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1		BEFORE THE	
2	FLOR	IDA PUBLIC SERVICE COMMISSION	
3		DOCKET NO. 030851-	TP
4	In the Matter	of f	
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6	IMPLEMENTATION OF R ARISING FROM FEDERA	L COMMUNICATIONS	
7	COMMISSION'S TRIENN LOCAL CIRCUIT SWITC		2 52 52
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13		VOLUME 17	
14		Pages 2249 through 2387	
15			
16	PROCEEDINGS:	HEARING	
17			
18	BEFORE:	CHAIRMAN BRAULIO L. BAEZ	
19		COMMISSIONER J. TERRY DEASON COMMISSIONER LILA A. JABER	
20		COMMISSIONER RUDOLPH "RUDY" BRADI COMMISSIONER CHARLES M. DAVIDSON	
21			
22	DATE:	Thursday, February 26, 2004	DOCUMENT NI MRER-DATE
23		Commenced at 9:00 a.m.	0 <b>5 (</b>
24	TIME:	Commenced at 9:00 a.m.	00
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1	PLACE:	Betty Easley Conference Center	
2		Room 148 4075 Esplanade Way	
3		Tallahassee, Florida	
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8			
9	APPEARANCES:	(As heretofore noted.)	
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1	I N D E X	
2	WITNESSES	
3	NAME :	PAGE NO.
4	BEN JOHNSON	PAGE NO.
5	Direct Examination by Mr. Beck	2253
6	Prefiled Rebuttal Testimony Inserted Prefiled Surrebuttal Testimony Inserted	2255 2256 2305
7	Cross Examination by Mr. Susac	2305
8	Direct Presentation by Dr. Johnson	2329
9	Opening Statement by Mr. Twomey	2349
10	opening beatement by mr. iwomey	2349
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	FLORIDA PUBLIC SERVICE COMMISSION	
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l		EXHIBITS		
2	NUMBER:		тр	ADMTD.
3				
4	103	Exhibits attached to Witness Ben Johnson's prefiled testimony	2255	2385
5	104	(Late-filed) Universal Data Service Information	2382	
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		FLORIDA PUBLIC SERVICE COMMISS	SION	

PROCEEDINGS 1 2 (Transcript follows in sequence from Volume 16.) 3 CHAIRMAN BAEZ: Okay, we'll go back on the record. Mr. Beck, how do we need to proceed with you? 4 MR. BECK: The prehearing order allocates an hour for 5 6 the OPC and the AARP, and we are going to start presenting Dr. 7 Johnson and his testimony, and Dr. Johnson, after moving his testimony and exhibits, we are going to also make a 8 9 presentation. After that, AARP plans to do an opening 10 statement, but within the hour that is allocated to us. 11 CHAIRMAN BAEZ: That's fine. 12 MR. BECK: Dr. Johnson, have you previously been 13 sworn? THE WITNESS: No, I have not. 14 15 CHAIRMAN BAEZ: Doctor, will you please stand. And, 16 by the way, since we are going to start rushing, everybody that 17 hasn't been sworn on the previous direct case, any remaining witnesses, if you can just stand and we will swear you all in 18 19 at once. Whoever is in the room. 20 (Witnesses sworn.) 21 CHAIRMAN BAEZ: All right. You're sworn. 22 BEN JOHNSON, Ph.D. 23 was called as a witness on behalf of the Citizens of the State of Florida, and having been duly sworn, testified as follows: 24 25 DIRECT EXAMINATION FLORIDA PUBLIC SERVICE COMMISSION

1	BY MR. BECK:
2	Q Would you please state your name?
3	A Ben Johnson.
4	Q And did you cause rebuttal and surrebuttal testimony
5	to be filed in this case?
6	A Yes, I did.
7	Q And did you also distribute an errata sheet to your
8	rebuttal and surrebuttal testimony?
9	A Yes.
10	Q Do you have any other changes to either your rebuttal
11	or your surrebuttal testimony?
12	A Yes. At Page 13 of my rebuttal testimony, at Line
13	12, the ID within brackets should not be there. And the
14	material from Lines 9 through 12 should not be single spaced or
15	indented, because it is not actually a direct quote from the
16	horizontal merger guidelines. That is the only additional
17	correction I have.
18	Q Okay. With the changes contained in your errata
19	sheet and the change you just made now, if I were to ask you
20	the same questions contained in your rebuttal and surrebuttal
21	testimony today, would your answers be the same?
22	A Yes, they would.
23	MR. BECK: Mr. Chairman, I would move Dr. Johnson's
24	rebuttal and surrebuttal testimony into the record as though
25	read.

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FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN BAEZ: Show Dr. Johnson's rebuttal and surrebuttal testimony entered into the record as though read. And, Dr. Johnson, did you also have two exhibits attached to your rebuttal testimony and a third exhibit attached to your surrebuttal testimony? Α Yes. MR. BECK: Mr. Chairman, I would ask that they be marked as a composite exhibit for identification. CHAIRMAN BAEZ: Show the exhibits accompanying Dr. Johnson's rebuttal and surrebuttal testimony marked as Composite Exhibit 103. (Composite Exhibit 103 marked for identification.) FLORIDA PUBLIC SERVICE COMMISSION

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1	Intro	duction
2		
3	Q.	Would you please state your name and address?
4	А.	Ben Johnson, 2252 Killearn Center Boulevard, Tallahassee, Florida 32309.
5		
6	Q.	Does your testimony include any Exhibits?
7	А.	Yes. Exhibit BFJ-1 is an Appendix that describes my qualifications in regulatory and utility
8		economics. I have also attached Exhibit No. BFJ-2 which contains 7 maps. These maps were
9		prepared under my supervision and are true and correct to the best of my knowledge.
10		
11	Q.	What is your purpose in making your appearance at this hearing?
12	A.	I am testifying on behalf of the Citizens of the State of Florida. My testimony will rebut certain
13		portions of the testimony filed on behalf of BellSouth Telecommunications, Inc. (BellSouth),
14		Sprint-Florida/Sprint Communications LP (Sprint), and Verizon Florida Inc. (Verizon). More
15		specifically, my testimony rebuts the testimony of BellSouth witness Pleatsikas. It is also offered
16		in rebuttal of BellSouth witnesses Aron and Tipton, since they rely on Mr. Pleatsikas's market
17		definition. Similarly, my testimony rebuts the testimony of Verizon witness Fulp and Sprint
18		witness Staihr, particularly with regard to market definitions. My testimony also effectively
19		rebuts portions of the testimony of other parties, to the extent these parties have also proposed,

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1		or accepted, flawed market definitions.
2		In general, my testimony is focused on the appropriate definition of the "market" for
3		purposes of evaluating the extent to which competitors would be "impaired" in attempting to
4		serve mass market customers if unbundled switching were no longer available from incumbent
5		carriers.
6		
7	Q.	Would you please describe how your testimony is organized?
8	A.	Yes. I agree with the position taken by BellSouth in its direct testimony regarding the proper
9		sequencing of analyses in this proceeding:
10		
11 12 13 14 15 16 17 18 19 20		A state commission must first define the appropriate geographic market to which it will apply the impairment analysis outlined in the TRO. Next, state commissions must determine the definition for the class of customers that the FCC identified as "mass market." Once appropriate definitions of the relevant geographic areas and "mass market" customers are determined, the FCC requires state commissions to apply two "triggers" tests to see whether CLECs are impaired with respect to serving mass market customers in each defined geographic market. [Ruscilli Direct, December 4, 2003, p. 4]
21		Consequently, I attempt to follow this sequencing in this rebuttal testimony. In the first section,
22		I briefly sketch the background of this investigation, focusing on the Commission's activities and
23		certain portions of the Triennial Review Order (TRO) issued by the Federal Communications
24		Commission (FCC). In the second section, I critique the BellSouth, Sprint, and Verizon

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1		proposals for defining the market, and briefly discuss some alternative approaches. In the third
2		section, I consider evidence available to the Commission which will enable it to define the mass
3		market more appropriately than has been proposed by the incumbent LECs. In the fourth
4		section, I discuss a concern that was not adequately considered by the witnesses for BellSouth,
5		Sprint and Verizon-the importance of recognizing distinctions between business and residential
6		customers-distinctions that are crucially important in reaching an appropriate result in this
7		proceeding. In the fifth section, I briefly set forth my reasons why I believe the Commission
8		should reject the proposals of the incumbent LECs.
9		
10	Q.	Would you please briefly summarize the thrust of your testimony?
11	A.	Yes. In general, I stress the importance of properly defining the market, and the risk of
11 12	A.	Yes. In general, I stress the importance of properly defining the market, and the risk of inadvertently reaching conclusions concerning impairment that are valid for mass market small
	A.	
12	A.	inadvertently reaching conclusions concerning impairment that are valid for mass market small
12 13	A.	inadvertently reaching conclusions concerning impairment that are valid for mass market small business customers but are not valid for residential customers. All of the geographic market
12 13 14	A.	inadvertently reaching conclusions concerning impairment that are valid for mass market small business customers but are not valid for residential customers. All of the geographic market definitions proposed in the direct testimony of BellSouth, Verizon and Sprint–including MSAs,
12 13 14 15	Α.	inadvertently reaching conclusions concerning impairment that are valid for mass market small business customers but are not valid for residential customers. All of the geographic market definitions proposed in the direct testimony of BellSouth, Verizon and Sprint–including MSAs, CEAs and UNE rate zones–are too broad. Among other problems, these proposals greatly
12 13 14 15 16	A.	inadvertently reaching conclusions concerning impairment that are valid for mass market small business customers but are not valid for residential customers. All of the geographic market definitions proposed in the direct testimony of BellSouth, Verizon and Sprint–including MSAs, CEAs and UNE rate zones–are too broad. Among other problems, these proposals greatly increase the risk of inadvertently reaching a conclusion of non-impairment that is only valid with

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1		carriers (CLECs) from serving residential customers. In other words, CLECs should be
2		allowed to continue using switching UNEs to serve residential customers wherever it is not
3		economically feasible for them to serve these customers using their own switch.
4		Second, considering differences in revenue and profit levels, residential and small
5		business mass market customers should be studied separately, to the extent feasible. In its
6		TRO, the FCC recognized the potential importance of demand differences (e.g., average
7		revenue levels) and it asked state commissions to perform granular analyses. If the Commission
8		follows the approach advocated by BellSouth, Verizon and Sprint, and ignores important
9		differences between residential and small business mass market customers, it may develop an
10		impairment analysis that is not sufficiently granular in nature, or that reaches conclusions that are
11		only valid for small business customers (or only some small business customers)-conclusions
12		that are <u>not</u> valid for most residential and very small business customers.
13		
14	Back	ground
15		
16	Q.	Could you begin your background discussion by explaining how the FCC defines the
17		mass market?
18	А.	Yes. The FCC defines the mass market as follows:
19		

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1 2 3 4 5 6		The mass market for local services consists primarily of consumers of analog "plain old telephone service" or "POTS" that purchase only a limited number of POTS lines and can only economically be served via analog DS0 loops. [TRO, ¶ 459]
7	Q.	What has the FCC found regarding mass market switching specifically?
8	A.	In the TRO, the FCC found that, on a national basis, "competing carriers are impaired without
9		access to unbundled local circuit switching for mass market customers." [Id.] The FCC's
10		conclusion was based upon its finding that "operational and economic factors associated with
11		the current hot cut process used to transfer a loop from one carrier's switch to another's serve
12		as barriers to competitive entry in the absence of unbundled switching" [Id., ¶460] However,
13		the FCC recognized that "a more granular analysis may reveal that a particular market is not
14		subject to impairment in the absence of unbundled local circuit switching." [Id., ¶461]
15		Accordingly, the FCC required state commissions to undertake a market-by-market
16		examination, to determine whether carriers requesting the mass market switching UNE would
17		be impaired if they were not given access to it in a given market. [Id., $\P$ 461] The FCC
18		established two "triggers" for commissions to apply in their impairment analysis.
19		
20 21 22 23		First, where a state determines that there are three or more carriers, unaffiliated with either the incumbent LEC or each other, that are serving mass market customers in a particular market using self- provisioned switches, the state must find "no impairment" in that

5

market. [Id., ¶ 462]

1 2 3 4 5		Second, a state must find no impairment when it determines that there are two or more competitive wholesale suppliers of unbundled local circuit switching, unaffiliated with the incumbent or each other. [Id., $\P$ 463]
6		If either trigger is met, commissions must find impairment in that particular market. If neither
7		trigger is met, the FCC has directed state commissions to
8		
9 10 11 12 13 14		proceed to the second step of the analysis, in which it must evaluate certain operational and economic criteria to determine whether conditions in the market are actually conducive to competitive entry, and whether carriers in that market actually are not impaired without access to unbundled local circuit switching. [Id., ¶ 494]
15		According to the FCC, "operational and economic criteria" include evidence of switch
16		deployment that does not automatically satisfy the triggers, CLEC difficulties in obtaining
17		collocation space and cross-connects, costs to CLECs associated with migrating incumbent
18		local exchange carrier (ILEC) loops to their own switches, and revenue-cost comparisons
19		associated with serving mass market customers.
20		Finally, the FCC has left to the states the task of defining the market for purposes of
21		their granular impairment analyses.
22		
23	Q.	Has the FCC established some parameters for defining the relevant market?
24	A.	Yes. State commissions have considerable discretion to determine the contours of the relevant

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1		markets in their state. [TRO, $\P$ 495] However, the FCC did place some limitations on that
2		discretion. First, a state commission must use the same market definition for the "trigger"
3		analysis and the economic impairment analysis. Second, a state commission may not define the
4		market to encompass the entire state. Third, a commission should not define the market so
5		narrowly "that a competitor serving that market alone would not be able to take advantage of
6		available scale and scope economies from serving a wider market." Finally, the Commission
7		"should attempt to distinguish among markets where different findings of impairment are likely."
8		[Id.]
9		
10	Q.	Has the FCC given state commissions any further guidance?
11	A.	Yes. When defining the market, the Commission must consider the following:
12 13 14 15 16 17 18 19		<ul> <li>The locations of customers actually being served (if any) by competitors</li> <li>The variation in factors affecting competitors' ability to serve each group of customers</li> <li>Competitors' ability to target and serve specific markets economically and efficiently using currently available technologies</li> <li>How competitors' ability to use self-provisioned switches or switches provided by a third-party wholesaler to serve various groups of customers varies geographically. [Id.]</li> </ul>
20		The FCC gave some specific examples of additional factors that can be considered in defining
21		the relevant market:
22 23 24		<ul> <li>How UNE loop rates vary across the state</li> <li>How retail rates vary geographically</li> </ul>

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1 2 3 4 5 6		<ul> <li>How the number of high-revenue customers varies geographically</li> <li>How the cost of serving customers varies according to the size of the wire center and the location of the wire center</li> <li>Variations in the capabilities of wire centers to provide adequate collocation space and handle large numbers of hot cuts. [Id., ¶ 496]</li> </ul>
7		Finally, the FCC recognized that state commissions may have previously established geographic
8		markets for other purposes, such as retail ratemaking, the establishment of UNE loop rate
9		zones, and the development of intrastate universal service mechanisms. [Id.] A state
10		commission's previous use of density zones or other geographic areas for purposes of setting
11		UNE loop rates is an example of a previously established geographic market definition that
12		could be relevant in the impairment analysis process. A state commission may use these existing
13		geographic areas to define the market if, after considering the above factors, it determines they
14		would be appropriate. [Id.]
15		
16	Q.	How has the Commission responded to the FCC's directives?
17	A.	The Commission opened this docket on August 22, 2003 to implement the FCC's recently
18		issued TRO. The Commission also opened a docket devoted to the examination of loop and
19		transport impairment issues. This docket is devoted to the examination of mass market
20		switching issues.
21		In the immediate docket, on September 17, the Commission issued notice that it would
22		hold an issue identification conference on October 6. The Commission ordered parties to file a

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1		list of potential issues by September 29. On September 22, the Commission issued its first
2		procedural schedule which set filing dates and set guidelines for serving discovery, submitting
3		testimony, and all hearing-related activities. On October 23, 2003, a second issue identification
4		conference was held, affording parties the opportunity to put forth, discuss, and consolidate
5		issues that they felt were integral to the proceeding. An issues list was confirmed and a new
6		procedural schedule set by the Commission in its November 7 order. In response to an AT&T
7		motion to alter the procedural schedule a second time, the Commission approved the requested
8		changes on December 23. Aside from the filing of direct testimony on December 4, 2003,
9		virtually all other case activity has involved discovery.
10		
11	Marl	tet Definition
11 12	Marl	tet Definition
	Mark Q.	et Definition Do you agree with the market definitions proposed by other parties in this proceeding?
12		
12 13	Q.	Do you agree with the market definitions proposed by other parties in this proceeding?
12 13 14	Q.	<b>Do you agree with the market definitions proposed by other parties in this proceeding?</b> No. I disagree with the market definitions proposed most of the parties in their direct
12 13 14 15	Q.	<b>Do you agree with the market definitions proposed by other parties in this proceeding?</b> No. I disagree with the market definitions proposed most of the parties in their direct testimonies. For the sake of brevity, my testimony will focus on flaws in the approaches used
12 13 14 15 16	Q.	<b>Do you agree with the market definitions proposed by other parties in this proceeding?</b> No. I disagree with the market definitions proposed most of the parties in their direct testimonies. For the sake of brevity, my testimony will focus on flaws in the approaches used by the major incumbent LECs (ILECs)–BellSouth, Sprint, and Verizon. To the extent other

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1	geographic markets for use in this proceeding. Verizon uses MSAs to divide UNE rate zones
2	while BellSouth uses Component Economic Areas (CEAs) to divide UNE rate zones; the
3	CEAs are generally larger geographic areas than MSAs. All of these proposals are overly
4	broad.
5	BellSouth contends that "the FCC's self-provisioning trigger is met in 13 of the 31
6	market areas." [Tipton Direct, December 4, 2003, p. 7] Also, "applying the 'potential
7	deployment' methodology to the remaining 18 markets leads to the conclusion that CLECs are
8	not impaired without access to BellSouth's unbundled switching in an additional 10 of those
9	markets." [Aron Direct, December 4, 2003, p. 6] In sum, out of the 31 broad geographic
10	markets that BellSouth defines, it contends that CLEC impairment would not exist in 23 of them
11	if it were to no longer provide CLECs with unbundled switching. [Tipton Direct, December 4,
12	2003, p. 7] Verizon witness Fulp, in his direct testimony, presents a similar finding for the broad
13	markets that it defines:
14	
15 16 17 18 19 20 21 22	As the data in Exhibits 2 and 3 show, Verizon meets the mass market switching trigger in the Density Zone 1 and 2 areas of the Tampa-St. Petersburg-Clearwater MSA. There are a total of eight unaffiliated CLECs currently serving mass market customers with their own switches in this area. Therefore, the Commission must find no impairment in this market in Florida. [Fulp Direct, December 4, 2003, p. 24]
23	Sprint, another large incumbent local exchange carrier (ILEC), seems to have reached

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1		essentially the opposite conclusion, stating that it would not challenge the FCC's national finding
2		that impairment exists throughout all of its markets.
3		
4	Q.	On what grounds do you disagree with these proposals?
5	A.	All of the geographic market definitions proposed in the direct testimony of BellSouth Verizon
6		and Sprint-including MSAs, CEAs and UNE rate zones-are too broad. Among other
7		problems, these proposals greatly increase the risk of inadvertently reaching a conclusion of
8		non-impairment that is only valid with respect to a portion of the overall geographic area-a
9		conclusion that is <u>not</u> valid for other portions of that broadly defined area.
10		
11	Q.	How can the Commission overcome this deficiency?
12	A.	By rejecting market definitions that utilize large geographic areas and, instead, define the
13		relevant markets on the basis of a single wire center or small group of wire centers, thereby
14		ensuring that each carefully defined market has reasonably homogeneous characteristics.
15		
16	Q.	Are you aware of any established guidelines that would support your proposed
17		solution?
18	А.	Yes. The Commission is venturing into largely uncharted territory, but telecommunications
19		markets have previously been defined by regulators for other purposes (e.g., reviewing requests

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1	for mergers, reviewing requests for extended calling areas). Of course, until recently no one has
2	needed to define geographic markets in a manner that is specifically relevant to a finding with
3	respect to impairment.
4	In the absence of a well established body of economic literature or regulatory law
5	concerning the most appropriate method and criteria for defining the relevant market for
6	impairment purposes, it can be useful to look at what has been learned by economists and
7	regulators looking at similar issues under different circumstances. Of course, the conclusions we
8	draw from this sort of comparison must be adjusted to fit the impairment issues being analyzed
9	in this proceeding.
10	The Department of Justice (DOJ) and Federal Trade Commission's (FTC) Horizontal
11	Merger Guidelines outline two types of markets–a product market and a geographic market. I
12	believe that some of the principles set forth in these Guidelines can be appropriately applied to
13	this proceeding. In defining both geographic and product markets, the DOJ/FTC recommend
14	utilizing what they call the "smallest market" principle. They first define this principle in the
15	context of a geographic market as follows:
16	
17 18 19 20 21 22	In defining the geographic market or markets affected by a merger, the Agency will begin with the location of each merging firm (or each plant of a multiplant firm) and ask what would happen if a hypothetical monopolist of the relevant product at that point imposed at least a "small but significant and nontransitory" increase in price, but the terms of sale at all other locations remained constant. If, in response to the price increase, the reduction in sales of the product at that

