1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		REBUTTAL TESTIMONY OF DR. DEBRA J. ARON
3		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 030851-TP
5		JANUARY 7, 2004
6		
7		I. INTRODUCTION
8		
9	Q.	PLEASE STATE YOUR NAME AND POSITION.
10		
11	A.	My name is Debra J. Aron. I am the Director of the Evanston office of LECG,
12		LLC, and Adjunct Associate Professor at Northwestern University. My business
13		address is 1603 Orrington Avenue, Suite 1500, Evanston, IL, 60201.
14		
15	Q.	ARE YOU THE SAME DEBRA J. ARON WHO FILED DIRECT
16		TESTIMONY IN THIS PROCEEDING?
17		
18	A.	Yes, I am.
19		
20	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?
21		
22	A.	My rebuttal testimony responds to the economic arguments made by Dr. Mark T.
23		Bryant on behalf of MCI, Mr. Steven E. Turner on behalf of AT&T, Mr. Don J.
24		Wood, also on behalf of AT&T, and Mr. Joseph Gillan on behalf of the Florida
25		Competitive Carriers Association ("FCCA").

I

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II. RESPONSE TO DR. BRYANT

PLEASE COMMENT ON DR. BRYANT'S ARGUMENT THAT THE 3 0. 4 SOCIAL COSTS **FINDING** WHERE OF NO IMPAIRMENT 5 IMPAIRMENT EXISTS ARE GREATER THAN THE COSTS OF FINDING IMPAIRMENT WHERE NO IMPAIRMENT EXITS. (BRYANT 6 7 DIRECT 19)

8

9 This is unsupported and, in my opinion, seriously misguided conjecture on the A. 10 part of Dr. Bryant. Mr. Gillan makes similar arguments, so my comments here will apply to his testimony as well. The asymmetry between the effects of the 11 two potential types of errors recited by Dr. Bryant is of a different type than 12 claimed by Dr. Bryant. The asymmetry is in the observability of the outcomes. 13 14 If the Commission errs in finding impairment where none exists, the social costs are extremely difficult to measure, because the nature of the social cost is in the 15 16 lost investment, innovation, and economic development that would have been 17 forthcoming but remains unknown and unobserved. This, however, does not 18 make these losses any less real nor less significant. In contrast, if the 19 Commission errs in finding no impairment where impairment exists, the social 20 cost is merely the foregone entry of carriers who would, in any event, rely entirely on the network of the incumbent (what the D.C. Court of Appeals, in 21 USTA v. FCC, referred to as "synthetic" competition). The social cost, therefore, 22 23 is likely to be relatively low, while the observed effect—that there will be fewer visible "competitors" in the market—would be relatively apparent. Hence, while 24 25 the asymmetry of social costs would, if anything, favor erring on the side of

1 finding no impairment, the political pressure clearly favors a finding of 2 impairment. Commissions should resist the temptation to succumb to short run 3 incentives to behave myopically for purposes of preserving the perception of 4 competition, and instead seek to engage in decision making that maximizes social 5 welfare and will encourage true competition. By law, carriers are entitled to 6 unbundled local switching where impairment exists, but this entitlement should 7 not be confused with the social-welfare benefits of promoting facilities-based 8 competition where such competition can be economic.

9

10 Q. PLEASE ELABORATE ON THE SOCIAL WELFARE COSTS OF AN 11 ERRONEOUS FINDING OF IMPAIRMENT.

12

13 A. The FCC recognized that unbundling is "one of the most intrusive forms of 14 economic regulation—and one of the most difficult to administer." (TRO ¶ 141) 15 This intrusive form of regulation diminishes the incentives for the facility owner 16 to keep up or improve the property, as it must share the benefits of those 17 investments with its competitors. (Breyer Iowa Utilities, TRO § 64) It also can damage the incentives of CLECs to invest in network infrastructure. There are, 18 as well, significant administrative and social costs of managing a shared resource. 19 20 (TRO ¶ 64) Facilities-based competition reduces the need for administrative 21 oversight and regulation and therefore better serves the Act's goal of reduced 22 regulation. 23 Facilities-based competition also better serves the Act's goal of innovation. 24

25 UNE-P-based CLECs are restricted in their ability to innovate because they

1		cannot innovate along the dimensions (that is, facilities) that are owned or
2		controlled by the ILEC. In addition, the FCC found that facilities-based
3		competition creates redundancy, which increases reliability and enhances national
4		security. (TRO fn. 233)
5		
6		As noted by the FCC Chairman Michael Powell in his Separate Statement to the
7		TRO, facilities-based competitors can offer differentiated service, they can
8		control more of their own costs thereby offering consumers real potential for
9		lower prices, they are less dependent on the incumbent, and they provide vital
10		redundancy of networks. (TRO Powell Separate Statement, page 3) It is for these
11		reasons, and perhaps others, that the FCC "disagree[s] that duplication of facilities
12		is necessarily 'wasteful'" (TRO fn. 233) and that "we disagree with commenters
13		that argue that the Act contains a 'statutory mandate of equal treatment of all three
14		options." (TRO fn. 233) It is also for these reasons that the Congress did not
15		create a general unbundling obligation, but instead provided a limitation in the
16		form of the Section 252 requirements.
17		
18	Q.	DOES DR. BRYANT MISSTATE THE EFFECTS OF A FINDING OF
19		NON-IMPAIRMENT WHEN HE CLAIMS THAT "UNE-P
20		COMPETITION WILL BE TERMINATED, AND ALL CONSUMERS
21		CURRENTLY SERVED BY UNE-P CLECS WILL BE FORCED TO
22		MAKE A CHANGE IN THEIR TELEPHONE SERVICE: EITHER
23		SWITCHING BACK TO THE ILEC, SWITCHING TO A UNE-L CLEC,
24		OR SWITCHING TO THEIR EXISTING CLEC'S NEW UNE-L
25		FACILITIES"? (BRYANT DIRECT 15-16)

