particular area.

Q. MR. KLICK HAS SUGGESTED THAT LATAS ARE A MORE APPROPRIATE BASIS FOR DEFINING GEOGRAPHIC MARKETS IN THIS CASE THAN UNE ZONES SUBDIVIDED BY CEAS BECAUSE THE

BELLSOUTH POTENTIAL DEPLOYMENT MODEL ASSUMES THAT A SWITCH IS PLACED IN EACH LATA. (KLICK REBUTTAL 22) PLEASE COMMENT.

A. Mr. Klick's view is erroneous in several respects. First, he is implicitly basing his market definition on the elements of the impairment analysis, not on economic substitutability and the FCC's guidance, which are the proper foundations for market definition analysis in this case. Thus, Mr. Klick has implicitly turned the impairment analysis on its head – using information from the impairment analysis to define markets rather than using the geographic market definition as an input to the impairment analysis.

Second, he has based his view on the fact that the placement and geographic area served by a switch "reflect[s] the cost of self-provisioning switches for various groups of customers." (Klick Rebuttal 22) However, the purpose of the market definition task for impairment analysis is not to define the market for switches (an upstream input to the downstream service of interest), as Mr. Klick implies, but to define the market for the provision of telecommunications services, including local exchange services, to mass-market customers by carriers using self-provisioned switches. Thus, the placement of the switches themselves may provide useful information for defining the relevant market, but is not determinative for defining the appropriate relevant geographic market in this instance. As an analogy, the

placement of an oil refinery may be useful information in defining a relevant market for gasoline retailing, but the geographic area served by the refinery need not (and generally does not) correspond to the relevant geographic market(s) for gasoline retailing because other factors affect economic substitutability.

Third, to the extent that Mr. Klick implies that a geographic market must exhaust all sources of economies of scale and scope, he is incorrect as a matter of economics and, in my opinion, in relation to the guidance provided by the FCC in paragraph 495 of the TRO. If it were true that all economies of scale and scope must be exhausted in a market, then the coverage of CLEC billing systems, some of which are national in scope, would indicate that even larger markets than LATAs were required.

Fourth, while Mr. Klick acknowledges that "use of UNE loop rate zones obviously gives some effect to variations in factors affecting a CLEC's ability to serve a group of customers and its ability to target…" (Klick Rebuttal 22), his market definition completely ignores this information. That is, his proposed use of LATAs as relevant markets does not take into account these cost differences across UNE zones.

V. RESPONSE TO MR. BRADBURY

Q. MR. BRADBURY CLAIMS THAT YOU MAKE AN "OUTLANDISH [CLAIM] THAT THE WIRE CENTER CONCEPT HAS NO MEANING AND THAT WHERE THE CUSTOMER IS LOCATED IS UNNECESSARY INFORMATION IN DETERMINING WHETHER CLECS CAN USE THEIR OWN SWITCHING FACILITIES TO ECONOMICALLY AND EFFICIENTLY SERVE MASS MARKET CUSTOMERS." (BRADBURY REBUTTAL 14.) PLEASE RESPOND.

A. I did not claim in my direct testimony that the "wire center concept has no meaning." Indeed, as Mr. Bradbury is apparently aware based on his quotation of my direct testimony, what I actually stated was "Therefore, the wire center concept is not relevant to market definition in this context, and specifically not economically relevant in terms of how CLECs provision services to their end users." In my opinion, aspects of Mr. Bradbury's testimony on CLEC network architecture actually support my views regarding the relevance of wire center boundaries to geographic market definition in this instance. I note that Mr. Bradbury leads off his discussion on network architecture by acknowledging that CLEC networks are not configured in the same manner as BellSouth's network. He specifically states that, compared to the traditional (BellSouth) network, CLECs are able to use fewer switches than does BellSouth to provide service to a particular geographic area. It is precisely this point – i.e., that AT&T has chosen a network architecture approach different from BellSouth's approach (e.g., to serve customers

in a wider geographic area with a single switch) – that I make in my own direct testimony.

I conclude that this fact provides evidence that the geographic market definition in Kentucky should not be based on the BellSouth wire center boundaries because the switch-based CLEC's decision to offer service in a geographic area is not limited by the area covered by the BellSouth wire center. The reason is that AT&T (or any CLEC) is not obligated to install a separate switch to customers in the different wire centers where it offers (or could offer) switch-based services. One of the principles that I refer to frequently herein and in my previously filed testimony in this matter is that supply substitutability is an important determinant of geographic market definition. The fact that CLECs such as AT&T are capable of serving customers in multiple wire centers from a single switching location is one indicator that using the boundaries of individual wire centers as the basis for geographic market definition is inappropriate because it does not consider supply-side substitutability (e.g., because CLECs are able to take advantage of scale and scope economies, including switching, that allow them to serve much larger areas than an individual wire center).

Q. MR. BRADBURY CLAIMS THAT "LANGUAGE IN THE TRO, AT ¶ 501, ¶ 517, AND ¶ 520, SUPPORTS THE LOGICAL PROPOSITION THAT FOR IMPAIRMENT TO FOUND TO BE NON-EXISTENT, COMPETITION

MUST EXIST THROUGHOUT THE WHOLE MARKET, NOT ONLY IN PORTIONS OF THE MARKET." (BRADBURY REBUTTAL 15) PLEASE COMMENT.

A. While the paragraphs in the TRO cited by Mr. Bradbury provide general instructions about the triggers and potential deployment tests, in my view they provide no obvious support for Mr. Bradbury's contention that service must be ubiquitous throughout the market for a finding of non-impairment. The fact that Mr. Bradbury offers no specific guidance as to how he believes these paragraphs provide support for a "ubiquity" test also suggests that no such support exists.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.