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1 2 3 4 5 6		location would be large enough that a hypothetical monopolist producing or selling the relevant product at the merging firm's location would not find it profitable to impose such an increase in price, then the Agency will add the location from which production is the next-best substitute for production at the merging firm's location. [Id.]
7		It is further explained in the context of a product market.
8		
9 10 11 12 13		The product market methodology is a conceptual process by which products are added to a group of products just until a hypothetical (unregulated) monopolist could profitably impose a small but significant, non-transitory increase in price.
14		In the case of both types of markets, the DOJ/FTC methodology entails starting with a small
15		area or group of products and adding area or products to that small set until a benchmark is
16		reached. This "start small and build up" principle (as I refer to it) is of crucial importance to the
17		process of defining a market in this proceeding.
18		
19	Q.	Has the FCC voiced any opinions as to the applicability of the DOJ/FTC Horizontal
20		Merger Guidelines (HMGs) in this context?
21	A.	Yes. The following is an excerpt from the TRO.
22		
23 24 25		Although we recognize a substantial amount of commonality between the HMG's framework for assessing ease of entry and our analysis of entry barriers above, we do not adopt the standards and framework of

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1 2 3 4 5 6		the HMG for evaluating committed entry. First, in contrast to the HMG, we are not considering whether new competitors will enter the market in response to a "small but significant and nontransitory" price rise, nor do we assume that incumbent LECs will be ceding a portion of the market to competitors due to this price rise. [TRO, ¶ 111]
7		The TRO continues with a description of some other ways in which the DOJ/FTC Merger
8		Guidelines are not directly applicable here.
9		
10	Q.	Does the FCC's position in this regard preclude the Commission from utilizing the
11		"smallest market" principle in this proceeding?
12	А.	No. I am not suggesting that the DOJ/FTC Merger Guidelines can or should be applied on a
13		direct, step by step basis, as some parties apparently argued to the FCC. Instead, I am
14		suggesting that the Commission can rely upon these guidelines to extract some basic principles
15		that can be appropriately applied to the Commission's impairment investigation.
16		While the FCC found that the Merger Guidelines could not be applied letter-for-letter,
17		it did recognize how well established economic reasoning, like the DOJ/FTC Guidelines, can be
18		utilized in a proceeding, such as this one, that considers slightly different issues. In fact, the FCC
19		gained some insights from these guidelines in conducting its nationwide impairment investigation.
20		
21 22 23		Other doctrines and theories, such as the Horizontal Merger Guidelines (HMG) used in antitrust and the economic theories developed in the barriers to entry literature, were proffered by commenters as providing

1 2 3 4 5 6 7		models for such a standard. While we discuss later why we do not adopt any single one of these doctrines or theories in toto as our standard, we find that <u>the lessons learned from these legal doctrines and</u> <u>economic theories help us develop an impairment standard, and will</u> <u>also help us in our attempt to apply this standard in our analysis of</u> <u>specific network elements</u> . [Id., ¶ 73. Emphasis added]
8		While the FCC has not required use of the "smallest market" principle, neither has it precluded
9		use of this principle. In my opinion, the Commission would be well advised to use this approach
10		in defining the appropriate market and in studying the degree of impairment that exists in
11		providing switching services to mass market customers.
12		
13	Q.	Do BellSouth, Sprint, or Verizon correctly apply the "smallest market" approach as
14		recommended by the DOJ/FTC in their assessment of the relevant market?
15		
	A.	No. In their direct testimonies, these ILECs essentially ignore the lessons that can be learned
16	A.	No. In their direct testimonies, these ILECs essentially ignore the lessons that can be learned from this well established body of knowledge. In fact, rather than following a "smallest market"
16 17	A.	
	Α.	from this well established body of knowledge. In fact, rather than following a "smallest market"
17	Α.	from this well established body of knowledge. In fact, rather than following a "smallest market" approach, the ILECs take the opposite tack, starting with extremely large areas (e.g. entire
17 18	Α.	from this well established body of knowledge. In fact, rather than following a "smallest market" approach, the ILECs take the opposite tack, starting with extremely large areas (e.g. entire UNE rate zones) then dropping down. The resulting geographic market proposals are all very
17 18 19	Α.	from this well established body of knowledge. In fact, rather than following a "smallest market" approach, the ILECs take the opposite tack, starting with extremely large areas (e.g. entire UNE rate zones) then dropping down. The resulting geographic market proposals are all very large. Although, Verizon and BellSouth are to be commended for at least considering the

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1		process and results are essentially the same regardless of which division is applied first). The
2		final result are proposals for some very large geographic market areas.
3		
4	Q.	Are there disadvantages to using large geographic areas as markets?
5	A.	Yes. If the state is divided into just a handful of broad markets, each containing widely varying
6		market conditions, the Commission will encounter grave difficulties in performing the sort of
7		granular analysis sought by the FCC in the TRO, and it runs a greater risk of inadvertently
8		reaching conclusions concerning impairment that are valid for some customers but not valid for
9		other customers.
10		MSAs, defined by the Office of Management and Budget, are no better a market
11		definition than the entire state, which the FCC has specifically prohibited. [TRO, $\P$ 495] There
12		are currently 19 MSAs in Florida. These cover large portions of the state, encompassing widely
13		varying conditions. The MSAs do not cover the entire state, because many small towns and
14		rural areas are excluded (e.g., the Everglades). However, MSAs are not limited to urban areas;
15		they also include many smaller cities and towns, as well as some rural areas. In my view, the
16		MSAs are not sufficiently homogenous to offer an acceptable option. MSAs lump together
17		customers with fundamentally dissimilar choices.
18		BellSouth and Verizon proposals to use UNE rate zone as "markets" are similarly
19		flawed. Since these zones tend to separate the most urban wire centers from most rural wire

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1	centers, the UNE rate zones are a step in the right direction. However, combining large
2	geographic areas like MSAs and CEAs with the UNE rates zones still results in markets that
3	are quite heterogenous. BellSouth's CEA proposal is a good example. Fort Pierce-Port St.
4	Lucie, FL is one of the 21 Florida CEAs. This is a vast geographic area. BellSouth uses its
5	boundaries to separate the UNE zones contained therein from UNE rate zones in neighboring
6	CEAs (e.g., West Palm Beach-Boca Raton, FL) because the zones can be "so geographically
7	distant that the costs of transport could impact the ability to consider these two distant locations
8	to be a single market." [Pleatsikas Direct, December 4, 2003, p. 6] While transport concerns
9	are alleviated by this proposal, it isn't sufficient to alleviate the problem of heterogeneity. CEAs
10	(like MSAs) are a mix of both urban and rural areas and, consequently, a UNE rate zone that
11	encompasses Fort Pierce may have widely differing geographic and demographic
12	characteristics than a UNE rate zone that includes Port St. Lucie, which is in the same CEA.
13	The Federal Reserve Bank of Kansas City spoke to the heterogeneity of CEAs in a recent
14	study.
15	
16 17 18 19 20 21 22 23	The 348 CEAs form an excellent basis for analyzing the rural economy because each one has a central node and a surrounding area. There are a few difficulties, however For instance, 59 of the Commerce Department economic areas are in places such as the Washington-Boston corridor that lack rural counties. In addition, there are 47 economic areas in places like the Great Plains that lack an urban center. For the purposes of this article, therefore, both groups have been excluded. The remaining 242 economic areas are shown in Figure

1 1. [A New Micro View of the U.S. Rural Economy, Mark Henry and Mark Drabenstott, p. 2] 2 3 4 To be clear, this means that almost 70% of CEAs nationwide include a mixture of urban and rural areas. While considering only a single UNE rate zone within each CEA provides a good 5 step toward granularity, it isn't necessarily sufficient. The risk remains that vast geographic 6 areas will be treated as a single market, leading to conclusions concerning impairment that are 7 valid for some customers (e.g., residents living in upscale high rise condominiums along the 8 coast, and small businesses in downtown business districts) that are not valid for other 9 10 customers within the same CEA/UNE rate zone (e.g., customers located in lower density, 11 lower income suburbs). 12 **Q**. Witnesses for Sprint, Verizon and BellSouth argue that their market definitions meet 13 the TRO's market definition guidelines. Do you agree with these assessments? 14 15 No. Recall from the previous section that the FCC directed state commissions to "attempt to A. distinguish among markets where different findings of impairment are likely." [TRO, ¶ 495] 16 Large geographic areas like those proposed by the ILECs in this proceeding are not sufficient 17 to distinguish among markets where different findings of impairment are likely. For instance, if 18 areas with numerous enterprise customers are segregated from an area with very few enterprise 19 customers, the Commission might conclude that impairment exists in the latter area but not in 20

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1	the former one (because CLECs serving enterprise customers may find it is feasible to also
2	serve smaller customers). While the UNE rate zones are useful in this regard, since they were
3	established in part to account for the urban/rural distinction, these are not sufficiently granular,
4	and can still vary widely over large areas like MSAs or CEAs.
5	A better approach is one that is more closely analogous to the method set forth in the
6	DOJ/FTC Merger Guidelines. Markets should not be defined by focusing on media markets or
7	vast statistical areas, but rather by "starting small and building up." In this way the Commission
8	can better ensure that customers facing fundamentally different competitive choices are analyzed
9	separately. For instance, this approach reduces the risk of concluding that impairment doesn't
10	exist within an MSA, based upon conditions in areas where per-customer revenues are high,
11	then being forced to apply this same conclusion to portions of the market where per-customer
12	revenues are low, despite the fact that impairment does exist in the latter portions of the MSA.
13	Because the TRO seems to contemplate a "one size fits all" conclusion of impairment,
14	or non-impairment, for an entire market, a broad market definition increases the risk of reaching
15	a conclusion with regard to the presence or absence of impairment that is only valid for a
16	portion of the market in question.
17	The "start small and build up" approach better serves a host of other TRO guidelines
18	as well. For instance, by starting at the wire center level, one can more easily determine "the
19	locations of customers actually being served (if any) by competitors." [TRO, $\P$ 495] If one were

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to begin such an effort at the MSA or CEA level, it would prove far more daunting for the
 Commission.

3 Starting with wire centers leaves the Commission with plenty of opportunity to "build 4 up" to a larger market areas, if an individual wire center is too small to meet other TRO 5 guidelines like CLEC "scale and scope economies." Although ILEC witnesses have used this 6 guideline to argue against the use of wire centers as markets in this proceeding, I am unaware of 7 any study conducted by these ILECs which proves that CLECs cannot achieve "scale and 8 scope economies" in individual wire centers, or small groups thereof (which is my proposal in 9 this proceeding). At least from an economist's perspective, scale and scope economies are not 10 looked at in isolation, based upon a single market, unless that market is completely unrelated to 11 any other markets. To the contrary, it is well understood that economies of scale and scope can 12 often be best achieved by serving multiple markets. Thus, for example, airlines achieve greater 13 economies of scale and scope by serving the package shipping market, the leisure travel 14 market, and the business travel market. Similarly, economies of scale and scope may be 15 enhanced by serving both the Boston-to-Miami market, the Miami-to-Atlanta market, and the 16 Atlanta-to-Boston market. While these are all separate markets, airplanes can serve multiple 17 markets, and thus while an analysis of economies of scale and scope is relevant to the 18 appropriate definition of the geographic market, the TRO requirement that such an analysis be 19 performed does not suggest that a market must be large enough to exhaust all potential

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1		economies of scale and scope without regard to the physical proximity of other markets, or the
2		potential for achieving economies of scale and scope across multiple markets.
3		
4	Q.	Another argument that Sprint, Verizon and BellSouth have put forward in support of
5		their proposals is that they better simulate the "markets" that CLECs typically enter.
6		Do you agree with this position?
7	A.	No. By this logic, if it could be shown that CLECs make their initial entry decisions on the basis
8		of broad multi-state regions, it would be plausible to define the "Southeastern United States" as
9		a single market-e.g. the overall "market" in which BellSouth operates. Needless to say, the
10		entire Southeast may constitute a relevant telecommunications market for some purposes, but it
11		is not relevant for purposes of this proceeding. The reason is that <i>initial</i> CLEC entry decisions
12		are not the end of the line when it comes to CLEC entry. Entry actually entails a series of
13		decisions that a CLEC will make over time regarding operating regions, geographic markets,
14		entry method (e.g., resale, UNE-P, UNE-L), switch installation, targeted customers, and
15		others.
16		
17	Q.	Can you explain why entry occurs as the result of a series of decisions?
18	A.	Yes. The correct way to view the entry process is that it is a series of decisions. From a

business planning standpoint, this process includes how to enter, which products to offer,

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1	whether to use their own switch or to rely on resale and the like. For example, a CLEC quite
2	realistically might decide to install a switch in Orlando, with the thought that the same switch
3	could potentially serve markets like Ocala, Jacksonville, Titusville, Melbourne, and perhaps
4	even Tampa. Similarly, the CLEC may have some specific customers in mind when it installs the
5	switch, and thus it may immediately start marketing and selling to these particular customers in
6	the Orlando area. Once it has hooked up these customers, it may look for other growth
7	opportunities. Since its switch is already in place, it might examine whether it would be
8	profitable to broaden its marketing effort and attempt to serve other customers in the Orlando
9	area, or whether it should expand to other parts of the state.
10	At some point in the expansion/entry process, the CLEC will need to analyze individual
11	wire centers, looking at the cost of collocation, the cost of connecting to customers in that wire
12	center and other factors, in order to determine if it can profitably serve that wire center with its
13	switch. This process may start with consideration of specific wire centers in the Orlando area,
14	but it may also involve analysis of wire centers in Titusville, Lakeland, Melbourne, Jacksonville,
15	etc.
16	Each step of the way, the CLEC needs to consider the fixed and variable costs of the
17	entry decision in question, taking into account the fixed cost of collocation and the other
18	investments involved in that entry option. The CLEC will not likely take the next step unless it
19	has a reasonable expectation of recovering its fixed costs over the life cycle of the investment in

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1	question. The CLEC might incur collocation costs, costs for various pieces of equipment to be
2	installed in the collocation area, and additional costs required to serve both DS1 and DS0
3	customers. Thus, the decision to serve DS1 customers using the CLEC's own switch does not
4	automatically entail a decision to serve DS0 customers in that wire center. That is a different
5	entry decision-one that is separate from the decision to serve DS1 customers. Once the CLEC
6	has made the investments needed to serve DS1 customers, it may eventually find it is feasible to
7	also consider serving at least some DS0 customers. As a result, CLEC entry is not an
8	all-or-nothing decision that occurs exclusively at the MSA or CEA level. Rather, it is a
9	sequential process that evolves and changes over time, with many of the key entry decisions
10	occurring at the wire center level or at an even more granular level.
11	In order to answer the most important question in this proceeding, that being whether or
12	not Florida CLECs would be impaired if they did not have access to switching UNEs, the
13	Commission must look at the factors that influence CLEC decisions concerning the installation
14	and use of their own switching equipment-and this requires consideration of the demographic,
15	engineering and economic characteristics of individual wire centers.
16	In fact, some of the factors involved in a CLEC's decision to enter an MSA or CEA
17	may be completely irrelevant in this context, because initial entry may occur using a mixture of
18	pure resale, UNE-P and UNE-L. Similarly, the contours of existing media markets are not
19	especially important, since these contours tell us little about the cost of serving mass market

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1	customers with a CLEC switch. Even if a CLEC makes its initial entry decision on the basis of
2	broad media markets, MSAs or CEAs, this tells us nothing about whether that CLEC will use
3	its own switch, rely on pure resale, rely on UNE-P, or rely on a combination of different
4	methods. A CLEC might install a switch to serve enterprise customers, while planning to serve
5	smaller customers using pure resale or UNE-P. However, once the switch has been installed,
6	its plans may evolve, and eventually it may use the switch to serve additional types of customers
7	in some wire centers.
8	A CLEC may find it feasible to serve mass market customers in one wire center, and
9	only find it possible to serve enterprise customers in an adjacent wire center, due to differences
10	in the mix of customers (e.g., high and low revenue customers), physical constraints, or other
11	reasons. The mere fact that a CLEC switch exists in an MSA or UNE rate zone, or the mere
12	fact that a switch is used to serve some mass market customers within a particular MSA or
13	UNE rate zone, tells us very little about the ability of that CLEC, or other CLECs, to serve
14	customers in other wire centers using that switch-regardless of whether or not these wire
15	centers happen to be in the same MSA or UNE rate zone.
16	Consequently, to fully explore the issues in this proceeding, it is preferable for the
17	Commission to examine the characteristics of individual wire centers – those factors which
18	would cause or prevent a CLEC from serving that area "economically and efficiently using
19	currently available technologies." [TRO, $\P$ 495] This is a more ambitious process than simply

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1		focusing on initial CLEC entry patterns, marketing efforts, or locations of existing switches, but
2		it is a necessary one if the Commission hopes to credibly define the relevant market.
3		
4	Q.	Can you expand upon your concerns with respect to using large geographic areas like
5		MSAs for purposes of defining markets in this proceeding?
6	A.	Yes. Many MSAs cover large geographic areas that encompass a wide range of
7		heterogeneous conditions. According to the Office of Management and Budget ("OMB"):
8		
9 10 11 12 13 14		The general concept of a Metropolitan Statistical Area or a Micropolitan Statistical Area is that of an area containing a recognized population nucleus and adjacent communities that have a degree of integration with that nucleus. [Federal Register, Vol. 65, No. 249, Wednesday, December 27, 2000]
15		While an MSA involves a "high degree of integration" that doesn't imply a high degree of
16		homogeneity. To the contrary, an MSA can encompass vastly different neighborhoods, and can
17		include multiple towns, cities and counties with widely varying economic and demographic
18		conditions. Because an MSA includes "a recognized population nucleus", it will invariably
19		include a substantial urban component. Since most urban areas include a suburban fringe of
20		bedroom communities, a typical MSA includes a mixture of both urban and suburban markets.
21		Furthermore, in a state like Florida, which includes many rural areas, an MSA may include
22		miles of lightly populated rural areas beyond the suburbs.

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1	Q.	Has the OMB recognized the heterogeneity of MSAs?
2	A.	Yes. The OMB explains:
3		
4 5 6 7 8		The Metropolitan and Micropolitan Statistical Area Standards do not equate to an urban-rural classification; all counties included in Metropolitan and Micropolitan Areas and many other counties contain both urban and rural territory and populations. [Id.]
9		Collectively, the OMB refers to Metropolitan and Micropolitan Statistical Areas as Core Based
10		Statistical Areas (CBSAs). CBSAs are used to "provide nationally consistent definitions for
11		collecting, tabulating, and publishing federal statistics for a set of geographic areas". [OMB
12		Press Release 2003-18, June 6, 2003]. The OMB cautions against using CBSAs for anything
13		other than their intended purpose:
14		
15 16 17 18 19 20 21 22 23		In periodically reviewing and revising the definitions of these areas, OMB does not take into account or attempt to anticipate any non-statistical uses that may be made of the definitions, nor will OMB modify the definitions to meet the requirements of any non-statistical program. Thus, OMB cautions that agencies should not use the Metropolitan Statistical Area and Micropolitan Statistical Area definitions to develop and implement Federal, State, and local non-statistical programs and policies without full consideration of the effects of using these definitions for such purposes. [Id.]
24		The OMB further states:
25		

- 1Program designs that treat all parts of a CBSA as if they were as urban as the2densely settled core ignore the rural conditions that may exist in some parts of3the area. [Federal Register, Vol. 65, No. 249, Wednesday, December 27,42000]
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Q.

## What is the danger of ignoring the distinction between the rural and urban components

7 of an MSA?