1 A. Yes, this is an erroneous statement for several reasons. A finding of "non-2 impairment" does not necessarily terminate UNE-P competition, but rather 3 terminates (over time) the ILEC's obligation to provide unbundled local 4 switching at regulated prices. Incumbent carriers may continue to provide 5 unbundled local switching on commercially agreeable terms, as determined by 6 the actions of the marketplace. Moreover, a finding of non-impairment does not 7 terminate competition, but rather shifts the focus of competition to UNE-L and 8 bypass competition, which, as I discussed, and as the FCC agrees, provides for 9 the potential of more robust and vigorous form of competition than can UNE-P. 10 Finally, a finding of non-impairment does not immediately "terminate" UNE-P, 11 it merely begins a gradual phase-out process. 12 13 Moreover, it is simply not true that the gradual switch from UNE-P to UNE-L in 14 areas where there is no impairment "forces" consumers to make a change in their 15 telephone service. The transition of customers from UNE-P to UNE-L is a 16 service provider issue, not a consumer issue. Switching the service platform from 17 the ILEC's switch to the CLEC's does not require the consumer to make any 18 Certainly, there would be no injury to the CLEC's customer due change at all. 19 to being served by the CLEC's switch rather than that of the ILEC. 20 Dr. Bryant may be envisioning instances in which a CLEC would rather exit the 21 22 market than pursue the UNE-L opportunity. This is, of course, a possibility, 23 particularly for CLECs with no particular comparative advantage or expertise 24 with the deployment of actual telephone network facilities. Where CLECs are 25 unimpaired, however, the exit of particular carriers who cannot survive if required

to compete without regulatory favor creates opportunities for those who can. It
 would be poor public policy to perpetuate a defective regulatory policy (mandated
 unbundling where CLECs are not impaired) simply to sustain an artificial market
 structure.

5

6 Q. DR. BRYANT ARGUES THAT CLECS "HAVE MUCH TO GAIN BY 7 LIMITING THEIR DEPENDENCE UPON THE INCUMBENT." 8 (BRYANT DIRECT 21) PLEASE COMMENT.

9

10 A. Dr. Bryant ignores the fact that CLECs have much to gain by depending on an 11 incumbent that remains under the firm grip of regulation. A CLEC that has 12 available to it UNE-P at regulated prices can defer making investments by using 13 UNE-P even when there would be no impairment without it. Thus, rather than 14 actually investing in bringing new, facilities-based technologies to the market 15 place, UNE-P permits CLECs to defer investment in infrastructure. While such 16 an approach may benefit the individual CLEC business plan, it delays the 17 benefits that new technology brings to consumers.

18

19 Q. DR. BRYANT CLAIMS THAT THE ACT "DOES NOT GIVE
20 PREFERENCE" TO THE THREE TYPES OF ENTRY VEHICLES
21 (RESALE, UNE-BASED, AND FACILITIES-BASED) FOR WHICH IT
22 PROVIDES. (BRYANT DIRECT 22) IS THIS CORRECT?

23

A. No. In fact, that is not the issue. While one can argue that the law is agnostic
about which form of entry a particular CLEC chooses, the law is perfectly clear

1		that where CLECs are not impaired without access to any given unbundled
2		network element, unbundling that network element is not required. Hence, where
3		CLECs are not impaired without access to unbundled local switching, for
4		example, the Act strictly disfavors—i.e., precludes—UNE-P based entry. This
5		Commission is not being asked to make an impairment decision despite the Act's
6		alleged neutrality over different entry vehicles, but precisely because the Act
7		strictly favors facilities-based entry (or resale) where there is no impairment, to
8		the point of requiring it. The Act's philosophy in that regard is the foundation of
9		this proceeding.
10		
11	Q.	DR. BRYANT CLAIMS THAT THERE IS AN INCONSISTENCY IN
12		BELLSOUTH'S POSITION, IN LIGHT OF THE ALLEGED FACT THAT
13		ILECS ARE NOT BUILDING THEIR OWN LONG DISTANCE
13 14		ILECS ARE NOT BUILDING THEIR OWN LONG DISTANCE NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY?
14	A.	
14 15	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY?
14 15 16	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY? No, for two reasons. First, wholesale long-distance service is not an unbundled
14 15 16 17	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY? No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor
14 15 16 17 18	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY? No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor must they price it at TELRIC if they do offer it. Similarly, it may be the case that
14 15 16 17 18 19	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY? No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor must they price it at TELRIC if they do offer it. Similarly, it may be the case that in markets where CLECs are not impaired without access to unbundled local
14 15 16 17 18 19 20	A.	NETWORKS. (BRYANT DIRECT 23) IS THERE AN INCONSISTENCY? No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor must they price it at TELRIC if they do offer it. Similarly, it may be the case that in markets where CLECs are not impaired without access to unbundled local switching, ILECs nevertheless may provide switching at market-determined
14 15 16 17 18 19 20 21	A.	No, for two reasons. First, wholesale long-distance service is not an unbundled network element. Long-distance carriers need not offer wholesale service, nor must they price it at TELRIC if they do offer it. Similarly, it may be the case that in markets where CLECs are not impaired without access to unbundled local switching, ILECs nevertheless may provide switching at market-determined prices, just as some long-distance carriers provide wholesale long-haul services at

1		Second, ILECs are in fact bringing new long distance capacity to the market, to
2		the extent that they are not leasing capacity from the big three incumbents, but
3		rather leasing capacity from newcomer wholesale providers such as Williams
4		Communications.
5		
6	Q.	DOES DR. BRYANT OFFER AN ANALYSIS OF THE FEASIBILITY OF
7		POTENTIAL DEPLOYMENT?
8		
9	A.	Yes, Dr. Bryant sponsors a model, or "analytical tool," upon which he relies to
10		make recommendations to the Commission as to the geographic markets in which
11		he believes CLECs are impaired without access to unbundled local switching.
12		His model, however, is flawed in a number of critical respects, rendering his
13		conclusions irrelevant.
14		
15	Q.	DR. ARON, FROM YOUR PERSPECTIVE AS AN ECONOMIST, PLEASE
16		DESCRIBE THE PROBLEMS WITH DR. BRYANT'S ANALYTICAL
17		MODEL.
18		
19	A.	First, Dr. Bryant's uses an improper framework for analyzing potential
20		deployment and therefore impairment. Moreover, even within the context of the
21		analysis itself, Dr. Bryant makes several assumptions that do not reflect the
22		potential of a reasonably efficient CLEC. In particular, based on the extensive
23		research I have performed on these issues, I conclude that Dr. Bryant's
24		assumptions regarding prices, customer acquisition costs, churn, bad debt, DSL

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- penetration, and DSL prices do not reflect the opportunities available to an efficient CLEC.
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4 Q. WHAT YOU MEAN WHEN YOU SAY THAT DR. BRYANT'S ANALYSIS 5 USES "AN IMPROPER FRAMEWORK"?