There can be extreme differences in operating and engineering characteristics between wire 8 A. 9 centers within the downtown urban core and wire centers toward the far edges of the MSA. In turn, these differences translate into substantial differences in the cost of using a CLEC switch 10 to serve mass market customers in different wire centers within a single MSA. For example, 11 different UNE loop rates may apply to urban and rural wire centers within an MSA. For this 12 and other reasons there may be substantial differences in the effective cost per line of serving 13 customers using a CLEC switch (e.g., due to differences in available economies of scale with 14 respect to inter-office transport facilities and collocation facilities). 15

Similarly, the mix of high revenue customers and low revenue customers may differ throughout an MSA. Hence, CLECs may confront entirely different conditions in considering the potential for using their own switch to serve mass market customers in different parts of an MSA. By overlaying UNE rate zones with MSAs or CEAs, Verizon and Bellsouth have mitigated some of this heterogeneity, but they have not eliminated the problem. Instead, it would be preferable to define the relevant markets on the basis of individual wire centers, or small

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1		clusters of wire centers having homogeneous characteristics.
2		
3	Q.	Have you prepared any evidence which validates this concern?
4	A.	Yes. I have prepared some maps of the State of Florida, the Tampa-St. Petersburg-
5		Clearwater MSA, and the combined Miami and Fort Lauderdale Component Economic Areas
6		(CEA). The latter maps coincide with an example of a BellSouth recommended geographic
7		market area in South Florida.
8		
9	Q.	Can you describe these maps in more detail?
10	A.	Yes. Exhibit No. BFJ-2, page 1 shows the 19 Florida MSAs. This map reflects the current
11		MSA boundaries as published by the U.S. Census Bureau.
12		For reference and orientation, Exhibit BFJ-2, page 2 shows these 19 MSAs in context,
13		with the city limits and U.S. highways and interstates. One can easily see that all of the major
14		population centers in the state are centered within an MSA, but the MSAs are not limited to
15		urban areas. The MSAs are large geographic areas that encompass numerous small towns and
16		rural areas, as well as suburban areas.
17		
18	Q.	Now let's turn to your map of the Tampa MSA. What do you show on this map?
19	A.	Exhibit No. BFJ-2, page 3 shows the location of the ILEC switches (dots), and the

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1		approximate location of ILEC wire center boundaries within the Tampa MSA. There are 55
2		wire centers in the Tampa MSA, including 49 served by Verizon, 3 by Bell South, and 3 by
3		Sprint. This map visually distinguishes wire centers on the basis of approximate line density.
4		As this map demonstrates, the MSA is quite heterogeneous. Comparing the CLEC switch data
5		presented in Verizon Witness Fulp's Exhibit No. ODF-1 with the data in this map, it is clear
6		that the CLECs have only penetrated portions of the MSA-primarily some of the denser, more
7		urbanized areas.
8		
9	Q.	Now let's turn to your maps of the combined Miami Ft. Lauderdale CEAs. What do
10		you show on these maps?
11	А.	Exhibit No. BFJ-2, page 4 is very similar to the map just discussed. This map shows the
12		location of the ILEC switches (dots), and the ILEC wire center boundaries within the 3
13		
14		counties comprising these CEAs (Dade, Broward, and Monroe). Of the 57 wire centers in this
• 1		counties comprising these CEAs (Dade, Broward, and Monroe). Of the 57 wire centers in this 3 county area, 56 are served by Bell South, and 1 by Sprint. This map distinguishes wire
15		
		3 county area, 56 are served by Bell South, and 1 by Sprint. This map distinguishes wire
15		3 county area, 56 are served by Bell South, and 1 by Sprint. This map distinguishes wire centers on the basis of density (access lines per square mile). Exhibit No. BFJ-2, page 5
15 16		3 county area, 56 are served by Bell South, and 1 by Sprint. This map distinguishes wire centers on the basis of density (access lines per square mile). Exhibit No. BFJ-2, page 5 shows the same wire centers distinguished on the basis of UNE rate zone.

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1		the ILEC switches using a Bell South Exhibit (Pleatsikas' Exhibit No. CJP-2) and publically
2		available wire center area data from the FCC's Hybrid Cost Proxy Model (HCPM).
3		
4	Q.	Have you been able to analyze CLEC activity in detail?
5	A.	No. According to Bell South, "CLECs have deployed more than 100 switches in Florida, at
6		least 30 of which are serving over 100,000 'mass market' customers." [Tipton Direct (revised),
7		December 30, 2003, p. 3].
8		A close inspection of Bell South witness Tipton Exhibit No. PAT-1 (which purports to
9		list the CLEC switches deployed in Florida) reveals that there are many entries with the exact
10		same CLLI (Common Language Location Identifier) code. While it is possible to have multiple
11		switches at the same location, they are normally assigned different CLLI codes to distinguish
12		the different types of equipment.
13		The source of the data included in Exhibit No. PAT-1 is the Local Exchange Routing
14		Guide (LERG) database, but it is unclear how the database was queried, or why there are so
15		many seemingly duplicate entries with the same CLLI codes. Moreover, the CLEC switch data
16		from the Bell South Exhibit apparently includes all CLEC switches regardless of their type (e.g.,
17		voice, data) or the customers they are serving (e.g., mass market, enterprise). Ideally Bell
18		South would have identified only CLEC voice grade switches that it has reason to believe are
19		serving significant numbers of mass market customers. At the time this testimony was written I

1		did not have access to detailed data concerning CLEC switches. Without access to the
2		underlying CLEC switch data, I was not able to analyze this issue in detail, and thus I am unable
3		to confirm or refute the BellSouth allegations with respect to CLEC switches.
4		However, Exhibit No. PAT-1 included street address locations of CLEC switches
5		deployed in Florida. Using this Exhibit we were able to digitize 28 of the 31 non-duplicate
6		CLEC switch addresses in Dade and Broward counties. These data have been superimposed
7		upon the ILEC switches and wire centers in my Exhibit No. BFJ-2, pages 6 and 7.
8		
9	Q.	Can you please describe these next two maps?
10	A.	Yes. Exhibit No. BFJ-2, page 6 shows the 17 CLEC switches in Bell South's UNE Rate Zone
11		1. Exhibit No. BFJ-2, page 7 shows the 11 CLEC switches in Bell South's UNE Rate Zone 2.
12		These maps do not show where the CLECs are serving customers, nor do these switches
13		necessarily serve any mass market customers. Nevertheless, they do provide some useful
14		
		information concerning where the CLEC switches are located. It is apparent that the CLECs
15		information concerning where the CLEC switches are located. It is apparent that the CLECs have generally chosen to locate their switches in the more urbanized portions of the CEAs. It
15 16		
		have generally chosen to locate their switches in the more urbanized portions of the CEAs. It

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1	Q.	Do you agree with the ILEC proposals for defining geographic markets?
2	A.	No. Defining broad geographic markets may appear to simplify the issues, but it will actually
3		make the Commission's decision making process much more difficult, and it could lead to
4		results that are inappropriate, illogical, or misleading. If the Commission uses a top-down
5		approach (e.g. defining the market to include entire MSAs or rate zones within MSAs), it
6		increases the risk that it will not be able to resolve important differences in the degree of
7		impairment within that large area.
8		For instance, the data may reveal that CLEC entry has been disproportionately
9		concentrated in certain portions of the MSA or CEA (e.g. where enterprise customers are
10		located). There is no basis for assuming that entry patterns that have occurred in a downtown
11		area or business district can easily be replicated in a suburban or rural area. This is particularly
12		true if differences between business and residential customers are ignored. Market conditions in
13		the downtown area (e.g., number of enterprise customers) may be atypical, and thus entry may
14		not easily be replicated in the residential market, or in other parts of the overall MSA.
15		The pattern of entry revealed in the data may suggest that some CLECs have entered
16		the market and have installed switching facilities primarily to serve enterprise customers. Some
17		parties may argue from this evidence that the entire large geographic market should be assumed
18		to be competitive, and the presence or absence of enterprise customers is irrelevant. Other
19		parties may argue on the same basis that the entire large geographic market should be assumed

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1		to be impaired, since none of the CLECs are serving mass market customers throughout the
2		entire large geographic area. Neither argument would be completely persuasive, or responsive
3		to the FCC's request for a granular analysis.
4		
5	Mass	Market/Enterprise Market Breakpoint
6		
7	Q.	Do you agree with the "mass market customer" definitions proposed by other parties
8		in this proceeding?
9	A.	Not necessarily; while they correctly state some aspects of this issue, they do not adequately
10		consider all of the important factors that the Commission should consider. For instance, Sprint
11		defines a mass market customer as one who purchases less than 13 DS0 loops.
12		
13 14		Exhibit KWD-1, attached to my testimony, calculates the average economic crossover a competitive local exchange carrier (CLEC)
15		would experience in serving the $[sic]$ an analog customer in the
16		territories of the three largest incumbent local exchange carriers (ILEC)
17		within the state of Florida based on the number of analog voice lines
18		used by the customer The model results indicate that up to 12 DS-
19		0s at a customer's location purchasing individual loops is more cost
20		effective than purchasing single DS-1. [Dickerson Direct, December 4,
21		2003]
22		
23		Similarly, Mr. Gillan, a witness for Florida Competitive Carriers Association (FCCA) in this
24		proceeding, advises the Commission to not set the "cut-over" (or dividing line) between mass

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1		market and enterprise customers too low.
2		
3		By failing to consider these factors, the DS0/DS1 cut-over required by
4 5		the FCC will strand some customers from competitive choice because they will not <i>really</i> be in a position to take advantage of a DS-1
6		connection, they will only be <i>presumed</i> able to do so. Consequently,
7		the Commission should be especially careful that it not adopt a cut-over
8		that is unreasonably low, because even a "theoretically correct" cut-
9		over is likely to adversely effect some customers. [Gillan Direct,
10		December 4, 2003, p. 27]
11		
12		While I understand the reasoning that underlies this portion of their testimony, I am
13		concerned that they are taking too narrow a view of the issue, and the approach they are
14		advocating could exacerbate the problem of accurately distinguishing between markets (or sub-
15		markets) that CLECs are able to serve using their own switching equipment, and markets (or
16		sub-markets) where impairment exists. Setting a high "cut-over" may exacerbate the already
17		considerable risk that the impact of this proceeding will be to reduce competitive options for
18		residential and small business customers.
19		
20	Q.	Would you please describe how the "cut-over" relates to the process of defining a
21		mass market customer?
22	А.	Yes. In the TRO, the FCC found that, on a nationwide basis, CLECs serving "mass market"
23		customers are presumed to be impaired, unless individual state commissions determine

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1	otherwise. The FCC concluded that impairment differed for large and small customers, leading
2	it to establish a distinction between what it referred to as the "enterprise" and "mass" markets.
3	The FCC apparently saw the tradeoff between DS1 and DS0 service as the primary
4	consideration in distinguishing these two market categories:
5	
6 7 8 9 10	The mass market for local services consists primarily of consumers of analog "plain old telephone service" or "POTS" that purchase only a limited number of POTS lines and can only economically be served via analog DS0 loops. [Id., $\P$ 459]
11	On its face, this language seems to suggest the "cut-over" between the "enterprise" and "mass"
12	markets would reflect the technical and economic factors that determine when it is feasible to
13	serve customers using DS1 loops. An important factor that influences this "cut-over" is the
14	number of lines used by the customer.
15	
16 17 18 19 20 21 22	Mass market customers are analog voice customers that purchase only a limited number of POTS lines, and can only be economically served via DS0 loops At some point, customers taking a sufficient number of multiple DS0 loops could be served in a manner similar to that described above for enterprise customers—that is voice services provided over one or several DS1s. [Id., ¶ 497]
23	In its TRO, the FCC adopted a tentative cut-over of four lines, while delegating to the states
24	responsibility for making a final determination on the appropriate cut-over:

1	This cross over point may be the point where it makes economic sense
2	for a multi-line customer to be served via a DS1 loop. We expect that
3	in those areas where the switching carve-out was applicable (i.e.,
4	density zone 1 of the top 50 MSAs), the appropriate cutoff will be four
5	lines absent significant evidence to the contrary. [Id.]
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### Q. Given this context, is there other support for the higher cut-overs that Sprint proposes

8 and FCCA wants?

9 A. Yes. While the FCC adopted a cut-over of four lines, some of the FCC's language seems to
suggest the possibility of a much higher cut-over. In the quote I cited above, the FCC states
11 that "at some point" mass market customers could require a "sufficient" number of DS0 loops
12 such that they take on the characteristics of an enterprise customer. Phrased in that manner, it
sounds as if the cross over point isn't necessarily at four lines. A "sufficient" number could
14 easily be more than four lines. In a supranote to that same portion of the TRO, the FCC states
the following.

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17 ... Setting the cut-off at an unconditional four lines would result in more 18 customers being treated as enterprise customers subject to our finding 19 of no impairment. If, on the other hand, a state finds based on record 20 evidence that a cut-off of more than four lines is appropriate, more 21 multi-line customers will be treated as mass market customers. ... In 22 such markets, then, it is more likely that there will be a finding of no 23 impairment for the entire market, leading to significantly less unbundled 24 switching than was available under the previous four-line carve-out. 25 [Id., supranote 1546] 26

# Q. Are there some potential risks if the Commission concludes that the appropriate cut over is higher than four lines?

Yes. This will increase the number of customers that are classified as falling within the "mass 3 A. market" and reduce the number of customers in the "enterprise" category. With a higher cut-4 over, the potential impact on residential consumers increases, because it increases the chances 5 that the Commission will conclude that "no impairment" exists for CLECs serving at least some 6 7 of the customers in the mass market (so defined). For instance, there may be instances in which 8 CLECs are customers with 7 or more lines, but they are serving very few (if any) customers 9 with fewer than four lines. With a cut-over of 12 lines, rather than four lines, the Commission 10 may conclude that impairment doesn't exist for the "mass market," based on the observed 11 competitive activity involving customers with 7 or more lines. However, the characteristics of 12 these small business customers may be completely different than the characteristics of smaller business and residential customers. 13

As the FCC stated above, a higher cut-over tends to classify more customers as being in the "mass market." If the cut-over is increased from four lines to twelve lines, the mass market category will include not only residential and very small business customers, but it will also include somewhat larger small business customers–those that purchase as many as eleven lines. As the FCC suggested, under that scenario, "it is more likely that there will be a finding of no impairment for the entire market," and there will be "significantly less unbundled switching

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1		than was available under the previous four-line carve-out." [TRO, supranote 1546] Unless
2		some other steps are taken to distinguish between small business and residential customers, this
3		could result in significantly less competition for residential customers because CLECs will no
4		longer be able to use UNE switching to serve residential customers, nor will they necessarily be
5		able to use their own switching facilities to do so.
6		
7	Dema	and-Based Market Distinctions
8		
9	Q.	Do you have any additional concerns with the direct testimonies of other parties to
10		this proceeding?
11	A.	Yes, and it is a significant one. I am very concerned that no other party in this proceeding has
12		recognized the importance of studying residential and small business customers separately.
13		Once a geography-based market has been defined, and once mass market customers have
14		been defined according to an appropriate cut-over, the Commission should consider another
15		layer of granularity before reaching its final decisions in this proceeding-by considering
16		important demand factors that tend to distinguish which customers can economically be served
17		using a CLEC's own switch.
18		In its TRO, the FCC recognized the potential importance of demand differences (e.g.,
19		average revenue levels) when it asked state commissions to perform granular analyses. If the

1	Commission follows the approach advocated by other parties, and conducts an impairment
2	analysis that is not sufficiently granular in nature, it risks reaching conclusions that are only valid
3	for some portions of the mass market (e.g. higher revenue customers)-conclusions that are not
4	valid for all portions of that market (e.g. lower revenue customers).
5	None of the ILEC witnesses adequately consider this type of granularity. While
6	geography is important, it isn't the only factor that needs to be considered. Most obviously,
7	residential and small business mass market customers have different demand characteristics,
8	which may impact the degree to which impairment exists. Hence, data for these customers
9	should be obtained and analyzed separately. Residential and small business mass market
10	customers tend to purchase different products (or pay different rates for similar products), and
11	this may influence the degree to which impairment exists. From an economic perspective, it is
12	appropriate to recognize that residential and business customers purchase services in distinct
13	product markets (or sub-markets). Residential and business mass market switched services
14	can appropriately be placed in separate markets, since the underlying market conditions,
15	including typical rate structures, rate levels and gross profit margins, are so different.
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1	Q.	Earlier, you indicated that the definition of the market that is relevant in a particular
2		context may differ from the appropriate definition in another context. Could it be
3		appropriate to group customers with fundamentally different demand characteristics
4		into two separate markets or sub-markets?
5	A.	Yes. In fact, it is common to distinguish between residential and business customers, or to
6		speak of the "residential market" separately from the "business market," just as it is common to
7		distinguish between a "retail market" and a "wholesale market" even where essentially the same
8		products (e.g., automobiles) are being sold in each market.
9		In the current proceeding, a key issue is whether there are differences between the
10		residential and business markets that might cause CLECs to face differing levels of impairment
11		in considering the potential for using their own switching equipment to serve residential and
12		business customers. While the extent and importance of these differences cannot be known at
13		this early stage of the proceeding, it is readily apparent that the potential exists for various
14		differences in these markets to prove significant, leading to different conclusions concerning the
15		degree of impairment that exists depending upon whether the Commission is focusing on
16		residential customers or business customers. If residential and business customers are lumped
17		into a single market, evidence may be overlooked, or not obtained, which would cause the
18		Commission to reach very different conclusions concerning the degree of impairment,
19		depending upon whether it is focusing on residential or business market data. Just as it would be

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1	inadvisable to lump Cleveland and Miami together when analyzing winter weather conditions, it
2	would not be appropriate to lump residential and business customers together when analyzing
3	impairment conditions in this proceeding.
4	From a CLEC's perspective, the opportunities and pitfalls in trying to profitably attract
5	and serve residential customers may be entirely different than the corresponding opportunities
6	and pitfalls involved in serving mass market business customers. The revenues generated by a
7	typical customer are greatly different in the residential and business markets. The great majority
8	of residential customers have only a single phone line, the remainder generally have just two. It
9	is much more common for business customers to have three or more lines. As well, revenues
10	tend to vary widely due to differences in rate levels, rate structures, and service quantities (e.g.,
11	number of toll minutes). Accordingly, the average revenue received from a typical small
12	business customer is likely to be many times greater than the average revenue received from a
13	typical residential customer. (The discrepancy is even greater when considering low income
14	residential customers and others who don't purchase optional services like Call Waiting and
15	Caller ID). Because of these fundamental differences, a CLEC may conclude that gross profit
16	margins are larger in the business market and, therefore, conclude that it cannot afford the high
17	collocation costs and other burdens of connecting residential customers to its own switch.
18	While per-customer revenue differences are probably the most important factor to
19	consider, there may be other factors that influence the ability of CLECs to profitably service

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1		residential and small business customers using their own switch. For example, a CLEC may
2		conclude that business customers are more responsive to innovation and quality improvements.
3		As a result, it may decide the added costs of connecting business customers to its own switch
4		can be justified by the ability to market its offerings as providing higher quality or more
5		technically advanced features than what BellSouth offers. In the residential market, in contrast,
6		the CLEC may conclude this type of marketing pitch will not be persuasive, and thus it cannot
7		profitably serve residential customers using its own switching equipment.
8		Given these many differences, a CLEC may find it is feasible to serve business
9		customers using its own switch, while simultaneously finding it cannot profitably serve residential
10		customers using that same piece of equipment. Stated differently, differences in the underlying
11		market characteristics may justify placing residential and business customers in two separate
12		markets or sub-markets.
13		
14	Q.	While the distinction between residential and business mass market switched services
15		may be a valid one from an economic perspective, there may be some dispute about
16		whether this is a legally viable distinction in this context. Can you provide any insight
17		into this issue from your perspective as an economist?
18	A.	Yes. It appears to me that the FCC has obligated state commissions to more precisely define
19		the mass market within their state, but it did not clearly state what parameters can, or cannot,

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Rebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

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1	be considered in defining the relevant market. The language in the TRO is focused primarily on
2	geography, but the FCC has not explicitly prohibited consideration of other factors. In fact, at
3	various points in the TRO the FCC mentions relevant customer characteristics like the average
4	number of customer lines and average per line or per customer revenues.
5	Because this proceeding is essentially one of "first impression," which is being held
6	simultaneously with similar proceedings throughout the country, the ambiguities in the TRO have
7	not yet been clarified (e.g., by appellate court decisions). However, it seems clear that the FCC
8	is requiring state commissions to make several interrelated decisions, and these decisions are
9	supposed to be accomplished on a granular basis. The first of these decisions concerns the
10	appropriate definition of a market. The primary thrust of this definition is clearly geographic,
11	but the TRO does not appear to explicitly prohibit state commissions from adopting market
12	definitions that consider both geography and product or demand characteristics (e.g., stratified
13	by average revenue per customer, or stratified between residential and business customers) in
14	this process. State commissions must then decide on an appropriate way to distinguish the
15	mass market from the enterprise market. This process does not entail geographic
16	characteristics, but rather, demographic ones.
17	Furthermore, the FCC seems to recognize, at least obliquely, that markets can also be
18	stratified or defined with reference to customer characteristics. Consider for instance, this
19	passage:

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1 2 3 4 5 6 7 8 9 10 11 12		As discussed above, the record does not contain sufficient detail concerning which geographic and <b>customer</b> markets may in fact allow economic entry. In addition, impairments that exist today in certain markets may be remedied in the future due to the implementation of a batch cut process, as discussed above. Because our standard and the guidance from the USTA decision require that the determination of impairment be made on a granular basis, and because the record provides insufficient evidence concerning the characteristics of particular markets, we find it appropriate to ask the states to assess impairment in the mass market on a market-by-market basis. [TRO pp. 493, emphasis added]
13	Q.	Has the FCC recognized that customer characteristics may impact the presence or
14		absence of impairment?
15	A.	Yes. For instance, the FCC recognized that customer-specific factors can influence whether or
16		not impairment exists:
17		
18		Mass market customers consist of residential customers and very small
19		business customers. Mass market customers typically purchase
20		ordinary switched voice service (Plain Old Telephone Service or
21		POTS) and a few vertical features. Some customers also purchase
22		additional lines and/or high speed data services. Although the cost of
23		serving each customer is low relative to the other customer classes, the
24		low levels of revenue that customers tend to generate create tight profit
25		margins in serving them. The tight profit margins, and the price
26 27		sensitivity of these customers, force service providers to keep per customer costs at a minimum. Profits in serving these customers are
27		very sensitive to administrative, marketing, advertising, and customer
28 29		care costs. These customers usually resist signing term contracts. [Id., ¶
30		127]
31		]

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1	In this passage, the FCC recognizes that profit margins in serving smaller customers are
2	tighter than those available when serving larger customers, and this clearly has important
3	implications in determining whether or not impairment exists. While the FCC didn't focus
4	specifically on differences in average revenues per line or per customer, the overall thrust of this
5	reasoning is consistent with an approach which draws such a distinction. As the revenue per
6	customer declines, it becomes less and less feasible to profitably serve a customer using a
7	CLECs own switch, because insufficient profit margins exist to overcome the fixed (per-
8	customer) costs of providing service using the CLECs own facilities.
9	For this reason, one would anticipate that relatively few CLECs will serve residential
10	customers using their own switches. Rather, CLECs that use their own switches primarily focus
11	on serving larger customers-those generating much higher revenues per customer. As the FCC
12	has recognized:
13	
14 15 16 17 18	although serving these customers is more costly than mass market customers, the facts that enterprise customers generate higher revenues, and are more sensitive to the quality of service, generally allow for higher profit margins." [Id., ¶ 128]
19	Unless these differences in customer characteristics and gross profit margins are
20	adequately considered in defining the market, and there is a great risk of inadvertently reaching
21	conclusions concerning impairment that are only valid for mass market small business

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1		customers-conclusions that are not valid for residential customers, particularly those with low
2		incomes or living on a fixed income.
3		
4	Q.	Do you have any recommendations with regard to the distinction between residential
5		and business (or low and high revenue) customers?
6	А.	Yes. To the extent it is legally permissible, it could be helpful to stratify each geographic market
7		in order to analyze business and residential customer data separately. If this is done, the analysis
8		of whether or not impairment exists could be performed separately with respect to business and
9		residential customers. Thus, for example, even if there is reason to believe a "trigger" has been
10		pulled (due to the presence of multiple CLECs) for the small business market or segment, this
11		wouldn't automatically force the Commission to conclude that the "trigger" has also been pulled
12		for the residential market or segment.
13		Another option would be to distinguish between the "enterprise" and "mass" market on
14		the basis of revenue per customer, or on the basis of gross profit margin per customer
15		(revenues minus direct costs), rather than purely on the basis of the number of DS0 lines. This
16		could lead to more accurate and homogenous market classifications than a system based purely
17		on the number of lines used by each customer (e.g. four DS0 or 12 DS0 lines).
18		For instance, rather than placing all customers with four or more lines in the "enterprise"
19		market, the Commission might place all customers generating revenue of less than \$100 per

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1	month in the "mass" market. With a classification system of this type, the Commission may find
2	it has greater flexibility in determining the most appropriate "break point" and thus it will have an
3	enhanced ability to ensure that the defined markets are sufficiently homogenous.
4	Revenue-based market definitions would better enable the Commission to take into
5	account differences in underlying market conditions, including typical rate structures, rate levels,
6	and gross profit margins associated with different types of customers. This is consistent with
7	language in the TRO that requires state commissions to take into account "the variation in
8	factors affecting competitors' ability to serve each group of customers, and competitors' ability
9	to target and serve specific markets economically and efficiently using currently available
10	technologies." [Id., ¶ 495]
11	Regardless of what specific approach the Commission ultimately adopts, it should take
12	great care to ensure that its decisions do not prevent competitive local exchange carriers
13	(CLECs) from serving residential customers. CLECs should be allowed to continue using
14	switching UNEs to serve residential customers if it isn't economically feasible for them to serve
15	these customers using their own switch.
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#### 1 **Recommendations**

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## Q. Would you please briefly summarize your recommendations for Commission action at this stage in the proceeding?

5 Yes. Due to the wide variations that exist within MSAs, and to a lesser extent UNE rate zones, A. it would be preferable to follow the type of "start small and build up" approach used by the 6 7 DOJ and FTC. For instance, the Commission could carry forward with its analysis based upon 8 the tentative conclusion that the area served by each wire center is unique, and therefore 9 evidence needs to be gathered and analyzed for each wire center separately. However, as the 10 evidence accumulates and is analyzed by the parties, they should look to see if certain groups of 11 wire centers are relatively homogenous in their characteristics, and thus should appropriately be 12 grouped together. For instance, wire centers could be grouped according to the likelihood that a CLEC would enter. Since CLECs would typically (as a part of the series of decisions that 13 14 they make when entering a market) pursue high margin customers during the initial entry period, 15 one could group wire centers in a metropolitan area both geographically and by the number of 16 DS1 and DS3 customers present there.

### 17 In this regard, it is logical to assume that facilities-based CLECs will initially be drawn 18 to areas where enterprise customers are abundant, where there are large numbers of customers 19 generating substantial revenues, and where per-line costs are low. Recall that the FCC required

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1		state commissions, in developing a market definition, to consider
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3 4 5 6 7 8		locations of customers actually being served (if any) by competitors, the variation in factors affecting competitors' ability to serve each group of customers, and competitors' ability to target and serve specific markets economically and efficiently using currently available technologies. [TRO, $\P$ 495]
9		These considerations cannot be adequately considered without considering variable geographic
10		and economic factors within an MSA, CEA or UNE rate zone. By defining the relevant market
11		as a small cluster of wire centers (e.g., ones having homogeneous characteristics) the
12		Commission will be embarking on an analytical process that is consistent with the guidelines set
13		forth by the FCC in the TRO. State commissions are required to consider actual customer
14		locations, the CLECs' ability to target specific markets, and geographic differences in CLEC
15		entry patterns. For example, state commissions are supposed to consider variations in the
16		number of high revenue customers and variations in existing UNE and retail rate levels. Each of
17		these factors can only be accurately analyzed at the wire center level. Accordingly, the
18		Commission should not rely solely on CEAs, MSAs and UNE rate zones in defining the
19		relevant market for the purpose of analyzing impairment.
20		
21	Q.	Does this complete your direct testimony that was prefiled on January 7, 2004?
22	A.	Yes, it does.

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP		
Introduction		
Q.	Would you please state your name and address?	
A.	Ben Johnson, 2252 Killearn Center Boulevard, Tallahassee, Florida 32309.	
Q.	Are you the same Ben Johnson who earlier filed rebuttal testimony in this proceeding?	
A.	Yes, I am.	
Q.	Does your surrebuttal testimony include any Exhibits?	
A.	Yes. Exhibit BFJ-3 summarizes the positions taken by the parties filing testimony in this	
	proceeding on the issue of the appropriate definition of a market.	
Q.	What is your purpose in filing this surrebuttal testimony?	
A.	In this filing I will respond to the rebuttal testimonies of BellSouth Telecommunication: nc.	
	witness Pleatsikas, Florida Competitive Carriers Association (FCCA) witness Gillan, MCI	
	Worldcom Communications, Inc. (MCI) witness Bryant, Sprint-Florida/Sprint Communications	
	LP (Sprint) witness Staihr, and Verizon Florida Inc. witnesses Fulp and Taylor. These parties	
	("listed parties") addressed issues I discussed in my rebuttal testimony. Due to time and	
	resource constraints, I have not attempted to address each and every point included in their	
	testimonies, particularly since many of their arguments were already dealt with in my rebuttal	
	testimony. Instead, I will take this opportunity to clarify my recommendations, and to emphasize	
	the risks associated with the alternatives advocated by the listed parties. The fact that I do not	

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		uttal Testimony of Ben Johnson, Ph.D.
	On Bel	half of the Citizens of the State of Florida, Docket No. 030851-TP
1		discuss other portions of their rebuttal testimonies should not be construed as agreement with
2		such testimony.
3		
4	Q.	How is your testimony organized?
5	A.	I first very briefly restate the major points in my rebuttal testimony, and discuss whether, and to
6		what extent, these points were addressed in the rebuttal testimonies of the listed parties. I then
7		respond, in turn, to the listed parties' rebuttal testimonies concerning three main issues: (1)
8		market definition; (2) the breakpoint between the mass market and the enterprise market; and
9		(3) the distinction between residence and business product markets.
10		
11	Majo	or Points in Rebuttal Testimony
12		
13	Q.	To place the listed parties' rebuttal testimonies into context, can you please briefly
14		describe the major points included in the rebuttal testimony you filed on January 7,
15		2004?
16	A.	Yes. My rebuttal testimony centered on three major themes. First, I stressed the importance of
17		properly defining the market, and the risk of inadvertently reaching conclusions concerning
18		impairment that are valid for some mass market customers but are not valid for others.
19		Geographic market definitions like MSAs, CEAs and UNE rate zones are too broad. Among
20		other problems, these proposals greatly increase the risk of inadvertently reaching a conclusion
21		of non-impairment that is only valid with respect to a portion of a geographic area-a conclusion
22		that is <u>not</u> valid for other portions of that area.

Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1		Second, the Commission is obligated to set a breakpoint to distinguish between
2		customers in the mass market and those in the enterprise market. I alerted the Commission to
3		the lack of guidance that the FCC provided in its TRO regarding this issue. In response to the
4		testimony of Sprint witness Dickerson, suggesting a breakpoint of 12 lines, I cautioned the
5		Commission that a higher cut-over tends to classify more customers as being in the "mass
6		market." As noted by the FCC, with a higher breakpoint, "it is more likely that there will be a
7		finding of no impairment for the entire market," and there will be "significantly less unbundled
8		switching than was available under [a] four-line carve-out." [TRO, supranote 1546]
9		Third, considering differences in revenue and profit levels, residential and small business
10		mass market customers should be studied separately, to the extent feasible. In its TRO, the
11		FCC recognized the potential importance of demand differences (e.g., average revenue levels)
12		and it asked state commissions to perform granular analyses. If these important differences
13		between residential and small business mass market customers are completely ignored, the
14		impairment analysis may not be sufficiently granular, or it may reach conclusions that are only
15		valid for some small business customers-conclusions that are not valid for most residential and
16		smaller business customers.
17		
18	Q.	Did any of the listed parties address these issues in their rebuttal testimony?
19	A.	Yes, many of these issues were discussed by the listed parties in their rebuttal testimony.

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Surrebuttal Testimony of Ben Johnson, Ph.D.	
On Behalf of the Citizens of the State of Florida, Docket No.	030851-TP

### 1 Market Definition

3	Q.	Which of the listed parties, in their rebuttal testimonies, took a stance contrary to your
4		own regarding the issue of market definition?
5	A.	BellSouth witness Pleatsikas, Sprint witness Staihr, Verizon witness Taylor, and FCCA witness
6		Gillan testified in favor of broad geographic market definitions, and against narrow market
7		definitions, although they were not in agreement as to the appropriate broad definition.
8		
9		[Dr. Bryant's wire center] aggregation is not reasonable because it
10		does not sufficiently consider substitutability in supply. That is, it fails to
11		consider whether efficient competitors using self-provisioned (or
12		third-party) switching to provide service in certain wire centers could,
13		within a sufficiently short period of time, render supracompetitive
14		pricing by the incumbent in another, proximate wire center unprofitable
15		(i.e., because a sufficient number of the incumbent's customers would
16		switch to one of the competitors in response to such pricing) In fact,
17		the scale and scope economies available to efficient entrants (TRO fn.
18		1536) are generally not consistent with the existence of narrow
19		geographic markets defined along wire center boundaries. [Pleatsikas
20		Rebuttal, p. 6]
21		
22		That urban/rural distinction is one of the key reasons why Sprint's
23		proposed market definition (MSA) is a more accurate market
24		definition, because in general MSAs are the more urban areas and
25		non-MSAs are the more rural areas The BellSouth proposal to treat
26		different portions of the CEA differently, based on UNE zones,

essentially negates this community-of-interest aspect. Whereas using the MSA as the market maintains the community-of-interest aspect. [Staihr Rebuttal, pp. 2-3, 4]

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		ttal Testimony of Ben Johnson, Ph.D. alf of the Citizens of the State of Florida, Docket No. 030851-TP
1 2 3 4 5 6 7		Based on sound economic principles and a number of FCC policy statements I conclude-contrary to the position of interveners-that the relevant geographic market is the MSA, not the individual wire center nor the undefined geographic area implied by Mr. Gillan's incorrect and novel notion. In this section I provide the basis for my conclusion. [Taylor Rebuttal, p. 9]
8 9 10 11 12 13 14 15 16		I recommend that the Commission use LATAs to evaluate impairment. As I noted repeatedly above, the mass market is spread throughout BellSouth's service territory in Florida and any lesser area could potentially camouflage the importance of this fact. However, the evidence (see Table 2) suggests that each LATA is sufficiently comparable to the state overall that the Commission's analysis would not be distorted by using these pre-existing areas in its analysis. [Gillan Rebuttal, p. 15]
17	Q.	Have you summarized these and other intervenor positions on the appropriate market
18		definition to use in this proceeding?
19	A.	Yes, my Exhibit BFJ-3 contains a table which places each intervenor's market definition
20		proposal into one or more columns. As the quotes just cited confirm, I have placed Dr.
21		Pleatsikas's name into the column labeled "UNE Zones within Component Economic Area
22		(CEA)." I have placed Dr. Staihr's name into the column labeled "Metropolitan Statistical
23		Area (MSA)." I have placed Mr. Taylor's name into the column labeled "UNE Zones within
24		MSA." And I have placed Mr. Gillan's name into the column labeled "Local Access and
25		Transport Area (LATA)."
26		
27	Q.	Can you briefly respond to this portion of Dr. Pleatsikas's rebuttal testimony?
28	A.	Yes. Dr. Pleatsikas attacks Dr. Bryant's recommendation that wire centers be aggregated into

	Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP
1	geographic market, yet this concept is directly analogous to the approach that is employed in
2	the Department of Justice (DOJ) and Federal Trade Commission's (FTC) Horizontal Merger
3	Guidelines (HMGs). Recall that the approach to defining a geographic market was described
4	in the HMGs as follows.
5 6 7 8 9 10 11 12 13 14 15 16 17 18	In defining the geographic market or markets affected by a merger, the Agency will begin with the location of each merging firm (or each plant of a multiplant firm) and ask what would happen if a hypothetical monopolist of the relevant product at that point imposed at least a "small but significant and nontransitory" increase in price, but the terms of sale at all other locations remained constant. If, in response to the price increase, the reduction in sales of the product at that location would be large enough that a hypothetical monopolist producing or selling the relevant product at the merging firm's location would not find it profitable to impose such an increase in price, then the Agency will add the location from which production is the next-best substitute for production at the merging firm's location. [Id.]
19	The substitutability of supply to which Dr. Pleatsikas refers is inherently considered in the "start
20	small and build up" approach used by the DOJ/FTC. In order to define a market in this
21	proceeding, the Commission should start with a wire center and add to it other wire centers
22	with homogeneous characteristics. While there is some merit to trying to determine the point at
23	which "efficient competitors using self-provisioned (or third-party) switching could render
24	supracompetitive pricing by the incumbent unprofitable" there is absolutely no basis for
25	assuming that point is determined by any preexisting large geographic boundary such as a
26	LATA, an MSA or a CEA. To the contrary, the only logical way to find that point is to
27	carefully evaluate the relevant market conditions present in each wire center or small group of

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	Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP
1	wire centers.
2	Oddly, Dr. Pleatsikas seems to concede the relevance of market conditions within each
3	wire center (or homogeneous group of wire centers) at a later point in his rebuttal testimony:
4	
5	As I noted, the competitive entry decision occurs at the market level
6	(which generally would span several wire centers) even if a particular
7	CLEC may elect not to enter a particular wire center (immediately or
8 9	ever). Accordingly, and in contrast to Dr. Bryant's proposal, a
9 10	reasonable way of determining whether a particular wire center should be included in a more broadly defined market area depends on whether
11	that wire center's relevant economic/financial characteristics are
12	reasonably homogeneous with those of other proximate wire centers. If
13	they are, then the wire center should generally be included in that
14	broader market area. [Pleatsikas Rebuttal, p. 16]
15	
16	
17	As I read this statement, it appears that Dr. Pleatsikas realizes that a small group of wire
18	centers with homogeneous characteristics could, as I propose, constitute a valid geographic
19	market definition. In some cases the resulting market area might be similar to the market
20	definitions proposed by BellSouth (UNE rate zones divided by Component Economic Areas),
21	but in other cases they might differ substantially (because market conditions are not necessarily
22	homogenous throughout a CEA).
23	As for Dr. Pleatsikas's contention that CLECs cannot adequately achieve economies of
24	scale and scope in individual or groups of wire centers, I would first note that BellSouth and
25	other parties to this proceeding have not offered any studies to demonstrate the extent to which
26	CLECs can or cannot achieve "scale and scope economies" within individual wire centers, or
27	small groups thereof.

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

Properly conducted, such a study would consider not only the degree to which economies can be achieved within a particular market, but also the extent to which additional scale and scope economies can be achieved when serving the specified market while also serving other markets. Stated differently, scope economies are frequently achieved by selling goods and services in multiple distinct markets.

6 In general, as a matter of sound economic reasoning it isn't valid to reject a particular 7 set of market definitions merely because this set of definitions separates geographic markets that are distinct from a demand perspective, yet are interrelated from a supply perspective. For 8 9 instance, the Miami - New York air travel market can legitimately and appropriately be 10 separated from the Miami - Orlando air travel market and the Orlando - New York air travel market. These definitions are valid notwithstanding the fact that airlines may achieve additional 11 12 economies of scale and scope if they decide to serve all three of these markets (e.g., by scheduling planes to fly triangular routes from Miami to New York to Orlando to Miami and 13 14 from Miami to Orlando to New York to Miami).

While the TRO requires consideration of potential economies of scale and scope, there is no indication that the FCC requires the Commission to artificially ignore the potential for cross-market efficiencies, nor does the TRO state that each individual geographic market must be large enough to exhaust all potential economies of scale and scope, without regard to the physical proximity of other markets, or the potential for achieving additional economies of scale and scope across multiple markets.

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1	Q.	Can you briefly respond to the quoted portion of Dr. Staihr's rebuttal testimony?
2	A.	Yes. Dr. Staihr apparently is under the impression that MSAs are uniformly "urban or
3		suburban." This is not the case. To the contrary, they frequently include rural areas, as well.
4		The Office of Management and Budget (OMB), the government agency responsible for
5		developing MSAs, has cautioned that they are not exclusively urban in character:
6 7 8 9 10 11		The Metropolitan and Micropolitan Statistical Area Standards do not equate to an urban-rural classification; all counties included in Metropolitan and Micropolitan Areas and many other counties contain both urban and rural territory and populations. [Id.]
12		Collectively, the OMB refers to Metropolitan and Micropolitan Statistical Areas as Core Based
13		Statistical Areas (CBSAs). The OMB further states:
14 15 16 17 18 19		Program designs that treat all parts of a CBSA as if they were as urban as the densely settled core ignore the rural conditions that may exist in some parts of the area. [Federal Register, Vol. 65, No. 249, Wednesday, December 27, 2000]
20		While I agree that MSAs often reflect a significant "community-of-interest aspect" that doesn't
21		mean they are economically homogeneous. Because an MSA includes "a recognized population
22		nucleus," it will invariably include a substantial urban component. [Federal Register, Vol. 65,
23		No. 249, Wednesday, December 27, 2000] Since most urban areas include a suburban fringe
24		of bedroom communities, a typical MSA includes a mixture of both urban and suburban
25		markets. Furthermore, in a state like Florida, which includes many rural area, an MSA may
26		include miles of lightly populated rural areas beyond the suburbs.