6

7 A. The FCC explains in great detail what it believes is the economically appropriate 8 framework for evaluating potential deployment of a reasonably efficient CLEC. 9 The FCC is clear that an impairment analysis should be based on a business case 10 analysis ("[S]tates should perform a business case analysis of providing local 11 exchange service" TRO fn.1581). Based on my many years of experience as a business school professor, as well as my general knowledge as a professional 12 economist, I can say that a proper and standard business case analysis for a 13 14 startup firm would model the costs and revenues per period (typically, per year) over several years and then calculate the discounted present value of the cost and 15 16 revenue flows. Explicitly modeling the business over a period of time is 17 important in modeling new entry in particular, because entry typically requires start-up costs that are incurred right away but only recovered over time. That is, 18 19 revenues tend to increase over time, so that there is a mismatch between the 20 timing of revenues and the timing of costs. If one fails to model the costs and 21 revenues over time, one cannot readily capture the fact that many costs are 22 incurred immediately, but revenues that may justify those costs may start small 23 and increase over time. A static model that, for example, considers only the first 24 year or two of operation would tend to overstate costs and understate revenues, 25 concluding that the enterprise is not profitable, when in fact it may be if the

1	discounted present value of future revenues and costs are accounted for. Dr.
2	Bryant admitted in discovery that a company's business plan can have negative
3	net revenue in the early years and nevertheless have a positive net present value
4	("NPV") over a specified period of time. (See MCI Response to BellSouth
5	Interrogatory 3-150) Alternatively, a model that compares only the long run
6	"steady state" costs and revenues would tend to ignore the up-front costs of entry.
7	A proper business case analysis accounts for all these effects by explicitly
8	modeling the costs and revenues over time and calculating a discounted present
9	value of the firm. A snapshot or static business model that considers only a
10	single (or "typical") period of costs and revenues is not likely to be a valid and
11	robust business case from which reliable conclusions can be drawn.
12	
13	The approach adopted by Dr. Bryant suffers from this fundamental structural
13 14	The approach adopted by Dr. Bryant suffers from this fundamental structural defect. Dr. Bryant's impairment tool is based on a model developed by the
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14 15 16 17 18 19 20	defect. Dr. Bryant's impairment tool is based on a model developed by the National Regulatory Research Institute ("NRRI"). The NRRI model is a single- period or static spreadsheet that appends revenue estimates to an annualized costing model. Dr. Bryant admitted in discovery that he did not perform a time series analysis with respect to the use of his impairment tool. (MCI Response to BellSouth Interrogatory 3-163) This approach therefore fails to conform to the business case (net present value) methodology that would properly assess the
14 15 16 17 18 19 20 21	defect. Dr. Bryant's impairment tool is based on a model developed by the National Regulatory Research Institute ("NRRI"). The NRRI model is a single- period or static spreadsheet that appends revenue estimates to an annualized costing model. Dr. Bryant admitted in discovery that he did not perform a time series analysis with respect to the use of his impairment tool. (MCI Response to BellSouth Interrogatory 3-163) This approach therefore fails to conform to the business case (net present value) methodology that would properly assess the viability of a business and that the FCC unequivocally requires. It would therefore

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Q. ARE YOU AWARE OF ANYOTHER STRUCTURAL DEFECTS WITH DR. BRYANT'S MODEL?

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4 Α. Yes. Dr. Bryant's model ignores the ability of the CLEC to serve medium and 5 large business customers. (See MCI Response to BellSouth Interrogatory 3-175) 6 Ignoring this market segment violates the principles of sound business case 7 analysis, and is contrary to the explicit guidance provided by the FCC ("The state 8 must also consider the revenues a competitor is likely to obtain from using its 9 facilities for providing data and long distance services and from serving business 10 customers" (TRO \P 519)). It is contrary to the principles of sound business case 11 analysis because the ability of a CLEC to serve the enterprise market affects its 12 ability to share the costs of a switch, transport, collocation and other items across 13 market segments. As the FCC observes, this potential to share costs is a form of 14 scale economies (considering revenues from business customers "will therefore 15 take into account the scale and scope economies available to carriers using 16 existing facilities to provide a variety of services to all customers that are likely 17 to be served by an efficient entrant." (TRO fn. 1586)). A rational CLEC will 18 consider the ability to leverage these potential scale economies as part of its 19 business case analysis. While it may not be economic for a CLEC to invest in a 20 switch to serve only the enterprise and small business market, it may well be 21 economic to invest in a switch to serve these customer segments along with the 22 enterprise market. The correct standard for assessing whether it is economic to 23 serve the mass market via UNE-L is to determine whether serving the mass 24 market provides positive NPV to a hypothetical CLEC that also has the 25 possibility of serving the enterprise market. Ignoring this possibility deprives the

1		CLEC of legitimate scale economies and could therefore lead to a conclusion of
2		impairment when there is no impairment. This further reinforces my conclusion
3		that Dr. Bryant's modeling approach fails to meet the FCC's standards and so its
4		results can be given no weight in determining impairment.
5		
6	Q.	ARE THERE ANY OTHER PROBLEMS WITH DR. BRYANT'S MODEL?
7		
8	A.	Yes. It is clear that he has offered unsupported and unreasonable inputs that
9		drive his results. These include his inputs for revenues, penetration, bad debt,
10		customer acquisition costs, and customer churn.
11		
12	Q.	DR. BRYANT BEGINS HIS DISCUSSION OF THE "PROCESS [HE
13		USED] TO ESTIMATE REVENUE" RELEVANT TO A CLEC
14		CONSIDERING POTENTIAL DEPLOYMENT WITH ASSERTIONS
15		THAT FUTURE REVENUES WILL FOLLOW A DECLINING PATH
16		OVER TIME. (BRYANT DIRECT 78) WHAT IS THE RELEVANCE OF
17		THIS DISCUSSION?
18		
19	A.	There is none, insofar as Dr. Bryant clarified in discovery that none of his
20		revenue projection estimates were used in the impairment model he sponsors.
21		(See MCI Response to BellSouth Interrogatory 3-145) Moreover, Dr. Bryant
22		begins his analysis with the ILEC's existing rates (Bryant Direct 80) but his
23		claims that prices will decline 11 to 20 percent from that level over time as a
24		result of competition (Bryant Direct 79-86) are deficient in a number of respects.
25		The critical deficiency of an assumption of future price reductions, however, is

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1that it violates the requirements of the FCC's potential deployment analysis. The2FCC requires that states evaluate potential deployment business cases using the3existing level of prices and revenues. The FCC concludes that it "expect[s] states4to consider prices and revenues prevailing at the time of their analyses." (TRO5fn. 1588) The FCC thereby concludes that existing prices and revenues are6reasonable proxies for likely prices and revenues after competitive entry and will7result in a more administrable standard.

8

9 Q. ARE THERE ANY OTHER DEFICIENCIES IN DR. BRYANT'S 10 ANALYSIS OF PROJECTED PRICE TRENDS?

11

12 A. Yes. Dr. Bryant produced his analysis in discovery. Upon review of that 13 document, I note that his analysis, while ignoring any potential for innovation 14 that could increase demand or provide new services (and other deficiencies), 15 assumes that CLECs will, in aggregate, achieve over a 21 percent market share 16 in the first year, and achieve over 47 percent of the market by year ten. (MCI 17 Response to BellSouth Interrogatory 3-144, page 12) In contrast, his impairment 18 model assumes that an efficient CLEC will have a market share of 5 percent. If 19 Dr. Bryant believes that an efficient CLEC could not achieve a market share 20 above 5 percent, it is disingenuous to quote results to this Commission about 21 price trends that he predicts only on the assumption that CLECs will capture 22 nearly half the market.

23

Q. IF DR. BRYANT DOES NOT INCORPORATE THE PRICE TREND ASSUMPTIONS INTO HIS MODEL, WHAT IS THE BASIS FOR HIS REVENUE ASSUMPTIONS?

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A. I understand from Dr. Bryant's response to discovery that he bases his revenue
assumption on aggregate wireline FCC data. (MCI Response to BellSouth
Interrogatory 3-153 B)

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9 Q. IS THIS AN ACCEPTABLE FOUNDATION FOR A REVENUE 10 ASSUMPTION IN A POTENTIAL DEPLOYMENT MODEL?

- 11
- 12 A. No. First, Dr. Bryant's revenue assumptions fail the requirement that the analysis 13 be sufficiently granular to take into account the state of impairment in a particular 14 market. In particular, the FCC concluded "[t]hat market-specific data is needed 15 is indicated by the significant variation in the costs and revenues an efficient 16 entrant is likely to face." (TRO ¶ 485) Dr. Bryant's revenue estimates are based 17 on national average ILEC revenues, which include not only customers outside the 18 Florida BellSouth territory, but customers outside of Florida, and indeed 19 customers outside the entire BellSouth footprint. Dr. Bryant makes no attempt to 20 adapt these national figures to reflect the unique characteristics of the Florida 21 customer base (such as the relatively high level of international calling), the 22 demographic mix of customers in the relevant geographic area, or the specific 23 services offered by service providers in the state. These factors are relevant to 24 the economics of the CLEC business model, and it is improper to omit them if it 25 is possible to include them.

1		Indeed, MCI presumably knows its own average revenue per customer in Florida,
2		but Dr. Bryant chose not to consider that in his model, and MCI refused to
3		provide this information in discovery on the grounds that it is "not relevant."
4		(MCI Response to BellSouth Interrogatory 3-149) By ignoring its own offerings
5		in Florida, and by ignoring revenue sources that are clearly available to it, MCI's
6		revenue approach violates the FCC's granularity requirements in the TRO. (TRO
7		\P 519) While MCI's own revenue numbers are not determinative of the revenue
8		potential of an efficient CLEC, it is irresponsible for MCI to conceal them in
9		presenting an analysis of CLEC competitive entry. Such revenue estimates
10		clearly could give some indication of the ability of a CLEC to achieve revenue in
11		excess of an ILEC's revenues per customer, and give some indication of the
12		differences in revenue potential between geographic markets. Finally, MCI's
13		refusal to consider and provide information about its own revenues appears to be
14		particularly disingenuous in light of its willingness to rely on what it represents to
15		be based on its own churn and bad debt numbers for its model assumptions.
16		
17	Q.	DR. BRYANT ARGUES THAT HIS REVENUE ASSUMPTION IS
18		REASONABLE BECAUSE IT IS SIMILAR TO THE PRICE OF ONE OF
19		MCI'S BUNDLED OFFERINGS. (BRYANT DIRECT 89) IS THIS A
20	`	GOOD POINT OF COMPARISON FOR A REASONABILITY CHECK?
21		
22	A.	No. Dr. Bryant compares his revenue assumption with MCI's Neighborhood
23		Advantage 200 plan, priced in Florida at \$39.99. However, MCI offers several
24		bundles in Florida, in addition to the particular bundle referenced by Dr. Bryant
25		and in addition to à la carte services. In fact, my search of MCI's website

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1		indicated that the Advantage 200 plan is the cheapest bundled offering advertised
2		on the website. Examples of other MCI bundles available for residential
3		customers in Florida include a \$62.49 plan (Neighborhood Complete, including a
4		\$6.50 end-user charge) and a \$97.49 plan (MCI Neighborhood HiSpeed,
5		including a \$6.50 end-user charge). MCI has ignored the fact that it offers, and
6		presumably some customers purchase, these more expensive bundles. Moreover,
7		the bundle to which Dr. Bryant compares his revenue assumption does not
8		include various sources of revenue that MCI presumably receives even from the
9		customers to whom it sells that bundle, such as long distance calling in excess of
10		the 200 included minutes, international calling (which is billed separately under
11		the MCI plan), and Directory Assistance. Once again, I observe that if MCI's
12		bundled pricing is relevant, then MCI's revenues per customer would presumably
13		be relevant, but Dr. Bryant declined to rely on MCI revenue information.
14		
15	Q.	DOES THE BACE MODEL USE THE ILEC'S EXISTING LEVEL OF
16		PRICES AND REVENUES?
17		
18	A.	No, it adjusts them downward. The BACE model "starts with" the ILEC's
19		prices, as advocated by Dr. Bryant, and then assumes that when CLEC customers

prices, as advocated by Dr. Bryant, and then assumes that when CLEC customers
purchase services à la carte, they pay 90 percent for the local services of what
they would pay if purchasing the same services from the ILEC. This adjustment
is not applied as a price trend, but as a once-and-for-all (constant in each period)
10 percent cut. Hence, the BACE model incorporates a "CLEC discount" from
ILEC rates. For bundled services, the model assumes that CLECs offer a number
of bundle types, the prices of which are based on the actual prices of the relevant