1		For instance, downtown Tallahassee, Crawfordville and Panacea are all in the same
2		MSA, but these do not represent a single homogeneous market from the perspective of a
3		CLEC wanting to use its own switch, nor is the degree of impairment faced by such a carrier
4		likely to be the same throughout this large MSA. Most, if not all, MSAs include widely varying
5		neighborhoods, and they often include multiple towns, cities and counties with widely varying
6		economic and demographic conditions.
7		The danger in defining as this vast area as a single market is that it ignores the extreme
8		differences in operating and engineering characteristics between wire centers within the
9		downtown urban core and wire centers toward the far edges of the MSA. In turn, these
10		differences translate into substantial differences in the cost of using a CLEC switch to serve
11		mass market customers in different parts of the MSA.
12		MCI witness Bryant offered a critique of Dr. Pleatsikas's CEA proposal that is also
13		applicable to Dr. Staihr's MSA proposal:
14 15 16 17 18 19		If 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, p. 3]
20	Q.	Can you briefly respond to Mr. Taylor's rebuttal testimony?
21	A.	Yes. Mr. Taylor follows the statement I quote above with four reasons why he believes MSAs
22		are the most appropriate basis for defining a market. Needless to say, I disagree with his first
23		contention-that MSAs are consistent with economic theory. Oddly, in support of this reasoning
24		Mr. Taylor cites the FTC/DOJ merger guidelines. As I explained in my rebuttal testimony,

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1	starting with a large geographic area like an MSA does not comply with the "smallest market"
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2	principle that lies at the heart of the HMGs. Mr. Taylor and I are in agreement that the HMGs
3	are consistent with sound economic theory; where we disagree is with our interpretation of the
4	HMGs; I believe a fair reading of the HMGs confirms that the FTC/DOJ approach is more
5	consistent with an approach that starts with an individual wire center then adds other nearby
6	wire centers with homogenous characteristics; it is not consistent with an approach that simply
7	chooses amongst large "off the shelf' geographic areas like CEAs, MSAs or LATAs.
8	I have already refuted Mr. Taylor's second and third points, regarding fulfillment of
9	TRO guidelines and CLEC entry and advertising patterns, in my rebuttal testimony. I will
10	concede that CLECs do not generally announce the details of their business plans and market
11	entry strategies, a point that was emphasized by Dr. Pleatsikas in his rebuttal testimony.
12	[Pleatsikas Rebuttal, p. 9] However, in Michigan Case No. U-13796, a witness for a CLEC,
13	Sage Telecom, Inc., testified that it does not analyze markets or make entry decisions on the
14	basis of broad MSAs:
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16	Q. Does Sage Market its UNE-P based services to
17	customers in Michigan based on the Metropolitan
18	Statistical Areas defined by the U.S. Office of
19 20	Management and Budget? A. No.
20	A. NO.
22	Q. To your knowledge, does anyone in the Michigan
22	telecommunications industry market its services to
23	customers in Michigan based on the Metropolitan
25	Statistical Areas defined by the U.S. Office of
26	Management and Budget?
27	A. No, they do not. In fact, nearly all of those providing basic local

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Surrebuttal Testimony of Ben Johnson, Ph.D.
On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1 2 3 4 5 6 7 8 9	exchange in Michigan, including SBC, market their services based on exchange areas, because central office services, switching, provision of NXXs, and local calling areas are all based on exchange areas. Some carriers appear to market based on wider amalgamations of exchange areas, such as LATAs or Number Plan Areas (also known as Area Codes or NPAs"). [McCausland Direct, Sage Telecom, Inc., Case No. U-13796, December 19, 2003, p. 16]
10	Mr. Taylor's fourth contention is that prior FCC use of MSAs validates their use in this
11	proceeding. I disagree. The FCC has never utilized MSAs in a context like the present one. I
12	concede the FCC has used MSAs for a variety of different analytical purposes, but those
13	proceedings involved entirely different circumstances and issues than are present in this
14	proceeding. Cases related to telephone numbers portability, ILEC mergers, and pricing
15	flexibility for interstate services all involve factual issues that do not vary greatly from wire
16	center to wire center within an MSA. In the context of this proceeding, however, it is not
17	sufficient to speak of the "local exchange market" generally. In this context, the appropriate
18	geographic market relates to a CLEC's ability to use its own switching facilities to serve mass
19	market customers, and that can vary widely depending upon the circumstances applying to each
20	wire center (e.g., the availability of collocation facilities and the number of enterprise customers
21	present in each wire center).
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23 Q. Can you briefly respond to Mr. Gillan's rebuttal testimony?

A. Yes. Mr. Gillan's proposal is deeply flawed, and creates very high risks for consumers. Local
 Access and Transport Areas (LATAs), which were initially designated at the end of the AT&T

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

antitrust case, are even larger geographic areas than MSAs. There are 10 LATAs in Florida, collectively encompassing the entire state. Because LATAs are so vast and heterogenous, they are effectively very similar to defining the entire state as a single market. In the quote above, Mr. Gillan apparently views this as a virtue, noting that a LATA is "sufficiently comparable" to the state as a whole.

Recall that the TRO explicitly prohibits defining an entire state as a single market. By utilizing LATAs, Mr. Gillan is offering an approach that avoids this legal prohibition while ensuring a similar end result. LATAs are very heterogeneous, virtually guaranteeing that each market will include a mixture of different circumstances and areas, ranging from places where high levels of impairment exist, to areas where little or no impairment is present.

11 With such a broad geographic market definition, the Commission is forced into an all-12 or-nothing choice: either the entire LATA will be declared off-limits to competition from CLEC 13 that depend on unbundled switching (because the"trigger" has been pulled in a portion of that 14 vast area), or UNE-P will be preserved throughout the entire LATA because the absence of impairment does not uniformly exist throughout the entire LATA. Perhaps from his clients' 15 16 perspective an all-or-nothing dichotomy may seem like a reasonable (albeit high stakes) 17 gamble. But from the perspective of customers, it is far too risky an approach. The competitive 18 alternatives available to millions of customers may shrink or disappear if this approach is 19 followed and it is determined that the "trigger" conditions have been fulfilled within a portion of 20 the LATA.

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		Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP		
1	Mass	s Market/Enterprise Market Breakpoint		
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3	Q.	Would you like to respond to any of the rebuttal testimony regarding the breakpoint		
4		between the mass market and the enterprise market?		
5	A.	Yes. Verizon witness Fulp, and FCCA witness Gillan testify as follows:		
6 7 8 9 10 11 12 13 14 15		A fixed crossover point based on a pre-determined number of analog lines, based on some calculation of average costs, would ignore the actual economic choices made by the CLECs and their customers. As I explained in my direct testimony, the Commission should establish that mass market customers are those customers that are actually being served with one or more voice grade DS0 circuits, while enterprise customers should be those customers actually being served by DS1 or higher capacity loops. [Fulp Rebuttal, p. 6]		
16 17 18 19 20 21 22 23 24 25		In the Verizon territory, I recommend that the Commission accept Verizon's proposal to not impose an artificial upper bound to the mass market Where the ILEC insists that the Commission establish a regulatory "cap" on the mass market, the basic principles on how such a cap should be calculated were included in my direct testimony. My review of the testimony of Sprint's witness Kent Dickerson indicates that Sprint's calculation conforms to those prificiples and I would recommend the Commission adopt a crossover of 12 lines for the territories of Sprint and BellSouth. [Gillan Rebuttal, p. 16]		
26		To varying degrees Mr. Fulp and Mr. Gillan argue that the Commission should not use		
27		the FCC's default breakpoint of four lines, and that it is not necessary to choose a specific		
28		(uniform) alternative. Instead, they suggest the Commission should define the mass market as all		
29		customers that are served using analog DS0s. This is an intriguing approach, since it relies on		
30		actual customer data, rather than a uniform breakpoint. However, it isn't explicitly permitted		

under the TRO. The TRO reads in part:

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Therefore, as part of the economic and operational analysis discussed below, a state must determine the appropriate cut-off for multi-line DS0 customers as part of its more granular review. This cross over point may be the point where it makes economic sense for a multi-line customer to be served via a DS1 loop. We expect that in those areas where the switching carve-out was applicable (i.e., density zone 1 of the top 50 MSAs), the appropriate cutoff will be four lines absent significant evidence to the contrary. We are not persuaded, based on this record, that we should alter the Commission's previous determination on this point. Accordingly, we authorize the states, within nine months of the effective date of this Order, to determine the appropriate cross over point. [TRO, ¶ 497]

16 At least on its face, this language seems to contemplate defining the mass market on the basis of 17 a specific cut-over point or dividing line-the "point where it makes economic sense for a 18 multi-line customer to be served via a DS1 loop." The TRO seems to provide some flexibility 19 in defining this point, allowing, for example, consideration of a variety of different revenue and 20 cost data. However, the FCC clearly seems to contemplate a breakpoint that corresponds to a 21 conceptual dividing line, rather than simply sorting customers into markets on the basis of their 22 historic serving arrangements. Thus, for example, if a large bank continues to be served with 23 hundreds of analog PBX trunks, this would not be sufficient to cause the bank to be classified 24 as a "mass market" customer. Interestingly, while Mr. Gillan agrees with classifying customers 25 on the basis of their actual serving arrangements in the case of Verizon, for BellSouth he 26 recommends adopting a breakpoint of 12, as developed in the study conducted by Sprint 27 witness Dickerson.

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

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### Q. What is the impact of using a breakpoint of 12 rather than the FCC's default assumption?

A. The immediate impact is that a larger number of customers will be classified as falling within the "mass market" and fewer will be treated as "enterprise" customers. The ultimate impact will depend on the geographic market definitions adopted by the Commission, as well as the specific criteria that are used by the Commission in reaching its final conclusions concerning whether or not impairment exists.

8 In general, a high breakpoint increases the number of risks facing residential consumers 9 in this proceeding. With a high breakpoint and large geographic market areas, the likelihood 10 increases that millions of residential customers will no longer be provided with any competitive 11 options, or they will have fewer competitive choices, as a result of decisions made in this 12 proceeding. This follows directly from the fact that CLECs that are using their own switches 13 tend to focus on larger business customers; the smaller the customer, and the lower the revenue 14 provided by the customer, the less likely they will be able to serve that customer using their own switch. With a high breakpoint, the likelihood increases that the Commission will conclude the 15 16 "trigger" has been pulled due to CLEC activity that has spilled over from the enterprise market 17 into the high end of the mass market. In turn, this could lead to a finding of "no impairment" 18 throughout the entire geographic market, despite the fact that no CLECs are economically 19 capable of, or willing to, serve low-revenue customers (e.g. very small business and residential 20 customers) within that market. As a result, competitive options for residential customers will 21 diminish or disappear, because CLECs will no longer be able to use unbundled switching to 22 serve these smaller customers, and they may not be able to use their own switching facilities to

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		Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP	
1		do so.	
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3	Dem	and-Based Market Distinctions	
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5	Q.	In their rebuttal testimony, do any of the other witnesses criticize the concept of	
6		distinguishing between business and residence product markets?	
7	A.	Yes. Verizon witness Taylor states as follows:	
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		In the first place, the TRO makes it clear that the product market the FCC considers relevant for applying its triggers is mass-market local exchange service, irrespective of whether the customers are business or residential: [Quotes cited] [Taylor Rebuttal, p. 36] Second, from an economic perspective, the fact that residential and business customers pay different prices for basic service does not imply that those customers purchase services in different markets In other words, Dr. Bryant overlooks the fact that the price differences between residential and business services are the result of public policy and not private profit-maximization, and thus those price differences, by themselves, do not imply that residential and business customers occupy different product markets under the Merger Guidelines' standard. [Id., pp. 37, 39]	
24 25 26 27 28 29 30 31 32		Third, the TRO, itself, outlines some of the economic reasons why all mass-market customers, business and residence alike, belong in the same product market for the purpose of its trigger analysis. In ¶ 459, the FCC spells out the characteristics of these customers that place them in a distinct product market: they are served by DS0 technology, they have small accounts, and they purchase service month-to-month rather than using a term discount. In addition, such customers are served through customer service centers rather than individual customer representatives, their services are marketed using mass-market media	

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1 2 3 4 5 6 7 8		rather than individual, customer-specific marketing, and they buy simple tariffed services rather than packages of network services solicited by formal Requests for Proposals. Residential and business mass-market customers are served using the same technologies (circuit switches and DS0 loops), and thus any supplier of mass-market business services offers and can supply mass-market residential services if a profitable opportunity arises. [Id., p. 39]
9	Q.	What is your response?
10	A.	None of these quotes from the TRO precludes the possibility of analyzing residential and
11		business customer data separately, or viewing these customers as purchasing telecom services
12		in separate product markets. In fact, I presented a very similar quote in my rebuttal testimony
13		from $\P$ 127 of the TRO. In this passage, the FCC discusses the tight profit margins associated
14		with serving smaller customers. This is a crucially important point-one that Dr. Bryant made in
15		his rebuttal testimony.
16 17 18 19 20 21 22 23 24 25 26		Because business customers generally produce more revenue than residential customers under current pricing practices, a larger proportion of business customers means a larger potential revenue stream for the CLEC. Likewise, the demographic characteristics of the wire center may affect the potential revenue available to the CLEC. A wire center with a large proportion of affluent customers, or a wire center with a large proportion of younger, more tech-savvy customers will likely generate more revenue per customer than wire centers without these characteristics. [Bryant Rebuttal, p. 5]
27		The tighter profit margins associated with serving residential customers have steered most
28		switch-based CLECs into serving predominantly business customers In turn, this suggests that
29		important differences may exist between impairment conditions for business and residential

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1 mass market customers-differences that could be overlooked if these customer groups are 2 lumped together throughout the Commission's decision making process. Unless differences in customer characteristics and gross profit margins are adequately 3 4 considered, conclusions concerning impairment may be reached by the Commission that are 5 only valid for a minority of the mass market customers. For instance, a finding of non-6 impairment may be reached based on evidence that is only valid with respect to higher revenue 7 small business customers-evidence that isn't valid for lower revenue customers (e.g. those 8 customers generating less than \$80 per month). Yet, the latter group may include the vast 9 majority of all customers in Florida. Stated another way, unless the Commission takes care to 10 examine data separately for residential customers, or low revenue customers, it may reach conclusions about impairment that are not valid for those customers. This problem is a serious 11 12 one, since it involves the risk of reaching invalid conclusions for the great majority of all 13 customers in the state.

I also disagree with Mr. Taylor's contention that "price differences between residential 14 and business services... do not imply that residential and business customers occupy different 15 product markets under the Merger Guidelines' standard." It is true that residential customers 16 pay lower prices than business customers in part due to public interest considerations 17 (particularly the universal service goal). But "the price differences between residential and 18 19 business services" are not exclusively the result of public policy considerations, nor are they 20 necessarily inconsistent with private profit-maximization. For instance, private 21 profit-maximization efforts in the airline industry have led to wide discrepancies between 22 business and leisure fares. Hence, for many purposes it is appropriate to distinguish between the

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Surrebuttal Testimony of Ben Johnson, Ph.D.	
On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP	

1	business and leisure travel markets. Furthermore, the mere fact that price differences are partly
2	due to public policy considerations does not eliminate the relevance of those pricing differences
3	for analytical purposes, nor does it imply that residential and business services cannot
4	legitimately be classified as occupying different product markets under the Merger Guidelines'
5	standard.
6	Finally, it is worth noting that in at least one point in the TRO, the FCC seems to
7	suggest that state commissions may refine their market definitions in a manner than ensures an
8	appropriate final conclusion:
9 10 11 12 13 14 15	In circumstances where switch providers (or the resellers that rely on them) are identified as currently serving, or capable of serving, only part of the market, the state commission may choose to consider defining that portion of the market as a separate market for purposes of its analysis. [TRO, supranote 1552]
16	In addition to resolving the issue of geographic market definitions, the Commission must
17	decide on an appropriate way to distinguish the mass market from the enterprise market, to
18	ensure that the final conclusions are consistent with the overall purpose of the proceeding. In
19	fact, the FCC seems to recognize, at least obliquely, that for some purposes it may be useful to
20	stratify markets with reference to customer characteristics. Consider for instance, this passage:
21 22 23 24 25 26 27	As discussed above, the record does not contain sufficient detail concerning which geographic and <b>customer</b> markets may in fact allow economic entry. In addition, impairments that exist today in certain markets may be remedied in the future due to the implementation of a batch cut process, as discussed above. Because our standard and the guidance from the USTA decision require that the determination of

		uttal Testimony of Ben Johnson, Ph.D. half of the Citizens of the State of Florida, Docket No. 030851-TP
1		impairment be made on a granular basis, and because the record
2		provides insufficient evidence concerning the characteristics of
3		particular markets, we find it appropriate to ask the states to assess
4		impairment in the mass market on a market-by-market basis. [TRO pp.
5		493, emphasis added]
6		
7	Q.	Has the FCC recognized that customer characteristics may impact the presence or
8		absence of impairment?
9	A.	Yes. For instance, the FCC recognized that customer-specific factors can influence whether or
10		not impairment exists:
11		
12		Mass market customers consist of residential customers and very small
13		business customers. Mass market customers typically purchase
14		ordinary switched voice service (Plain Old Telephone Service or
15		POTS) and a few vertical features. Some customers also purchase
16		additional lines and/or high speed data services. Although the cost of
17		serving each customer is low relative to the other customer classes, the
18		low levels of revenue that customers tend to generate create tight profit
19 20		margins in serving them. The tight profit margins, and the price sensitivity of these customers, force service providers to keep per
20 21		customer costs at a minimum. Profits in serving these customers are
21		very sensitive to administrative, marketing, advertising, and customer
22		care costs. These customers usually resist signing term contracts. [Id., ¶
24		127]
25		
26		In this passage, the FCC recognizes that profit margins in serving smaller customers are
27		tighter than those available when serving larger customers, and this clearly has important
28		implications in determining whether or not impairment exists. While the FCC didn't focus
29		specifically on differences in average revenues per line or per customer, the overall thrust of this
30		reasoning is consistent with an approach which draws such a distinction. As the revenue per

Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

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1		customer declines, it becomes less and less feasible to profitably serve a customer using a
2		CLEC's own switch, because insufficient profit margins exist to overcome the fixed (per-
3		customer) costs of providing service using the CLEC's own facilities.
4		For this reason, one would anticipate that relatively few CLECs will serve residential
5		customers using their own switches. Rather, CLECs that use their own switches primarily focus
6		on serving larger customers-those generating much higher revenues per customer. As the FCC
7		has recognized:
8 9 10 11 12 13		although serving these customers is more costly than mass market customers, the facts that enterprise customers generate higher revenues, and are more sensitive to the quality of service, generally allow for higher profit margins." [Id., $\P$ 128]
14		Unless these differences in customer characteristics and gross profit margins are
15		adequately considered, there is a great risk of inadvertently reaching conclusions concerning
16		impairment that are only valid for mass market small business customers-conclusions that are
17		not valid for residential customers.
18		
19	Q.	Do you have any recommendations with regard to the distinction between residential
20		and business (or low and high revenue) customers?
21	A.	Yes. To the extent it is legally permissible, it could be helpful to stratify each geographic market
22		in order to analyze business and residential customer data separately. If this is done, data
23		relating to whether or not impairment exists could be analyzed separately with respect to
24		business and residential customers. Thus, for example, even if there is reason to believe a
23		relating to whether or not impairment exists could be analyzed separately with respect to

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Surrebuttal Testimony of Ben Johnson, Ph.D. On Behalf of the Citizens of the State of Florida, Docket No. 030851-TP

1	"trigger" has been pulled (due to the presence of multiple CLECs) for the small business market
2	or segment, this shouldn't automatically force the Commission to conclude that the "trigger" has
3	also been pulled for the residential market or segment.
4	Another option would be to further subdivide markets on the basis of revenue per
5	customer, or on the basis of gross profit margin per customer (revenues minus direct costs), to
6	the extent this is necessary to ensure that a finding of non-impairment is not erroneously applied
7	to customers that cannot feasibly be served using a CLEC's own switch. This could lead to
8	more accurate and homogenous market classifications than a system based purely on the
9	number of lines used by each customer (e.g., the number of DS0 lines).
10	For instance, if the Commission concluded that customers generating revenue of less
11	than \$80 per month cannot feasibly be served using a CLEC's own switch, it could potentially
12	segregate these customers from the remainder of the "mass" market, at least within certain
13	geographic markets. A revenue-based distinction might enable the Commission to take into
14	account differences in underlying market conditions, including typical rate structures, rate levels,
15	and gross profit margins associated with different types of customers. This is consistent with
16	language in the TRO that requires state commissions to take into account "the variation in
17	factors affecting competitors' ability to serve each group of customers, and competitors' ability
18	to target and serve specific markets economically and efficiently using currently available
19	technologies." [Id., ¶ 495]
20	Regardless of what specific approach the Commission ultimately adopts, it should take
21	great care to ensure that its decisions do not prevent CLECs from serving low revenue
22	customers. CLECs should be allowed to continue using switching UNEs to serve low revenue

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		uttal Testimony of Ben Johnson, Ph.D. half of the Citizens of the State of Florida, Docket No. 030851-TP
1		customers if it isn't economically feasible for them to serve these customers using their own
2		switch.
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4	Q.	Does this complete your surrebuttal testimony that was prefiled on January 28, 2004?
5	A.	Yes, it does.

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BY MR. BECK: 1 2 Dr. Johnson, have you prepared a presentation Q 3 concerning the testimonies that you filed? Yes, I have. 4 Α It's all yours. 5 Q 6 Α Thank you very much. It's going to be broken into 7 five areas. First, I'm going to talk briefly about some 8 background to provide context that I think may be useful at 9 this stage. Secondly, I will talk about the geographic market definitions. Third, about the distinction between the mass 10 11 market and enterprise market. Fourth, I will talk about demand-based market distinctions. And, finally, if time 12 13 permits, I will summarize my recommendations. 14 As you know, the TRO includes a national finding of impairment for mass market switching, but the FCC delegated 15 responsibility to this and other state commissions to determine 16 more granular market-specific impairment conditions, or whether 17 a lack of impairment exists in certain specific granular 18 markets. 19

And they have asked the Commission to do it in a three-step process. First, you are lacking at -- and the most important one in this proceeding -- what is called the self-provisioning trigger. Whether or not there are three or more unaffiliated CLECs that are serving mass market customers in the particular market. Also, you can look at whether a

wholesale trigger of two or more wholesale suppliers are
 present, and there is also a potential deployment trigger based
 on economic modeling and review of other facts.

The key Commission responsibilities are set out at 4 5 Paragraphs 495 and 496 of the TRO, as well as 497, where the FCC explains that you will need to define the markets that will 6 7 be used in these trigger analyses, and also to more precisely 8 define, if necessary, the mass market. And once you have done 9 those definitions, then the remaining step is to determine the extent to which impairment exists in each specific market given 10 the parameters of that market and the various parameters set 11 12 forth in the TRO.

13 Now, there are important consequences to this process which is easy to lose sight of. To the extent nonimpairment is 14 15 found in specific markets, it might reduce or eliminate competitive options for customers in those markets. It might 16 17 also increase CLEC costs leading to higher rates to be charged 18 by CLECs. The greatest impact will be in those instances where 19 a lack of impairment is found, but that lack of impairment is 20 actually unique to certain types of CLECs or certain types of 21 customers within that market.

Turning to the key issue of the geographic market definitions, the other parties' proposals are worth briefly summarizing. First, at one end of the spectrum with the largest proposed definition is the position of most of the

1 CLECs in this proceeding as collectively presented through the 2 FCCA, and they are proposing the use of a LATA, and they 3 frankly explain that one of the advantages of that is it is 4 very similar to using a statewide market definition.

5 The second broadest definition is the one offered by 6 Sprint, another one of the CLECs, as well as an ILEC in the 7 state, and they are proposing the use of metropolitan 8 statistical areas, or MSAs.

9 Towards the middle, but still very broad is the 10 proposal of Verizon to use UNE rate zones divided by MSAs, or 11 sort of the intersection of MSAs and rate zones. And very 12 similar to that is the BellSouth proposal to use UNE rate zones 13 divided by component economic areas.

Finally, MCI at the lowest end of the spectrum, or 14 the narrowest market definition is recommending the use of 15 individual wire centers. The citizens, and through my 16 testimony we are suggesting to you something towards the lower 17 end of that spectrum, but it is a little different than MCI, 18 19 but very close to MCI, and that is to start with individual wire centers, but to group them to the extent there are 20 homogeneous wire centers near each other that can form logical 21 geographic markets. 22

Those groupings, or small groups of wire centers, would be the ultimate market definition to use for the actual process, because to the extent an individual wire center is

close to other wire centers that have homogeneous
 characteristics, what you find within that one wire center can
 reasonably be interpreted as representative of that entire
 small market area.

5 The bulk of my testimony is concerned with the 6 disadvantages of using very large market areas and the 7 disadvantages of going too broad with this process. The key 8 problem is that they are not sufficiently granular in order to 9 achieve what the FCC is asking this Commission to do, and 10 ultimately what the federal judiciary has asked the FCC to do.

More specifically, to the extent you have 11 12 heterogeneity within that large area, such as an MSA, it 13 increases the risk that you will reach a finding of impairment, 14 whether nonimpairment or impairment, that is only valid for 15 some parts of that overall area. If you have differing 16 economic and cost characteristics within the broad area, or 17 differing demand and demographic characteristics, then whatever 18 evidence you settle upon and ultimately conclude that the 19 trigger is or is not pulled for that broad area isn't necessarily representative of the actual situation. 20

It is actually quite similar to the problem with the FCC's finding of nationwide impairment, because as the evidence comes out in the various states there are exceptions to that broad general finding. Some instances in which the facts are quite different than what the FCC looked at generally. The

same problem can happen within a state if you use a large
 market area, such as an MSA.

I also point out that the OMB, which is the federal 3 agency that defines the MSAs and updates them from time to 4 5 time, has warned the public that there is heterogeneity within MSAs, and that they do include rural as well as urban and 6 7 suburban areas. And I would point you to the maps at Pages 3 and 4 of my rebuttal exhibit to show you that the MSAs that 8 encompass, for example, Tampa are very broad areas that anyone 9 that is familiar with that area knows it encompasses areas that 10 11 are essentially rural in character, very lightly populated, unlikely to attract competitors. As well as densely populated 12 areas, like downtown Tampa. 13

I also talk about the horizontal merger guidelines, not because they are a specific mechanism that you can adopt here, but because they do provide some insight and guidance into a general approach that I would recommend you use. And that approach is what I call the smallest market principle, or start small and build up. And it is at the essence of what the FTC and DOJ do with their horizontal merger guidelines.

And bear in mind that unlike this impairment process, which is really a matter of first impression for this and other state commissions, the horizontal process for antitrust reviews has been perfected over a period of time. And they have found that starting with very small and narrowly defined, very

precise, tightly defined markets and then building up to the extent they find additional products or additional geography that is homogeneous and similar to that, and that has similar economic characteristics in that antitrust context, you settle upon a larger more practical market to work with rather than having to look at each and every individual product being sold by two firms that are proposing to merge.

8 What I am suggesting is that same basic approach 9 should be used here. That you would be well advised to start with the individual wire centers, which is the lowest level of 10 11 detail that is readily available for statistical purposes, and 12 you look at those and determine whether there are adjacent wire 13 centers that have homogeneous characteristics, similar numbers 14 of collocations. And by collocation I mean including IXC 15 collocations, all types of collocation. Similar numbers of enterprise customers, similar density levels. If you find 16 17 homogeneity, then you group those together, because whatever 18 you found in any one of those wire centers reasonably could be 19 concluded to be applicable to the remainder.

But as you go out from the inner city and go into the suburbs or into rural areas, you will find tremendous changes and it is no longer homogeneous, and it would be appropriate to group those separately as separate markets to be analyzed in a separate step of the process.

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Now, more fundamentally this entire approach, even

though the number of markets in the state may be very similar 1 to the one being used by BellSouth, is a more effective process 2 that will be more precise and more successful for you. The 3 approach being used by BellSouth and Verizon, and for that 4 matter Sprint, or even FCCA, is fundamentally the opposite. 5 Ιt 6 starts with the entire state, or it starts with a very broad 7 statistical predefined boundary, such as an MSA or a LATA, and if it does any further steps at all it cuts down towards a 8 subdivision of that, such as the UNE rate zones. Or vice 9 10 versa, they start with the entire state's three UNE rates zones and subdivide by CEAs. 11

It is fundamentally the opposite approach, and the problem with it is not how many markets they find, but whether the resulting markets are truly homogeneous. So can you trust the findings you find of a behavior of particular CLECs in portions of that market that they are going to be indicative of what can happen throughout the market once UNE-P is removed from being available.

The key problem is that you are supposed to be considering detailed factors like the locations of customers who are actually being served, if any, by the competitors. And that is a quote from Paragraph 495 from the TRO. You are supposed to be considering scale and scope economies, but those fundamentally are determined through an entry process that focuses on wire centers.

In general, if you start with very large area definitions, you will inadequately distinguish -- and this is again a quote from the TRO, Paragraph 495 -- distinguish among markets where different findings of impairment are likely. This is the absolute essence of the problem.

6 If you average a river that has sections that are two 7 inches deep and sections that are 12 feet deep, you cannot 8 reach a sound conclusion as whether you can walk across or wade 9 across the river, or whether you are going to need a boat. Ιt 10 is that same basic problem when you start looking at something 11 that is too broad and that is heterogeneous, you can't have 12 confidence that the currently observed empirical data is 13 representative of what will happen when you remove UNE-P from the market. 14

I would point out that to the extent some are suggesting that the CLECs cannot adequately achieve scale and scope economies through this approach of focussing on individual markets, I discuss at some length in my prefiled testimony the fact that scale and scope economies by their very nature involve multiple markets, that firms, carriers serve multiple markets, different types of customers.

Furthermore, there has been absolutely no study or proof that a large area, such as a LATA, is needed in order for a CLEC to achieve scale and scope economies. That they are unable to serve multiple markets and achieve, for example, the

1 efficiencies of using an OSS. And really to the contrary, 2 those economies can be achieved even if you define markets 3 narrowly in the manner I'm talking about with groups of wire 4 centers of homogeneous characteristics.

5 Now, there has been some discussion of market entry decisions, and that is one of the points of contention and 6 7 whether or not it is appropriate to define the markets as 8 individual wire centers or small groups of wire centers with 9 homogeneous characteristics. And the key point is that in 10 reality entry decisions are often made using the revenue to 11 cost considerations, the degree of profit margin that is 12 available. And those considerations vary at the wire center 13 level. It is to some degree reflected in the BellSouth 14 approach when they concede that the UNE rate zones are relevant 15 and they need to be considered because the profit margins are 16 lower in those areas where the loop rates are higher.

17 However, it should also be noted that it is very clear, anyone familiar with the industry would know that the 18 19 CLECs tend to locate their switches in areas where they can be 20 serving. And, in fact, their marketing efforts target 21 enterprise customers, high profit margin customers. There is 22 very few exceptions to that. Generally, the CLECs that put in 23 switches are primarily serving the enterprise customers. And 24 those tend to be located in specific places, higher density 25 areas, downtown urban areas and the like.

1 The other concern as to large area definitions is 2 that entry doesn't, in fact, necessarily occur throughout an 3 entire LATA or an MSA in one fell swoop. So that is really not a -- that is sort of a false basis for choosing the LATA or the 4 5 The reality is that entry consists of a series of MSA. 6 decisions, and those decisions are tied very specifically to 7 the profit margins or the revenue relative to cost 8 calculations. Which again can vary by individual wire centers, 9 and certainly more importantly can vary geographically from 10 different parts of the state or different parts of an MSA.

The customer mix which is available within specific 11 12 wire centers can also influence entry decisions. If there 13 aren't enough enterprise customers, CLECs may not be attracted 14 to the market regardless of any other factors that might be present. And, again, the fact we are focussing on enterprise 15 16 customers is not in any way incorrect here, because that is the 17 process. Typically what happens, and is well recognized is 18 that they are primarily serving the enterprise customers. The 19 key question is if we no longer have UNE-P available will the 20 CLECs start expanding into serving those types of customers who are currently served with UNE-P with that switch. 21

In other words, will they say, well, the second best choice is to start using my switch to serve smaller business customers, those who are below my current cutoff, or those that I am currently only serving using UNE-P. That is the key

question that the FCC needs you to figure out, because they have seen on a broad bush basis a distinction between the enterprise and the individual smaller customer market, the so-called mass market.

5 Now, the key thing also to bear in mind here, it is 6 very interesting the way you have set up your proceeding and 7 split it into two pieces, because in a sense the two parties 8 that are groups of parties that are spending most of the time 9 with you and have the most immediate direct impact on their 10 operations or the outcome of this proceeding sort of share a 11 sense of wanting large markets. What they disagree on is 12 whether that large market should then in turn be declared as 13 completely full or completely empty. The reality is the glass 14 is half full, and that is a very subtle problem to deal with. 15 The broader the market, the more a victory or a loss in Florida 16 helps them or hurts them, and they are obviously hopeful that 17 their advocacy efforts will be successful.

18 The problem from the Commission's point of view is to 19 do what the FCC wants you to do. It is very difficult to 20 achieve that if you, in essence, are dealing with such broad 21 brush categories that it essentially becomes a vote, 50 states decide whether they are going to agree or disagree with the 22 default finding of impairment for mass market and nonimpairment 23 24 for enterprise. And I don't really think that is what the 25 judiciary really is seeking here.

When they said they want a more granular approach, 1 2 and the FCC says we are needing a more granular approach from 3 the states, surely they are looking for something that is down 4 at the state specific level, the details of individual markets, 5 individual neighborhoods, if you will. Individual cities that 6 only state commissions can know. And that is the essence of 7 the exercise that you need to do here even though many of the 8 parties, perhaps virtually all the parties here have somewhat 9 different agendas.

The key question is that if the defined markets are sufficiently homogeneous then you are minimizing the risk of adverse or unintended consequences. Which is, of course, always the problem with government intervention in markets is you get these unintended consequences. The goal here is to minimize those and, in fact, to achieve what the Congress ultimately in the '96 Telecom Act is seeking.

By analyzing the data at the wire center level and then aggregating up where homogeneity exists, you can much more precisely determine where the impairment exists and where it does not exist. With this more granular analysis, you can have greater confidence that the findings you are making are going to be valid with respect to all carriers and all customers.

23 So removing UNE-P will not have a serious adverse 24 effect if it is done in that manner and it is very carefully 25 done so that you are confident that the behavior of the

1 existing three triggering carriers is indicative of what other 2 carriers are capable of doing. That they are, in fact, capable 3 of putting in a switch or taking an existing switch and 4 starting to use it to serve mass market customers.

5 The more heterogeneous the market, the less 6 confidence you can have that the conclusions you are reaching 7 will be valid and will not cause a drastic reduction in the 8 overall level of competition in the state. This is surely not 9 what the FCC was seeking and certainly not what the federal 10 judiciary was seeking when asking the FCC to be more precise in 11 its whole approach to impairment.

Now, according to the ILECs, if a trigger is pulled 12 13 in any portion of a large market area, then that entire area 14 should be deemed free of impairment. And, again, I think you 15 see the essence of that problem. That is really not the heart 16 of what is being asked here. The question is whether the 17 behavior of, say, an FDN and the way they are acting in the particular markets they are entering, are those indicative of 18 19 what, say, an AT&T is capable of doing in the future if it 20 becomes necessary for it to.

According to the witnesses that are arguing for large area definitions, and who are trying to find that the impairment exists throughout that entire large area, it is really just the reciprocal of the same philosophy. They are asking you to look at specific evidence of, say, a lack of

participation by most of the CLECs, or a lack of intensity of mass market activity as indicative of that entire market area.

These are parallel positions and in some ways you might think it is a nonissue what the geography is. Let's just use these large areas and move on to whether it is impairment or nonimpairment. But, again, I think that doesn't serve the best interests of the public, it doesn't serve the best interests of the citizens of the state.

9 The key question in this parallel process is that, 10 you know, from the point of view of the parties that are 11 advocating their respective positions, they get the biggest home run out of the ballpark. But from the point of view of 12 13 the public there is this real concern that you will find, for 14 example, a finding of a lack of impairment based on activity in 15 downtown Miami, and then generalize that throughout the entire Dade or Dade and Monroe area. And, again, that could 16 17 ultimately be very adverse to the interests of the citizens.

And really the reverse is also true. If you conclude based on the entire LATA there is just not enough activity, there is not enough evidence that the national default position should be overcome, you run the risk that we are not sufficiently withdrawing UNE-P where it should be withdrawn and encouraging additional investment in the state and additional switch-based competitive activity.

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Let me turn now briefly to the question of this

distinction between the mass market and the enterprise market.
This is one of these difficult issues that you don't have as
many tools available to you perhaps in the TRO as would be
desirable. The FCC used four lines to draw this distinction.
And that customers above the break point are presumed to be in
the enterprise market, those below that break point are in the
mass market.

There are alternative proposals in the proceeding. 8 9 Sprint in particular is suggesting using 12 lines based on a 10 cost analysis. Setting that higher break point, such as 12, 11 would seem to be within the Commission's discretion given some 12 language in the TRO that points to -- and I will point to 13 Paragraph 497 where it says, "at some point," and goes on to say there is a sufficient number of lines being used by a 14 15 customer, that even though they are currently served in a DSL 16 manner they could be treated the same as an enterprise 17 customer.

So it may be within your discretion to go to 12, and 18 19 it does have some beneficial effects. I will be very specific 20 about what those beneficial effects would be. It does expand 21 the number of small business customers that will continue to 22 have UNE-based competitive alternatives in markets where few, 23 if any, switch-based CLECs offer service. Or put another way, 24 it reduces the impact of the blanket nonimpairment finding for 25 the enterprise category.

In other words, we have areas of the state that enterprise customers are presumed to be nonimpaired, but is that truly going to be valid when you get to some of the nooks and crannies of the state, the more rural parts of the state. So there could be customers of 5, 9, 11 lines that would get some benefit of having additional UNE-P options available to them if you switch this break point.

8 On the other hand, there are some disadvantages or 9 some risks, if you will. It increases the chances that 10 residential and very small business customers, and by that I 11 mean the ones, you know, four, three, two, one line customers 12 will not have any competitive options at the end of this 13 process.

Or put another way, the trigger may be pulled in an entire market, yet that doesn't necessarily mean -- there is nothing about this process that guarantees that the extremely small customer, the one line business customer, the one line residential customer who doesn't use features or very many features, doesn't generate a lot of revenue is going to have any competitive alternatives.

One of the possible consequences of this entire process is where you find a lack of impairment exists under the FCC's rules you may ultimately have a result in which competitive alternatives will be withdrawn. UNE-P will no longer be available, carriers won't make enough money on the

FLORIDA PUBLIC SERVICE COMMISSION

pure resale approach and they will simply withdraw from the
 market.

3 If you shift this dividing line between the enterprise and the mass market, it has subtle effects on those 4 5 risks. For example, an entire market might be declared as 6 unimpaired because of some seven line customers activity that 7 these counts you have been looking at are all based on the 8 presumed four line demarcation. The counts may shift, the 9 number of CLECs may shift because of these gray area customers who are above four and below 12. 10

In general, the biggest concern is that the CLECs that remain in the market may need to increase their rates in order to recover the cost of installing a switch, a collocation cage, a backhaul network, or they may withdraw from the market in its entirety. That they are currently serving one and two line customers, three line customers, they may ultimately leave the market when UNE-P is no longer available.

18 To some degree that is an unavoidable consequence of 19 the structure of what the FCC has handed you with, but there 20 are ways that in looking at this analysis, looking at it very carefully you can certainly try to minimize the number of 21 22 customers who are adversely affected. You can try to minimize 23 those risks. Get a controlled experiment, if you will, but have one that is truly controlled and not out of control. 24 25 I am almost out of time, but let me very briefly

FLORIDA PUBLIC SERVICE COMMISSION

refer to the subtlety of demand-based market distinctions and remind you that in my prefiled testimony I have referred to the options that I believe are available under the TRO based on Paragraphs 461, 493, 127, and most notably of all, Footnote 1552 to the TRO, where it clearly says that market definitions can be refined if necessary, so that, in essence, an appropriate final conclusion is reached.

You would have to look at the footnote very 8 carefully, but I do believe they have given you the authority, 9 although I don't think they realized the full degree you might 10 need to use that authority. They have given you the authority 11 if you find that having defined a market through the basic 12 13 process there are some exceptions to that market, there are sections of the market, geographic or otherwise, that the 14 15 activities, the characteristics are fundamentally different, there is no evidence that CLECs are willing to serve that part 16 of the market, then you can make an exception and, in essence, 17 refine the market to separate out that pocket that is sort of 18 19 the anomaly, or that is contrary to the basic definition.

Now, I will admit the TRO doesn't specifically say you can do that to separate in certain cases residential from business customers. But I believe that would be a reasonable interpretation and within your discretion should you choose to do so. Admittedly, the TRO is primarily focussing on geography. But, again, there is no -- that I can tell there is

no explicit prohibition that prevents you from on a very
 careful selective basis drawing additional distinctions where
 you feel it is necessary.

Finally, the Commission has a need to look very 4 5 carefully at this entire process. You cannot treat it simply as a cut and dried mechanical exercise. All the states are 6 7 facing the same problems at the very time. There is very little guidance to go on in terms of how other states are 8 treating the issues, or for that matter how the FCC will 9 10 ultimately readjust or refine this process. We are at the 11 beginning of the process akin to quite some years ago in about '97 when we were all starting with the beginning of the TELRIC 12process and it evolved quite a bit over the subsequent years. 13

14 Core principles I will leave you with, and I hope you 15 will choose to use. I believe it is wise to start small and build up in dealing with your markets. The mere count of 16 17 markets is not the only factor to consider. You also need to 18 consider whether those are homogeneous and logical markets. 19 Also, I believe that the CLECs' ability to target these 20 specific markets, their actual pattern of entry is important 21 and needs to be looked at very carefully.

You should take care in setting the break point between the mass market and enterprise. And I'm not really advising you specifically whether you should deviate from the default. If you don't see strong evidence to deviate from the

four, I would suggest you leave it in place. But you should look at that issue carefully because it is a subtlety that will become clear to you as you look at the remainder of your evidence and how are the final outcomes affected by that assumption that you are going to use four as your breakpoint.

And, in particular, I would ask you to look very closely at data for residential separately from small business. Even if you ultimately conclude that the small business activity is indicative of what can happen to residential in the future, make that a conscious decision. Think about the question.

12 If you see evidence that none of the carriers or only 13 one of the carriers present is serving any significant number of residential customers, and they are almost entirely focussed 14 on small business customers, then do think through the 15 16 potential consequences of reaching a finding of nonimpairment 17 based on business activity and applying that to the residential market thereby removing the UNE-P option for carriers who are 18 19 interested in serving residential customers.

I think we have just about used up the half hour andI thank you very much.

22 MR. BECK: Mr. Chairman, we will cede the remainder 23 of the time to the AARP.

CHAIRMAN BAEZ: Okay. And by my count I've got exactly 30 minutes at this point. Mr. Twomey. Thank you, Mr.

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Beck. Thank you, Dr. Johnson.

MR. TWOMEY: Mr. Chairman, Commissioners, thank you. Mike Twomey on behalf of AARP. I want to apologize, I'm feeling a little bit lightheaded. I think I'm getting sick, but I want to go through a statement I have and read it as best I can.

7 Mr. Chairman and Commissioners, to some degree the 8 AARP questions the FCC's jurisdiction to have you undertaking 9 this task. Clearly others do, as well, and I suppose it is 10 possible within a matter of days that the D.C. court could 11 issue an order rendering most of what you are doing moot.