1		bundles actually offered by CLECs in Florida. The model assumes, consistent
2		with the direction provided by the FCC, that these prices do not change over
3		time.
4		
5	Q.	WHAT DOES DR. BRYANT ASSUME ABOUT CUSTOMER
6		ACQUISITION COSTS?
7		
8	A.	Dr. Bryant assumes that the efficient CLEC will spend \$130 per line to acquire a
9		customer, whether that is a residential or business customer.
10		
11	Q.	WHAT EVIDENCE DOES DR. BRYANT PROVIDE IN SUPPORT OF
12		THIS ASSUMPTION?
13		
14	A.	Dr. Bryant himself presents no justification. In response to BellSouth's
15		Interrogatory 3-153, Dr. Bryant simply offers that this is "the default value used
16		by Dr. Gabel in the NRRI model."
17		
18		I understand that Dr. David Gabel, associated with NRRI, programmed the model
19		that Dr. Bryant advocates. I would like to have the opportunity to determine
20		how Dr. Gabel arrived at his figure, because it is not evident based on the
21		response to interrogatory 3-153. The figures presented in this response include,
22		first, a CLEC (Z-Tel) whose customer acquisition costs are claimed to be between
23		\$80 and \$100. This experience is some \$30 to \$50 less than the \$130 used by Dr.
24		Gabel (and, derivatively, by Dr. Bryant). Dr. Bryant does not explain whether or
25		how he incorporates that experience into his estimate. I will note, however, that

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my recommendation (\$95 for residential customers) falls very close to the middle of the claimed Z-Tel's experience. If an *actual* CLEC can attain these levels, it would seem that this is an important datum regarding what an *efficient* CLEC might attain.

6 The figures presented by Dr. Bryant in response to discovery also include the 7 customer acquisition costs of a cable-TV company that offers voice telephony in 8 some areas of the country and several examples of wireless service providers. 9 However, Dr. Bryant does not demonstrate how he derives his recommended 10 \$130 from any figure, or combination of figures, in the response, or how one 11 might adjust the wireless (and possibly cable TV) figures to account for 12 interindustry differences, such as the fact that many wireless carriers provide and program the handset "free" to new customers, or that they sign up customers to 13 14 term contracts (and therefore can justify spending more to acquire customers).

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Q. HOLDING ASIDE THE FACT THAT DR. BRYANT'S CUSTOMER ACQUISITION COST ESTIMATE IS UNSUPPORTED, IS HIS ASSUMPTION NEVERTHELESS A REASONABLE ONE?

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A. No, it is unreasonably high for a residential line according to the data I have seen.
As I explained and fully documented in my direct testimony, several CLECs have
reported customer acquisition costs far below the number advocated by Dr.
Bryant, and I have seen no published estimates that reach the \$130 level. For
example, Talk America, a CLEC that markets primarily to mass-market
customers, is estimated to spend on the order of \$80 per customer acquisition.

1	(See Vik Grover, "Raising Numbers Again," Kaufman Bros. Equity Research
2	(KBRO Kaufman Bros. L.P.), April 30, 2003, p. 1. See, also, Excerpt from The
3	Wall Street Transcript, "Company Interview: Gabriel Battista, Talk America
4	Holdings, Inc." May 2003, p. 5.) Management at Z-Tel, another CLEC that
5	markets primarily to mass-market customers, claims that it is trying to reduce
6	customer acquisition costs to \$50. (See James J. Linnehan, "Z-Tel Technologies,
7	Inc.: Still Chugging Along," Thomas Weisel Partners Merchant Banking,
8	November 8, 2001, p. 3.) I also noted in my direct testimony that investment
9	analysts at Thomas Weisel Partners estimated that Z-Tel's actual customer
10	acquisition costs were in the \$60 to \$70 range, not the \$80 to \$100 range that Dr.
11	Bryant claims, without reference to source, documentation, or support, is Z-Tel's
12	customer acquisition costs. Indeed, according to Banc of America Securities,
13	even AT&T's customer acquisition costs are somewhat less than Dr. Bryant's
14	estimate, and are expected to drop 50 percent over the next five years. (David W.
15	Barden, "AT&T Corporation: A Case for Consumer Services," Banc of America
16	Securities—United States Equity Research, April 30, 2003, p. 17.) None of these
17	estimates for actual CLECs exceeds or even meets Dr. Bryant's recommendation
18	for an efficient CLEC.
19	

Finally, as I discussed in my direct testimony, the experiences of actual CLECs may not be indicative of what an efficient CLEC could accomplish. I described that UNE-P-based firms have the incentive to spend inefficiently high amounts to acquire customers. The reason is that having UNE-P available where there is no impairment provides CLECs with an opportunity to save on network investments, but these savings are dissipated in competition for new customers. The bottom

line is that an estimate of customer acquisition costs, such as Dr. Bryant's, that
 exceeds the customer acquisition costs observed for UNE-P-based firms is, in and
 of itself, evidence of the unreasonableness of the estimate for an efficient UNE-L based CLEC.

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Q. PLEASE COMMENT ON DR. BRYANT'S ESTIMATE OF "CHURN."

- A. In his testimony, Dr. Bryant says, "customer life is 12 months." (Bryant Direct
 90) Dr. Bryant also claims to evaluate the impact on impairment of using
 different customer lives between 8 and 16 months. The text that is available with
 the model itself indicates that the model evaluates customer term of 15 months,
 and performs a sensitivity analysis for other values between 10 and 20 months. I
 am unable to account for the discrepancy between the Mr. Bryant's testimony
 and the model documentation.
- 15

16 I have several comments about Dr. Bryant's churn assumption. First, I find it 17 entirely implausible on its face that an efficient CLEC would spend \$130 per line 18 to acquire a customer that is expected to stay with the CLEC for only 12 months. 19 Such a CLEC would have to collect nearly \$11 per month just to recover its 20 customer acquisition costs from its customers. In contrast, for example, Talk 21 America, a UNE-P-based CLEC that serves the mass market, had monthly churn 22 of 4.1 percent (which implies that at the end of about 17 months, the CLEC will 23 have lost about half of the customers that the CLEC had signed up at the 24 beginning of that period) and customer acquisition costs of \$80. (Vik Grover, 25 "Talk America Holdings, Inc, Kaufman Brothers, April 30, 2003, p. 1.) This

means that Talk America would have to collect approximately \$4.70 per month
 over the life of its average customer to recoup its customer acquisition costs, or
 less than half of the monthly necessary recoupment implied by Dr. Bryant's churn
 and customer acquisition cost proposals.