12 However, in the event that this case is not mooted, AARP believes this case has critical implications for the level 13 14 of competition residential customers will continue receiving that they have now and that they might experience in the 15 future. AARP believes it is essential for this Commission to 16 exercise the discretion it has under the TRO to ensure that the 17 fewest number of residential customers are left geographically 18 19 stranded with no reasonable near term potential for receiving 20 economically reasonable competition. AARP believes that there 21 are promises that have been made to residential customers regarding the availability of competition for many years now 22 that are in danger of being reneged on. 23

Let me briefly tell you how AARP believes we got to where we are today, what we have today in the way of

competition, and lastly where we fear this proceeding may lead us. As you all are aware, although I think only Commissioner Deason was on the Commission at the time, the ILECs were legally protected monopolies until the 1995 state legislation that subjected them to competition in exchange for an escape from profit regulation, amongst other things.

7 The 1996 federal legislation was passed with the 8 goal, among other things, of increasing local service 9 competition. At least as early as the session of 2002, 10 virtually all of the telephone parties to this case were 11 petitioning the legislature for access fee legislation which 12 had the potential of substantially increasing basic local 13 rates, especially residential rates.

14 One of the several justifications for raising local 15 residential rates was that the increased rates would provide a 16 greater likely profit margin to potential competitors which in 17 turn would kick start the long promised residential competition that had never materialized to the degree it had been promoted. 18 19 That is, the companies told the legislature that there was not 20 enough competition and that large percentage rate increases 21 would likely fix the problem.

Those companies, again, virtually all of them in this room, prevailed with the legislature in the 2003 session. In late 2003, just last year, these same companies essentially as a consortium petitioned this Commission for some \$355 million

in annual rate increases. As they had told the legislature,
 they also told you that the increased rates would among other
 things increase or enhance the potential for residential
 service competition.

5 You approved over \$344 million in annual rate 6 increases, over 90 percent of which will be paid by residential 7 customers. Your order speaks to the potential increased rates 8 will play in hopefully promoting local service competition.

Your just completed 2003 report to the legislature on
competition, which is Exhibit 82 in this case, was also
included in the access case record as an exhibit. I want to
briefly recite to you some of the things that your report to
the legislature says to the legislature and the public in
general on the status of competition in the State of Florida in
the year 2003.

That report, Commissioners, said with respect to the three available means of competitors coming in an ILEC's market, of the first, resale, that your report said those CLECs that focus on serving customers who have been disconnected by the ILEC, or who refer prepaid service, may view resale as a long-term strategy. It spoke to unbundled network elements.

And then speaking to facilities-based competition, your report said in part, "Frequently CLECs enter the market using resale or UNE-based services while investing the financial resources necessary to build a telecommunications

network and eventually provide facilities-based services independent of the ILECs. Many CLECs have chosen a UNE-P or resale platform, and true facilities-based competition in the local telecommunications market is not yet widespread."

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5 Your report noted that CLECs' residential market 6 share had increased to 9 percent last year from 7 percent the 7 previous year, and it noted as well that the majority of those 8 customers are in BellSouth's territory and predominately in the 9 urban areas served by BellSouth.

The report also noted that the CLECs' residential customers in the year 2003 were up to 270 -- pardon me, 726,638, up from 366,653 in 2001, two years earlier. However, of that number fully 668,261 were taken from BellSouth's service territory, while only 32,175 were in Sprint's territories, and 23,772 from Verizon. The rural LECs had a little more than 2000 residential customers lost to CLECs.

17 Your report went on to note that the top ten exchanges with the most CLEC providers were all located in 18 BellSouth's service territory. The report said on CLECs, it 19 said CLECs concentrate on larger metropolitan areas for a 20 number of reasons, including higher population densities, which 21 improve economics of scale and scope. Lower UNE rates in these 22 higher density zones also attract competitors. Notably, each 23 exchange shown in Table 4, that is the top ten, is in 24 BellSouth's territory. One explanation of the greater CLEC 25

presence in these exchanges is that BellSouth has the lowest
 UNE-P rates among all the ILECs.

The report goes on at Pages 12 and 13, and says that, "As stated earlier, the availability and price of UNEs, especially UNE-P, are key determinants of CLEC market entry. UNE-P appears to be the entry strategy of choice for many CLECs serving the mass market, i.e., residential and small business customers." It goes on to talk about how you all lowered their UNE-P rates over time to the rate they are currently.

Your report goes on to say that BellSouth's level of 10 11 competition is clearly related to its UNE-P rates, which were established much earlier than those for Sprint and Verizon and 12 which are very much lower than those of the other two ILECs in 13 the largest rate zones. 48 percent of total CLEC access lines 14 15 are UNE-P lines in BellSouth's territory alone, while UNE-P comprises only 3 percent of the CLEC lines in Verizon's 16 territory and only 5 in Sprint's. 17

Your report goes on to say that UNE-P lines in BellSouth's territory have increased significantly over the last three years, while resale lines have declined. They have declined dramatically, and they have transitioned, resale has transitioned to UNE-P as the preferred way to go.

A little more from the report. The report, I think it is at Page 17 says in Florida 73 percent of CLEC residential lines are served via UNE-P. 73 percent, Commissioners, of CLEC

residential lines are served by UNE-P, the very methodology that BellSouth and Verizon are trying to do away with at rates regulated by you in very large portions of this state.

Your report goes on to say where UNE-P has become the prevalent method of market entry, proponents of UNE-P argue that UNE-P is critical to ensuring competition in the local telecommunications market and that it must be preserved.

8 Your report notes, as has been conceded here, that 9 the FCC presumptively presumes, that is they presume that 10 markets are impaired unless the proponents prove otherwise to 11 your satisfaction. The report goes on to note that Sprint 12 recognizes the importance of UNE-P availability as is obvious 13 here by announcing its plans to go nationwide including 14 throughout Florida offering UNE-P competition.

As of June 30th, 2003, your report says there were 30
CLECs serving 992,990 lines in Florida. However,

Commissioners, your report notes that fully 90 percent of those 17 lines were business customers. Your report makes it clear that 18 competition to the extent that we have attained it in Florida 19 20 for residential customers is almost totally the result of UNE-P 21 availability. The report shows, I think, conclusively, that UNE-P, that residential competition in this state didn't really 22 start to take hold until your decisions affecting BellSouth's 23 UNE-P rates. I think the evidence is conclusive. 24

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If the Commission's decision in this case results in

1 the widespread unavailability of UNE-P at Commission regulated 2 TELRIC prices, it seems clear to the AARP that the narrow 3 foothold, the mere 9 percent statewide of residential 4 competition, is going to be disappearing to a large degree.

I mean, I think it is clear that those people came in 5 because of the availability of UNE-P at the current rates. Ιf 6 7 the rates increase to market rates, they would go from less than \$2 to \$14. It seems almost mathematically conclusive that 8 9 those people, some of them will go out of the market, and the 10 people that are residential customers, including AARP members 11 that are receiving competitive service over the 27-month transition period will be left without it. 12 To the extent --13 and that what we have now will decline.

Furthermore, AARP is concerned that to the extent that there were providers like AT&T and Sprint and others that tended through their plans to come into the State of Florida and compete with BellSouth and Verizon and the others utilizing UNE-P at the current rates, are less likely clearly to do so if the UNE-P rates, regulated rates are not available.

Now, it seems beyond doubt with the TRO that this Commission is going to be compelled to find the trigger met in certain areas. Where there is three trigger CLECs proven, you have no choice as I see it. What AARP would urge you to do in those cases is exercise the discretion that the FCC has granted to you and constrict the geographic area to the greatest extent

FLORIDA PUBLIC SERVICE COMMISSION

possible around those trigger switches. For the reasons that Dr. Johnson just gave you, that will leave fewer people at risk than if you engage in selecting larger geographic areas.

If it turns out that there is actual active competition in the geographic areas, the smaller areas that we urge you to pick, and it blossoms, there is nothing to stop it from spreading beyond the geographic areas that you select. But in the meantime those people in the areas not -- that are not found not impaired will have access potentially to competitors that would have the UNE-P at regulated rates.

So, in conclusion, AARP would ask you to exercise your discretion in the manner suggested by Dr. Johnson in a manner that will leave potentially the fewest residential customers in this state stranded without the potential access to residential competition. Thank you.

16 CHAIRMAN BAEZ: Thank you, Mr. Twomey. We have got 17 an hour of cross, I guess, for Dr. Johnson. Are any of the 18 parties --

MR. LACKEY: BellSouth is certainly willing to passif everybody else does.

21 CHAIRMAN BAEZ: There is no cross for Dr. Johnson? 22 MR. HENRY: The only reason I came to the table is 23 because Mr. Lackey came to the table, so --

24 CHAIRMAN BAEZ: I see, a little man-to-man. I can 25 appreciate that come March. Ms. McNulty.

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MS. McNULTY: None from me.

2 CHAIRMAN BAEZ: Okay. So it is fair to say that none 3 of the parties have cross-examine. All right. Thank you very 4 much. Well, we have -- you have a question for Dr. Johnson? 5 Okay. Where is Dr. Johnson? There he is.

6 COMMISSIONER DEASON: The question I have is 7 concerning a specific proposal. Have you had the opportunity 8 or have you formulated a specific plan where you have 9 determined the degree of homogeneity for particular wire 10 centers and how those would be grouped, or are you just leaving 11 that to the Commission to ascertain or determine?

12 THE WITNESS: Given the time lines that were 13 applicable in this case, and the delays in receiving discovery and the like, I was not able to actually do the necessary 14 15 calculations by the prefiling date. I have prepared similar 16 calculations for other states, so I can describe to you in 17 detail the process that I am recommending, but I have not had 18 the opportunity to submit to you an exhibit showing a specific 19 example or specific setup of wire centers that have those 20 homogeneous characteristics.

COMMISSIONER DEASON: Is it your opinion that we have the necessary information in the record to do the exercise that you would have done had you had the time?

THE WITNESS: You have most of the data you would want. The only data that -- if there is data missing, and I

can't say exactly what you have in your record, it is certainly 1 available as public data that you could take administrative 2 3 notice of. There is published data by the FCC that they use for the federal universal service fund process. The data that 4 feeds into their cost model that they use to determine the 5 relative cost of various states, various parts of states has 6 7 the data you would need as far as like the area served by each wire center, so you can calculate density. It has published 8 data as to the number of lines in that wire center. 9

Certainly from what I have seen of the discovery in 10 this case there is guite a bit of discovery that tells you the 11 presence or absence of CLECs in various wire centers. 12 The 13 basic data you need is the number of collocators in a wire center, and by that I mean not just those who are operating a 14 15 switch for local exchange, not necessarily just serving mass market, the broadest measure of collocation including IXCs. 16 17 That does give you some indication of the feasibility of collocation in that wire center, the attractiveness of that 18 19 market. So that is an independent data set you can look at 20 that is completely unaffected by UNE-P and its pricing.

So the number of collocators, certainly the number of enterprise customers, or at least a proxy for that. Again, that would be publicly available from the universal service data set, because that data set publishes the number of single line, I believe, and multi-line business customers. It

certainly has the number of special access customers, which are highly correlated with the enterprise class. DS-1 special access, DS-3 special access is available in that data set. Again, you may have additional data that your staff asked for in this proceeding, and other states have been working and there is often complimentary data sets that are very similar that track the same basic information.

So, if you can get a measure on the amount of 8 9 collocation, the line density, and by that I mean total number of lines divided by square mile served by the wire center, and 10 the presence of enterprise customers as indicated by special 11 access lines or multi-line business customers, you have a 12 pretty good indicator. You can look at that data together and 13 very quickly get a sense of whether -- you would know 14 personally if you went to a particular place and said, well, 15 this one is downtown and there is lots of businesses and lots 16 of buildings, and now just a few miles away the next one over 17 is at the edge of the Everglades and it is almost entirely 18 rural in character, some sugar farms or whatever. You can see 19 20 that pattern in the data very quickly and can assemble it.

So if you start working from each individual wire center, and say are the ones next door to it, nearby of the same sort of characteristics, do they belong together or not, and that process can be done fairly easily. Your staff could certainly do it assuming you went ahead and brought in any

extra data like I am describing beyond what they already have
 available to them.

And ultimately, although I think it is useful to 3 perform the exercise for every single wire center, ultimately 4 the ones that matter, of course, are the ones that are in 5 6 dispute, the ones that BellSouth or Verizon is claiming that a 7 nonimpairment is present. If you focus in on those, you may, in fact, find that say within the Tampa/St. Pete MSA there is 8 very distinct heterogeneous patterns occurring, and that 9 10 downtown Tampa is fundamentally different than the areas to the 11 east of Tarpon Springs or whatever, north of the bay.

12 So, you can look at it and determine which wire 13 centers belong together, so that then in turn when you look at your trigger analysis, if you, in fact, conclude that, say in 14 15 downtown Tampa there are -- and I will just pick a number as an 16 example based on what I have seen in some other states that 17 would be typical of, say, Phoenix or Cleveland, places like that, you might find 20 collocators present in the key wire 18 19 centers downtown, and there may be seven or eight CLECs that 20 are operating with switches in there.

But then in turn when you focus on how many are actually serving mass market customers, it may drop to a very borderline situation, maybe five, maybe four. Clearly, the nonimpairment standard would be met if it is, in fact, five or four, but that is a step-wise process that I think can work

very clearly. And then the key question is, having found nonimpairment in downtown Tampa, does that, therefore, take UNE-P away throughout the entire Tampa/St. Pete/Clearwater area, every single wire center however far away from those kinds of characteristics. I would suggest that it would not be wise to reach a finding for the entire MSA based on what is happening downtown, but that is the key issue.

8 COMMISSIONER DEASON: You were here this morning when 9 Mr. Ruscilli was on the stand, is that correct?

10 THE WITNESS: Yes. If not in the room, I was 11 listening in for a good part of it.

12 COMMISSIONER DEASON: Okay. He expressed his 13 understanding that CLECs place switches, but while they may be 14 placed in a central metropolitan densely populated area, that 15 they have the capability of serving much broader geographic 16 areas. Do you have any information or opinion on that?

17 THE WITNESS: Sure. Yes, that is true. It is not 18 the end of the story, but it is certainly true. And I tried to 19 indicate that in my testimony about the fact that a CLEC may 20 enter in Orlando and ultimately serve Jacksonville or Tampa 21 with that same switch. Which I think kind of suggests that 22 these MSAs, even though they are very large, clearly cannot be 23 the right answer because the scope of an individual switch is not simply determined by geographic proximity. 24

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What is critical is the backhaul network to get from

the remote location back to that switch. So, to connect a 1 2 Jacksonville downtown collocation to downtown Orlando may, in fact, be the best way a CLEC can serve those two markets given 3 its initial entry position and the lack of customers in both 4 markets. Say, put in one switch and pay the very expensive 5 6 cost of the fiber system between Jacksonville and Orlando. Ιt is a multi-step entry process. They decide to enter a section 7 8 of the country, such as Florida, Georgia, Alabama, then they 9 decide how many switches to put in at least initially, and then 10 in turn they try to figure out what customers can I serve with that switch. 11

12 So they may immediately be attracted to downtown 13 Orlando and they start doing that, then they look around and say given the kind of customers I am appealing to, which may be 14 15 enterprise customers, my next best place to go is Jacksonville, or Tampa given the realities of what kind of customers are 16 17 there and what my sales pitch is good at, what we do 18 particularly well. And it is going to be much harder for them 19 to sell Jacksonville and to make money, because they have got 20 to pay for the fiberoptic connection back up to Jacksonville.

But it is still a step-by-step process. They have got to look at the collocation in Jacksonville, they have to look at the electronic equipment in that collocation cage that hooks to the end of the fiber and sends it back to Orlando. The added cost, and the reason why geographic

proximity is certainly relevant is there is a function of that distance. That fiber costs money per mile, whether they are renting it via channels from somebody else, from AT&T or from BellSouth, or whether they have put it in themselves, or purchased the fibers from somebody.

However, you cut it, it is costing money to go a
longer distance, and that is why you don't often see a single
switch serve an entire region of the country because of the
very high cost of the fiber. But it is physically possible to
do it.

The critical thing then is in each individual wire center they have to make a decision, is it cost-effective to put in the collocation. Do I have techs in that area, technicians who can go work on that equipment if something goes wrong. Are they there to make sure a transition happens smoothly.

17 If I have got a very important customer and I've got 18 to absolutely make sure they have continuous service, I have 19 got to send somebody to that wire center and make sure my 20 equipment works right, and I don't have fingerpointing between 21 me and BellSouth. So, obviously it is much harder to do that 22 in Jacksonville than it is to do it in Winter Park, but they 23 can technically do it as far away as Jacksonville if they wanted to. 24

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COMMISSIONER DEASON: So is that one of the reasons why you think it is important to look at the number of collocators in a wire center?

THE WITNESS: Yes, because it is one way to very quickly detect where are the important key markets where competitors are drawn to. And it is independent of this dispute about whether the UNE-P rates are too low or not and whether they have somehow brought in some artificial competition.

As IXCs, including ones based out of the midwest or 10 whatever who need to terminate calls into the Jacksonville 11 market or whatever, they are putting in collocation, as well. 12 So you will get a pretty good quick measure of what are the key 13 locations in a state, where there is enterprise customers, 14 15 where there is a lot of activity, those are sort of the critical nodes in the state. Total gross number of collocators 16 17 is indicative of that, and it includes both the CLECs and the IXCs to the extent they differ. 18

19 COMMISSIONER DEASON: Thank you.

20 THE WITNESS: Thank you.

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CHAIRMAN BAEZ: Staff, you had some questions?

22 MR. SUSAC: Yes. Thank you, Chairman. Following up 23 on Commissioner Deason's questions, that was --

24 COMMISSIONER JABER: May I ask questions before staff 25 does?

FLORIDA PUBLIC SERVICE COMMISSION

2364

CHAIRMAN BAEZ: Go ahead, Commissioner. 1 I'm sorry. 2 COMMISSIONER JABER: No problem. Dr. Johnson, hello. 3 I have got just four questions that may turn into something more dependent on your response, but I want to put you on the 4 5 spot a little bit and ask you from the possible approaches to define the geographic market that we have in the record, and 6 7 just to summarize, wire centers, MSAs, LATAs, the UNE rate 8 zones that BellSouth proposed we use as further divided by the 9 CEAs. Do I understand your testimony to be that out of all of those if you had to pick one you would pick wire centers? 10 11 THE WITNESS: Yes. The MCI approach would be my 12 first choice. If I had to pick another my second choice would 13 be BellSouth's. 14 COMMISSIONER JABER: Okay. So MCI wire center and 15 then BellSouth would be your second? 16 THE WITNESS: Right. And then the rest are distant 17 thirds or fourths. COMMISSIONER JABER: Okay. 18 19 THE WITNESS: They are much broader and have much 20 more problems. 21 COMMISSIONER JABER: To some degree would you agree with me that the UNE rate zone approach does incorporate some 22 analysis of wire centers because there are a number of wire 23 24 centers in each rate zone, is that correct? 25 THE WITNESS: Yes, it is helpful in that regard. Ιt

does tend to separate the rural wire centers from the suburban and urban, but not as cleanly as could be done if you did it as a separate analysis.

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COMMISSIONER JABER: Okay. Now, for those that do not recommend the wire center approach, they say it is because that approach doesn't accurately reflect how competitors select how they select, why they select, where they will enter the market. Do you disagree with that, and if so, why?

9 THE WITNESS: I think they are only giving you a part of the picture, so to that extent I disagree. The actual entry 10 process is multi-staged. This would be clear in the 11 literature, but more importantly it is clear from watching the 12 13 actual behavior of firms. As I said a moment ago, they would 14 first choose to enter the market in the whole. They say I am 15 going to become a telephone company in the case of a startup, or I'm going to enter the local exchange business in the case 16 17 of an IXC. Then they decide what region of the country they are going to enter, then they decide where to put a switch in 18 if they are putting in a switch. Or, in general, where to 19 20 start targeting and looking for customers if they haven't yet 21 made up their minds they are going to do a switch.

Then as they -- they can enter with UNE-P on a more loose basis. They still have to make decisions which areas they want to start up in, but for this critical question in this case of a switch-based carrier, or a carrier deciding to

1 put in a switch to serve existing customers, either way that decision to install a switch and serve customers using their 2 3 own switch does take place and has to take place wire center by 4 wire center, because they have to do two things. They have to 5 pay for the collocation and the backhaul equipment physically 6 located at that switch. So there is fixed costs associated 7 with each and every wire center and they have to be sure they can cover those fixed costs by the revenues they think they can 8 9 generate in that one wire center.

10 And, secondly, they have to put together a backhaul 11 network or a method of connecting back to the switch. And when 12 doing that it is a much more complex problem, somewhat akin to 13 the problem an IXC has when trying to decide how best to serve 14 a nation. And that they could possibly put together a fiber 15 ring, which gives them added resiliency and added redundancy. 16 If so, they have got to find locations, wire centers that kind 17 of form a circle.

But conceptually you can visualize there is two steps; they have to pay for the wire center's specific fixed costs, and they have to pay for the distance sensitive costs that involve connecting those remote locations where the customers and the loops are back to their switch.

COMMISSIONER JABER: Now, maybe I'm naive, but at some point I would also consider how many product offerings I could sell to one customer.