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6 Dr. Bryant argues that his assumption is based on the "recent experience of MCI" 7 (Bryant Direct 90) and in discovery claims that this assumption is based on 8 undocumented "interviews with MCI personnel." (MCI Response to BellSouth 9 Interrogatory 153 E) Of course, even aside from the lack of documentation for 10 this assumption, MCI cannot be the relevant standard because no effort has been 11 made to demonstrate that MCI represents an efficient CLEC. Moreover, MCI's 12 "recent experience" is not likely to reflect a long run equilibrium level of churn 13 (as opposed to a start-up level of churn). This is particularly important because 14 Dr. Bryant's model is a one-period "static" model, so his churn level is 15 presumably expected to apply in a long-run equilibrium, not for the initial 16 experience of a relatively new entrant in to the market.

17

Second, Dr. Bryant's estimate of churn also suffers from insufficient granularity. Dr. Bryant assumes that all types of customers will have the same average tenure with the CLEC. As the FCC noted in its TRO, business customers are less averse to signing term contracts (TRO ¶ 452), so although a 4 percent per month churn rate is reasonable for residential customers, one would expect that business customers would have lower churn rates. In light of the availability of contracting, especially for business customers, it is unreasonable to assume that

the entire customer base of an efficient CLEC would turn over its entire base of
 customers every 12 months.

4 Finally, as I noted, Dr. Bryant claims that this assumption is based on his 5 undocumented "interviews" of MCI personnel. While the specific results of a 6 particular CLEC's business likely do not reflect the potential of an efficient 7 CLEC, it nevertheless appears self-serving that Dr. Bryant relied on MCI for 8 churn, but he did not rely on MCI for other, perhaps more obvious, input items. 9 For example, Dr. Bryant says that he obtained his estimate of long-distance 10 spending from the FCC's 2003 Reference Book. (MCI Response to BellSouth 11 Interrogatory 153-B) Dr. Bryant is testifying on behalf of the nation's second 12 largest long-distance provider. It seems that he could have obtained a more 13 nuanced, granular, and supportable level of long-distance spending (one that 14 reflects the countervailing advantage of being able to select your customers) by 15 interviewing MCI personnel regarding long-distance spending in Florida-16 especially given Florida's particularities regarding international calling-rather than use a national average computed by the FCC on the basis of nationally-17 18 sampled bills. Instead he claims that "[i]nsufficient data existed at the time of the 19 filing" to even differentiate between business and residence long-distance revenue 20 per line. (MCI Response to BellSouth Interrogatory 174) Moreover, in 21 BellSouth Interrogatory 160, Dr. Bryant was given the opportunity to explain why 22 he chose Dr. Gabel's revenue or cost estimates in some instances, why he 23 interviewed MCI personnel in other instances, and why he relied on FCC national 24 statistics in yet other instances, but he offered no such explanations.

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Q. PLEASE COMMENT ON DR. BRYANT'S ASSUMPTION REGARDING BAD DEBT.

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A. Dr. Bryant assumes that the efficient CLEC will experience bad debt of 5 percent
of revenue (based, as I noted, entirely on undocumented "interviews" with MCI
personnel). (MCI Response to BellSouth Interrogatory 157) This proportion is
some 3 *times* the average historical bad debt experience of the RBOCs and is not
representative of what one might reasonably expect an efficient CLEC to
experience.

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11 Managing bad debt is important because failure to pay for service exerts a double 12 whammy: it is both a loss of revenues that falls to the bottom line, and it implies 13 that the CLEC incurred costs to provide service that was never paid for. Thus, it 14 is very important for firms to manage bad debt, and it is unreasonable to 15 incorporate as part of an "impairment" analysis the assumption that a CLEC 16 might fail to properly manage this very important cost with reasonable efficiency. 17 If anything, CLECs should be able to avoid high risk customers simply by 18 refusing to serve them.

19

As one indicator of bad debt, I examined CLECs for which I could find uncollectibles percentages for either (or both) 2001 and 2002, one of which (2001) was a recession year. From 73 observations, I determined that the median ratio of bad debt to revenues was about 2.8 percent. The median is an indicator of central tendency. The measure indicates that there are as many observations above 2.8 percent as there are below 2.8 percent. This is an extremely

1		conservative indicator of the bad debt rate that an efficient CLEC should be able
2		to attain. Indeed, one might argue that an efficient CLEC's rate of bad debt
3		should be in one of the lower quintiles or deciles. Nevertheless, the actual
4		(median) experience of the CLEC sample is substantially below Dr. Bryant's
5		proposal, and more in line with the 2.75 percent that I recommend.
6		
7	Q.	PLEASE COMMENT ON DR. BRYANT'S ASSUMPTIONS REGARDING
8		DSL PENETRATION RATES.
9		·
10	A.	The effective proportions of CLEC business and CLEC residence customers that
11		ultimately subscribe to DSL, as computed from Dr. Bryant's model, are 1.2
12		percent for businesses and 5 percent for residences. These effective penetration
13		rates are too low to account for the customer targeting and bundling in which an
14		efficient CLEC can engage.
15		
16		Indeed, according to Figure 24 in this Commission's Annual Report on
17		Competition Markets in Florida, 24 percent of Florida households already have
18		adopted broadband, and 38 percent of those (that is, 9 percent of the total) have
19		opted for DSL (Figure 22). Moreover, DSL subscription continues to grow at a
20		rapid clip. Yet, Dr. Bryant ultimately estimates that only 5 percent of the
21		CLEC's residences will subscribe to its broadband offering. I conclude that an
22		estimated effective cross-penetration between the CLEC's voice and broadband
23		offerings that is substantially less than the average penetration level that
24		currently exists in the marketplace today, ignoring the fact that CLECs can
25		disproportionately target complex-needs customers, and ignoring the growth of

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DSL, does not adequately conform to the FCC's requirement that the potential deployment analysis consider all of the revenues and countervailing advantages that are available to the CLEC.

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5 Q. DOES DR. BRYANT UNDERPRICE THE ASSUMED DSL SERVICES?

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7 A. Yes, he does. Dr. Bryant assumes that residences pay \$35 extra per month for 8 DSL service from his modeled CLEC. While DSL is certainly available at 9 approximately \$35, one might expect that a reasonably efficient CLEC could 10 offer additional DSL-related products, or "vertical services," just as BellSouth 11 does. For example, in addition to a \$39.95 DSL offering, BellSouth offers a 12 home networking option (\$10.00), a parental controls/firewall (\$6.95), web 13 remote access (\$4.95), and a static IP address (\$14.95). While not all DSL 14 customers will take some or all of these options, some customers will take one or more. The ability to sell customers additional, useful features increases the 15 16 revenue opportunity, and, I understand, actual revenue, from DSL service. I do 17 not believe that Dr. Bryant's assumed DSL price adequately accounts for such, or 18 other, vertical revenue opportunities associated with DSL service.

19

The availability of other revenue opportunities is evidenced in the market. For example, my research indicates that while "lite" packages are available for less, higher speed DSL service is available for residential customers for about \$49.95 from a variety of carriers in Florida (including Covad TeleSurfer PLUS Residential, BellSouth DSL FastAccess, and AT&T Preferred DSL). For SOHO businesses, DSL service is available for nearly \$50 from MCI, BellSouth, and

1		Sprint, but it is also available for substantially more (such as \$79.95 from
2		BirchNet DSL, EarthLink Small Office, and MegaPath Networks and for \$99.95
3		from Comtex Telecommunications). Hence, my recommendation of \$47 for \dot{a} la
4		carte residential and SOHO business customers for the BACE model is both
5		reasonable and conservative, while Dr. Bryant's proposal is unreasonably low and
6		is not reflective of revenues available in the market, as is required by the TRO. I
7		would note that the BACE model also incorporates DSL in packages and applies
8		prices for those packages based on the bundle prices currently available from
9		CLECs in the market. Dr. Bryant does not explicitly incorporate bundles into his
10		model at all.
11		
12	Q.	DO YOU AGREE WITH DR. BRYANT'S ASSUMPTIONS REGARDING
13		OVERALL PENETRATION?
14		
14 15	A.	No. Dr. Bryant assumes a static CLEC market share of 5 percent. (Bryant Direct
	A.	No. Dr. Bryant assumes a static CLEC market share of 5 percent. (Bryant Direct p.88) While a penetration rate of 5 percent may be reasonable for a growing
15	A.	
15 16	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growing
15 16 17	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growing CLEC early in its life, it is not appropriate as an ultimate penetration rate.
15 16 17 18	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growingCLEC early in its life, it is not appropriate as an ultimate penetration rate.Nevertheless, there is no way of knowing in MCI's model whether one should
15 16 17 18 19	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growingCLEC early in its life, it is not appropriate as an ultimate penetration rate.Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period
15 16 17 18 19 20	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growingCLEC early in its life, it is not appropriate as an ultimate penetration rate.Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period of time, whether it is a "steady state" ultimate penetration (and the penetration
15 16 17 18 19 20 21	A.	 p.88) While a penetration rate of 5 percent may be reasonable for a growing CLEC early in its life, it is not appropriate as an ultimate penetration rate. Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period of time, whether it is a "steady state" ultimate penetration (and the penetration rates leading up to it are ignored), whether it is the assumed penetration in the
15 16 17 18 19 20 21 22	A.	 p.88) While a penetration rate of 5 percent may be reasonable for a growing CLEC early in its life, it is not appropriate as an ultimate penetration rate. Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period of time, whether it is a "steady state" ultimate penetration (and the penetration rates leading up to it are ignored), whether it is the assumed penetration in the
 15 16 17 18 19 20 21 22 23 	A.	p.88) While a penetration rate of 5 percent may be reasonable for a growing CLEC early in its life, it is not appropriate as an ultimate penetration rate. Nevertheless, there is no way of knowing in MCI's model whether one should interpret the 5 percent as the "average" penetration over an (unspecified) period of time, whether it is a "steady state" ultimate penetration (and the penetration rates leading up to it are ignored), whether it is the assumed penetration in the first or second year of operation, or some other interpretation.

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1	of zero, and will increase its penetration over time. Accordingly, the BACE
2	model explicitly assumes that a CLEC starts with no customers and grows toward
3	its ultimate penetration of 15 percent (though never quite achieves it) over a ten
4	year period. Dr. Bryant's penetration assumption could be consistent with many
5	ultimate penetration rates, including a 15 percent penetration rate achieved over a
6	period of time, but these dynamics are entirely unspecified in MCI's static model.
7	What is clear is that 5 percent is unreasonably low as an estimate of the ultimate
8	penetration rate for an efficient CLEC.

10 There are a number of reasons that Dr. Bryant's 5 percent market share estimate is 11 unreasonable as an ultimate penetration rate. First, as I explained in my direct 12 testimony, it has already been demonstrated that CLECs can achieve significantly 13 higher rates of penetration. AT&T has achieved 15 percent in New York, and 14 Cox Communications has achieved 19 percent penetration of the telephone-ready 15 homes in its geographic footprint around the nation, and 53 percent of its existing 16 cable TV customers in its Orange County (California) footprint. In Florida over 17 all, Table 2 of the Commission's Annual Report on Competition shows that 18 CLECs serve 21 percent of the lines in BellSouth's service territory. While this 19 21 percent includes many UNE-P-based CLECs, it certainly demonstrates a 20 greater willingness on the part of customers to leave BellSouth than is assumed by 21 Dr. Bryant.

22

Moreover, Dr. Bryant himself explains that UNE-L based providers will be more
 aggressive in expanding their market shares than would UNE-P providers. As Dr.
 Bryant explains, facilities-based CLECs are "under pressure to recover sunk costs

by increasing volume." (Bryant Direct 82) Aside from "sunk cost" concerns,
facilities investments create some scale economies, which induce efficient CLECs
to increase volume to leverage those economies of scale. Indeed, increasing its
customer base allows the CLEC to exploit the efficiencies available to a facilitiesbased provider. Hence, an efficient facilities-based provider will necessarily
operate at a scale that exploits its scale economies in equilibrium.

8 Finally, in order to appropriately interpret the 15 percent penetration assumption, 9 it is useful to recall that the market share numbers reported in many public venues (including the FCC reports) are at the level of large geographic areas such as an 10 11 entire state. A carrier that has, say, a 2 percent market share in a state would have 12 a far higher share in the geographic markets in which it operates. A carrier that 13 has a 5 percent share in a metropolitan area would also have a much higher 14 market share in its geographic market if it served only a part of that metropolitan 15 area. The penetration rate of the BACE model applies only to the penetration of 16 the narrowly defined geographic markets in which it operates, not to the average 17 penetration of an entire state or MSA (which would obviously be lower as a 18 consequence of the markets which the CLEC does not serve).