THE WITNESS: Absolutely. That is certainly --1 2 COMMISSIONER JABER: I'm sorry, qo ahead. 3 THE WITNESS: No, I agree with you. That is certainly a factor. 4 5 COMMISSIONER JABER: So, now what part of your 6 analysis would take that into account? Is it the wire center 7 approach, is it all of these approaches? THE WITNESS: It is very much behind the scenes what 8 9 In terms of a self-provisioning trigger analysis, is going on. the place where I would suggest that is most important is at 10 11 the end of the process when you have the data in front of you and somebody is urging you, your staff recommendation coming to 12 13 you in agenda conference, whatever the stage is when you are 14 sitting there about to make the decision that there is a lack 15 of impairment based on the activities of say, three or four 16 CLECs. I would then ask the question, well, let's talk about 17 those three or four CLECs. Are they serving residential 18 customers? Are any of them serving residential customers? Ιf 19 so, how many? Is it one or two customers, is it hundreds?

2368

20 What is going on?

To a lesser degree, I would also have some concern are they serving the full array of business customers. Are they highly specialized only serving those business customers that have data needs and happen to have a small number of lines. Is there any special circumstances here that might slow

Not necessarily to flinch from the finding of 1 me down. 2 nonimpairment, because, in fact, you may want to find nonimpairment.

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4 It may be clear you are supposed to under the TRO, 5 but just this question of whether that nonimpairment is 6 indicative of the entire broad market, all types of products, 7 all types of customers. Those who only use a few features, 8 those who use a lot. Or is it only indicative of a lack of impairment for some specialized niche market, such as small 9 10 businesses that happen to need a high level of data intensity 11 or have specialized needs.

12 If there is any suggestion or evidence at that point 13 that the data you are seeing these triggering carriers are, in fact, focusing on a small subset of the geographic market, then 14 15 that is the stage where I think the footnote that I cited to 16 becomes important, and an opportunity to still have this 17 controlled experiment of removing UNE-P, but removing it in a more cautious manner. 18

19 COMMISSIONER JABER: Okay. Then my final question 20 transitions from your response, which is if I should take into 21 account how many product offerings and what the customers are 22 really -- whether it is one or 100 are really acquiring from 23 these competitors, then how does the FCC universal service data 24 help us determine that information? Because as I understand 25 the universal service information and what it provides to us in

FLORIDA PUBLIC SERVICE COMMISSION

2369

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THE WITNESS: All of that is true. It is a device I 3 4 was suggesting for doing two things. Let me back up. I was 5 not in any way suggesting relying on the universal service data 6 set in lieu of the discovery that is present in the proceeding. I was merely suggesting as a readily available administrative 7 8 substitute, something you could take administrative notice of 9 and use even if there turned out to be some gaps in the 10 discovery. And I'm not saying there are gaps. There may not 11 be any. Strictly a way of supplementing it.

That I am confident that standardized data is readily available as to density, as to the presence of special access activity, enterprise activity. But, no, that data in and of itself does not tell you the types of products being sold, and the only way you will really know that is if through the course of discovery and the evidence that has been brought forward some parties have pointed out subtleties.

19 If, for example, FDN has a specialized product mix 20 that you could see, for example, in your tariff filings that 21 are on record with you, and say they are a unique case. Ιf 22 they are. I am not suggesting they are, but that is the 23 question. Are they a unique case, or are they, in fact, a typical CLEC. And if they are a typical CLEC, the critical 24 25 question under the FCC TRO is not whether they are typical in

and of themselves, but are there any others like them. Is
 there a second or third carrier.

Because what the FCC did is basically said 3 4 conceptually if a carrier can make a go of it using their own 5 switch to serve a correctly defined market, then that is 6 indicative that impairment is not present. However, they 7 recognize that a single carrier might be an anomaly. So they 8 set this criteria of three carriers. And that is the key 9 point, are all three of the carriers you are relying upon for 10 the self-provisioning trigger actually indicative of what is possible for a carrier that wants to serve the market and 11 12 chooses to use a switch. That it is economically feasible for 13 them to do so, and that there are thus indications that impairment does not exist in that particular market. 14

15 So, it is a long way of saying this product question 16 is a very interesting one. I am not certain the degree to 17 which the discovery allows you to separate that out, but 18 certainly your tariffs that are on file would give you further 19 indications as to whether particular carriers that are 20 allegedly triggering carriers have some special niche market 21 they are serving, or are they serving residential and business customers generally. 22

COMMISSIONER JABER: Okay. A final question. I'm going to ask you to speculate, because I know you have a lot of experience in this area, and I know you have testified in a

number of proceedings. And it truly is a question where I am 1 asking you to speculate, so I will take that into account. But 2 if, as AARP concedes, the TRO seems clear that there is some 3 part of this that we have to recognize from a mandatory 4 5 standpoint there are areas where no impairment exists and, therefore, switching has to come off the UNE list for those 6 7 areas, what do you think will happen in terms of a competitive response? How will the competitors react? 8

9 THE WITNESS: First, whatever I think -- and I will 10 give you my opinion in a minute -- is not the only question. 11 You also have to think about the risks involved that anyone's 12 opinion, including mine, may be off the mark. That we are 13 trying to predict what will happen, are we right or not.

14 That is why I have used this phrase controlled 15 experiment, because I think that is one way to look at this 16 entire process is there is going to be a controlled experiment. 17 Some states will be very careful in deciding where 18 nonimpairment exists. They will remove UNE-P in those 19 particular markets and over the next 27 to 36 months we will 20 see the behavior of the CLECS.

And the critical issue in my mind is let's have a controlled experiment, not just a wide open let's just see what happens and remove UNE-P throughout virtually the entire market. Removing it from every MSA that has any substantial number of customers. If you remove it from 70 or 80 percent of

the market at once, to me that is not a controlled experiment, that is a leap of faith, shall we say.

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3 As to what I think will happen, I think what will happen is some of the CLECs who are already succeeding in the 4 small business market and are succeeding in the enterprise part 5 of that small business market when no longer able to use UNE-P 6 7 to serve the smaller customers, will try to use their existing switch to expand it. Whether it is an MCI, I can't say for 8 sure, but it would not surprise me that MCI, if forced to do 9 10 so, rather than lose the customers entirely and lose the long 11 distance revenues and every other part of the revenues they are 12 getting from those one and two line business customers, will 13 choose to stay in the market and try to make a go of it by 14 expanding the use of their switch.

15 It may squeeze their margins, they may not be able to 16 offer quite as attractive prices, but I think some carriers 17 will stick it out. I do believe other carriers will simply abandon the business entirely or withdraw entirely from those 18 19 markets where they can no longer use UNE-P. They simply don't 20 have the capital to install the switches they need and they may 21 not have the technical expertise to do the full-blown 22 facilities-based business model. They will withdraw back to 23 rural areas, they will withdraw back to places where they can feel pretty confident that the business model they have been 24 succeeding at will continue to be in existence for awhile. 25

So I think you will probably have a mixture of 1 2 reactions. What is the hardest to predict is whether there 3 will be any competitive alternatives for residential markets. Or if there is any, how significant those will be. In other 4 5 words, will an MCI just target the extreme high end of the 6 residential market, the folks who are willing to pay a flat 7 rate of \$59 a month, which is maybe double what they are paying 8 from BellSouth, but to get a lot thrown in in the package. Ιf you like that stuff, if you like caller ID and call waiting and 9 10 all those things, they may try to serve those customers.

11 But the real question is will any of the carriers if 12 they are forced out of the UNE-P mode of operation attempt to 13 serve the smaller customers, those on fixed incomes, those who 14 simply don't value all those bells and whistles. And that is much harder to predict, because I can't say for sure none of 15 16 them will try it, because once you are in a business and you 17 are forced to do certain things, certain costs become sunk and 18 then you look at the next decision, and you say, well, you 19 know, if I can spread my marketing costs over another group, 20 you know, there are some benefits here.

So I can't say for sure there will never be any residential customers getting competitive alternatives in the controlled experiment locations, but certainly there is a serious risk that the competitive alternatives will go away or be greatly reduced and diminished.

1 COMMISSIONER JABER: Thank you, Dr. Johnson. And, 2 Mr. Chairman, thank you. 3 CHAIRMAN BAEZ: Thank you, Commissioner. 4 COMMISSIONER DEASON: I have another question, 5 please. 6 CHAIRMAN BAEZ: Commissioner Deason. 7 COMMISSIONER DEASON: This question kind of relates 8 to the last question and answer that Commissioner Jaber asked, 9 but it also relates back to one of your core principles, and 10 that being -- and forgive me, I just jotted it down, I may not 11 have it correctly. But, basically, one of your core principles 12 is that we, as decision-makers, we need to look at the degree to which switches being used for residential service versus 13 14 small business when we are making our ultimate decision. Am I 15 paraphrasing that correctly? THE WITNESS: Yes, I think at the last stages of the 16 17 process in particular, once you have got a pretty good handle 18 on the data, that is something you do want to look at. 19 COMMISSIONER DEASON: Okay. If we reach that stage 20 and we are asking that question, how do we get a handle on 21 whether the degree of residential versus small business in that 22 mass market is simply due to the fact that small business 23 usually has more of a higher profit margin, more of an emphasis 24 for those customers to be served and is not necessarily -- and 25 the fact that UNE-P is available.

That is a more cost-effective alternative to provide 1 2 service to residential customers and it is not necessarily an 3 indication of whether that particular carrier could or could not cost-effectively serve residential customers out of their 4 own switch, they just choose to use UNE-P because it is 5 6 available. And since is available, that is their choice. And 7 that if it were to become unavailable, it would still be cost-effective for them to utilize their switch and to serve 8 9 residential customers. Do you have any quidance in that 10 particular area?

11 THE WITNESS: I can try. That is a very subtle 12 question, and you have gone to the heart of what the federal judiciary has asked the FCC to do, and what the FCC has asked 13 14 you to do. And I'm sure you understand that. That it is sort 15 of a -- it is a difficult mathematical problem that is in that 16 sort of in that part of the temporarily knowns are themselves 17 variables. So the UNE-P rates are potentially affecting some of the data we observe. 18

One way to think about it, however, is that a carrier that -- many carriers throughout the nation are using their own switch to serve the enterprise market, so we know that in and of itself it is not simply a question that TELRIC somehow is too low, and that every regulator is getting it wrong, and that the FCC got it wrong. That can't be the answer, because carriers are putting in switches and they do serve using their

own switch.

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2 But we know that they primarily target enterprise 3 customers. One possible reason for that is with your own switch you can differentiate your product on the basis of 4 quality and features and functions that are not readily 5 available from the incumbent. You have a better story to tell, 6 7 and it may simply be that the enterprise customers are more willing to listen to that story at this time in the evolution 8 9 of the market. That residential customers are still basically buying plain old telephone service, and they are not as 10 11 impressed by statements like we will give you higher 12 reliability, or we will give you clearer sound, or we will give 13 a better voicemail function, or whatever.

14 So that is one thing you can look at. But then you 15 in turn look at the enterprise customers and enterprise carriers, those who are focussing on enterprise customers. 16 At 17 that point when they then make a decision should I also try to sell small business or residential customers, from their point 18 19 of view in most cases virtually all of the switching cost is a 20 sunk cost that is essentially zero. So any sort of a 21 TELRIC-based calculation is more expensive than the next cost they are facing in deciding while I am serving this wire center 22 23 and while I am serving the enterprise customers in that wire center, can I also afford to serve business, very small 24 25 business, or residential customers.

So that is the critical issue, and if they are 1 2 serving some of those customers and serving them in a significant way, then there isn't an actual impairment or 3 impediment that is preventing them from doing it. But if you 4 5 are seeing a pretty uniform pattern that even though they have the switch installed, and even though I am confident they are 6 7 going to have excess capacity, any plausible CLEC at this stage in their growth pattern will still have plenty of room on their 8 switch. 9

10 If they are not venturing out in that market it is due to something. It may be as simple as the lack of the 11 proper batch hot cut process, there is no feasible way for them 12 13 to crank over 50 and 60 lines at a time from all these different customers and all these different locations. 14 And 15 absent that, it just isn't practical. They know that those 16 sort of impediments are making it too hard for them to sell the 17 service.

Whatever the reason, I think that subtlety of looking at how the carriers themselves are behaving, if they put in the switch, they are serving the enterprise customers, are they venturing out and serving smaller business customers, are they venturing out and serving residential customers with that switch knowing that a lot of the costs, virtually all the costs are sunk costs for them.

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COMMISSIONER DEASON: Do you have any particular

1 recommendation as to what percentage we should look at? You
2 know, 1 percent, 5 percent, 10 percent, you know, enterprise
3 versus mass market, or is it just something we just need to
4 develop a feel for, or do you have any experience in that area?

THE WITNESS: I do think you are going to have to 5 look at it on a case-by-case basis. I do know for certain 6 purposes a number may be helpful. I think it is unfortunate 7 that BellSouth didn't choose to do what SBC has chosen to do at 8 9 least in Ohio, and I think in some other states. Rather than 10 quibble over this problem of what if there is one residential 11 line, or one small business line that is sort of this exception, does that count as a trigger? 12

13 What SBC has done is said six or under, we are going to assume that is noise in the data, in essence. 14 That we 15 don't, you know, really figure out why there is five or four lines, but if a particular carrier just has five, six, three 16 17 lines, we will treat them as if they have none. And I think 18 that was a conservative approach, and a wise approach, because 19 chances are if you investigate in detail it will turn out to be 20 a president or some important person on an enterprise customer, 21 you know, they may be losing money on that line, but they are 22 serving it to make the enterprise customer happy.

But once you get above that number, then you start getting in this gray zone of, well, maybe they are, in fact, willing to serve and able to serve and are choosing to serve

small business customers, they just haven't been as successful at it. So once you get above a number like six, I think you have to take it case-by-case and look at it carefully, and look at the circumstances of the degree to which they are, in fact, serving.

6 The presence of, say, 35 small business lines in a 7 single wire center by a single carrier is much more significant if they only have five enterprise customers in that wire 8 center. For that carrier, that is a significant effort. 9 For 10 another carrier, you know, an MCI maybe, that has tremendous 11 volume and has large numbers of enterprise customers, if they 12 happen to be serving 14 small business customers I would say 13 that is much more questionable whether that is any indication 14 of their ability to do it on a routine basis.

COMMISSIONER DEASON: Thank you. CHAIRMAN BAEZ: Mr. Susac.

MR. SUSAC: Thank you, Chairman.

CROSS EXAMINATION

19 BY MR. SUSAC:

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20 Q Digressing back a little bit, Dr. Johnson, to what 21 Commissioner Deason originally asked, and that is when you 22 aggregate, and when you begin to look at the market, the wire 23 center, and you aggregate these wire centers to a size that is 24 sufficient to have economies of scope and scale, our concern is 25 where do you stop. At how many wire centers, where do you glue

them together, and where do you begin. If we were to give 1 2 you -- if we were to ask you for a late-filed exhibit, is this 3 something that you possibly do within three weeks? Yes, I could. And you would just need to tell me 4 Α 5 whether you want it for a particular MSA or what area you would 6 like me to do it for. But, yes, I could do that. 7 MR. SUSAC: Give me one second, please. I'm going to 8 shift the burden back to you, something that represents your 9 methodology and your analysis. And I think it is only fair if 10 we give him to approximately March 18th. Briefs are due by April 6th, this gives sufficient time for parties to respond to 11 this information if it is, in fact, accepted. 12 13 CHAIRMAN BAEZ: All right. Can you restate what the late-filed exhibit will contain? 14 15 MR. SUSAC: Sure. Why don't we label it universal 16 data service needed for this proceeding. 17 THE WITNESS: Before we close this, I want to be sure I have a clear understanding of what is being asked. What I 18 19 understand is an assembly of the data illustrating the process 20 that I have been describing of defining small groups of wire 21 centers with homogeneous characteristics that would 22 appropriately be considered individual markets within one or more MSAs. 23 24 MR. SUSAC: Correct. 25 THE WITNESS: Okay.

CHAIRMAN BAEZ: Then we will mark that as Exhibit 1 104. 2 (Late-filed Exhibit 104 marked for identification.) 3 CHAIRMAN BAEZ: And that date is March 18th, correct? 4 MR. SUSAC: That is correct, Chairman. 5 CHAIRMAN BAEZ: Okay. Dr. Johnson, are you okay with 6 7 the date? THE WITNESS: That's fine, yes. 8 9 CHAIRMAN BAEZ: Okay. Thank you. MR. SUSAC: And I just have two more questions. 10 BY MR. SUSAC: 11 Dr. Johnson, are you specifically asking this 12 Ο 13 Commission to split the market between residential and business customers? 14 Not on a statewide universal basis, but I am asking 15 А you to keep that option open. When you finish the rest of the 16 17 process, you have defined the markets, you can see what is happening, if you find instances of a market where the trigger 18 19 is pulled based purely on small business activity, and there is 20 no significant residential activity present, then I would 21 certainly ask you to consider using the authority I believe is there present as indicated by the footnote I cited to pull out 22 23 the residential. Have the controlled experiment by removing UNE-P for business customers in that market while retaining 24 25 UNE-P for awhile longer for residential customers in that

market.

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Q Is there a technological difference between residential service and business service? I mean, how would we make that determination?

5 A There is a difference in the sense that you could 6 declare that UNE-P, or UNE switching, which is the essence of 7 UNE-P, is no longer available for use by any customer who is a 8 business. That using the classic traditional definitions that 9 are used by BellSouth or other carriers to charge business 10 local exchange rates rather than residential local exchange 11 rates.

Since it is a switch service, since there will be a phone number associated with it, it would be very easy for BellSouth or Verizon to police that and to refuse to provide UNE-P to a customer who, in fact, is using the line as a business.

17 Q Well, is there such a thing as a residential wire or 18 a business wire?

19 A Not at all. And, again, we are talking about 20 distinguishing the manner in which CLECs market to customers, 21 the manner in which customers purchase the service. It is what 22 I was referring to earlier as a demand-based subtlety or 23 distinction. I'm not suggesting there is major technical 24 differences.

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There are some differences. Business customers tend

to demand a higher level of guality, greater reliability, they 1 2 are less willing to put up with an uncoordinated hot cut where they might lose service for a few hours. A business facing 3 that might just absolutely refuse to even think about the idea 4 5 of switching. A residence, if you wave enough of a gift 6 certificate in front of them, or, you know, free miles or 7 something, they might take their chances. So there is some 8 differences, but I'm certainly not suggesting it is a difference in the wire. 9 10 Let me jump ahead. Are the unbundling rules specific Q 11 to loop type?

12 A No, not generally. I mean, there are some subtleties 13 you might have. In some states you will have four wire rates 14 that are subtly different than paying for two two-wire 15 circuits, but, generally, no.

Q Okay. So the obligations and limitations expressed in the rules do not vary based on the customer being served, is that correct?

A That is correct. In general, the UNE rate process, the costing process, and the rate process treat businesses and residence customers exactly the same.

22 Q Dr. Johnson, do you have the Triennial Review in 23 front of you?

A I have some excerpts, but not the entire document.
Q Okay. Subject to check, Paragraph 210 states, "Thus,

while we adopt loop unbundling rules specific to each loop 1 2 type, our unbundling obligations and limitations for such loops 3 do not vary based on the customer being served." If you turn to Page 192 of the TRO, the second 4 5 sentence in Note 935 states, "We reiterate that we do not tailor our rules to restrict or limit unbundling based on the 6 7 size or class of the customer served." And what my question is geared at, these obligations 8 9 and limitations expressed in the rules that I just read do not vary based on the customer being served, is that correct? 10 11 Α That is the point I made previously. Yes. In general, the UNE rate process and the unbundling process does 12 13 not make any distinction between business and residential 14 customers. 15 MR. SUSAC: Okay. There is no further questions, Chairman. 16 17 CHAIRMAN BAEZ: Thank you, Mr. Susac. Mr. Beck, did you have any redirect? 18 19 MR. BECK: No, I don't. I would move Exhibit 103. 20 CHAIRMAN BAEZ: Without objection, show Exhibit 103 21 moved into the record. And I'm showing a late-filed by March 18th. 22 (Exhibit Number 103 admitted into the record.) 23 MR. BECK: All right. At this point I think we can 24 25 break until 1:00 o'clock, and then we will get started on the

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1	impairment case. All right. We are in recess. Thank you.
2	(Lunch recess.)
3	(Transcript continues in sequence with Volume 18.)
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	FLORIDA PUBLIC SERVICE COMMISSION

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1	STATE OF FLORIDA )
2	: CERTIFICATE OF REPORTER
3	COUNTY OF LEON )
4	I, JANE FAUROT, RPR, Chief, Office of Hearing
5	Reporter Services, FPSC Division of Commission Clerk and Administrative Services, do hereby certify that the foregoing
6	proceeding was heard at the time and place herein stated.
7	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been
8	transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said
9	proceedings.
10	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative
11	or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in
12	the action.
13	DATED THIS 1st day of March, 2004.
14	(Va anti-
15	JANE FAUROT, RPR
16	Chief, Office of Hearing Reporter Services FPSC Division of Commission Clerk and
17	Administrative Services (850) 413-6732
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