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For example, suppose a particular MSA has three zones, 1, 2, and 3, each with equal numbers of customers. If a CLEC operates only in zone 1 and obtains 15 percent of the market there, then it would be calculated to have 5 percent of the MSA. Looked at differently, if carriers are observed to obtain 5 percent of an MSA, they may well be capturing a far higher percentage of the subset of the market in which they operate.

1		III. RESPONSE TO MR. TURNER
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3	Q.	WHAT COMMENTS DO YOU HAVE ON MR. TURNER'S TESTIMONY?
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5	A.	The main comment I have is that Mr. Turner's approach, as it stands, is useless to
6		address the FCC's definition of impairment. Mr. Turner's theory of impairment
7		was considered and explicitly rejected by the FCC. Mr. Turner's approach does
8		not address the question of whether an efficient CLEC economically could enter
9		a market without access to a particular unbundled element (which is the essence
10		of the FCC's impairment definition, e.g., see TRO \P 84), and so it provides no
11		economically useful information to the Commission, and should be disregarded.
12		
13	Q.	WHAT DO YOU MEAN THAT MR. TURNER'S APPROACH DOES NOT
14		ADDRESS "IMPAIRMENT"?
15		
16	A.	Mr. Turner's theory of impairment is that CLECs are impaired because (he
17		claims) they have higher costs than does the ILEC. (Turner Direct 4-5) His
18		impairment analysis computes the supposed cost disadvantages, relative to the
19		ILEC, faced by a CLEC that seeks to self-provision switching to serve mass-
20		market customers. (Turner Direct 5-7) Cost disparities, however, are not
21		determinative of whether entry is "economic," which is the basis of the FCC's
22		definition of impairment. Costs are relevant only within the context of a well-
23		defined business case analysis that evaluates whether entry by an efficient CLEC
24		is economic, and whether CLECs incur costs that are not incurred by ILECs is
25		not determinative of impairment. In fact, as the FCC recognized (TRO \P 112),

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1 entry by an efficient CLEC may be "economic" without access to the unbundled 2 element even when the CLEC suffers from a cost disadvantages. In real markets 3 (as well as in many standard economic models of competition), firms with 4 different costs coexist in competition with one another, and such competition is 5 sustainable and viable for the firms. A sound business case analysis considers 6 not just costs, but also the revenues that an efficient CLEC reasonably could 7 attract and, as I mentioned, any countervailing advantages that the CLEC might 8 enjoy, such as the ability to target geographic areas or customers within those 9 areas, and "second-mover" advantages such as the ability to create a lower-cost 10 network topography or use more flexible or powerful switches. An approach that 11 seeks only to demonstrate a cost disadvantage cannot determine whether 12 competitive entry is "economic" and so does not address the essential issue of the 13 FCC's impairment definition.

14

15 As I noted, approaches such as Mr. Turner's, which focus on absolute cost 16 disadvantages, were reviewed and rejected by the FCC during the Triennial 17 Review proceeding. The FCC concluded, "We reject the proposal to find 18 impairment whenever entrants would suffer from a substantial cost disadvantage 19 (such as five percent), regardless of whether entry is still possible." (TRO \P 112) 20 The FCC requires that "cost factors listed should not be considered in isolation, 21 but only in the context of a broad business case analysis that examines all likely 22 potential costs and revenues." (TRO fn. 1581. See, also fn. 1497) The FCC 23 specifically directs states "not [to] focus on whether competitors operate under a 24 cost disadvantage. [Rather,] [s]tate commissions should determine if entry is economic by conducting a business case analysis for an efficient entrant." (TRO 25

fn. 1579) The FCC also correctly noted that a cost disadvantage standard, such as
 Mr. Turner's, would focus on maximizing entry to the detriment of the other goals
 of the Act, such as innovation, deployment of new technologies, and reduced
 regulation. (TRO ¶ 112)

6 The Supreme Court also rejected the theory that demonstrating a cost 7 disadvantage is sufficient to prove impairment. The Court explained that a CLEC 8 that was able to operate profitably without access to an unbundled element could 9 not argue that it was impaired on the grounds that it would be even more 10 profitable with access to the element. (AT & T et al. v. Iowa et al. 13-14) Nor can 11 a CLEC claim impairment by noting that its costs would increase in the absence 12 of access to the UNE. (AT&T et al. v. Iowa et al. 14) Indeed, Mr. Turner's 13 comments are based on an approach that expressly is rejected as "unreasonable" 14 by the Court. As a result, the FCC's rules were vacated by the Court, and the 15 FCC, in the TRO, established an impairment test based on the economics of entry, 16 not on cost differentials or cost increases.

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18 Mr. Turner admits that his analysis is not determinative of whether a CLEC has 19 an economic business case in any geographic market, and that he has not 20 performed any analysis to determine whether it could have a positive business 21 case. Specifically, Mr. Turner responded with an unqualified "no" to the 22 following question: "Has any analysis, study, or evaluation been conducted by, on 23 behalf, or at the direction of AT&T to determine whether a CLEC providing a 24 qualifying service via the UNE-L can make a positive return on investment in any 25 wire center or combination of wire centers? If the answer to this Interrogatory is

1		in the affirmative, identify all documents referring or relating to such analysis,
2		study or evaluation." (AT&T Response to BellSouth Interrogatory 4-162)
3		
4	Q.	IS IT LEGITIMATE TO CONSIDER THE COSTS OF AN EFFICIENT
5		CLEC?
6		
7	A.	Yes, it is, if these costs are considered in the proper analytical framework. As the
8		FCC explained (TRO \P 77), this framework is a fully-developed "net present
9		value" business case that considers revenues, as well as costs, and countervailing
10		advantages that the CLEC might enjoy. A business case evaluates the CLECs'
11		costs relative to its revenues, not relative to the ILEC's costs. Mr. Turner's
12		analysis is in no way a business case and therefore is not helpful to this
13		Commission.
14		
15		IV. RESPONSE TO MR. WOOD
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17	Q.	SHOULD THE FPSC REJECT MR. WOOD'S PROPOSAL TO
18		REPUDIATE THE USE OF AN ECONOMIC IMPAIRMENT ANALYSIS
19		TO IDENTIFY GEOGRAPHIC MARKETS WHERE IMPAIRMENT
20		DOES NOT EXIST? (WO OD DIRECT 6)
21		
22	A.	Yes, it should reject Mr. Wood's proposal. Mr. Wood argues that an economic
23		analysis may be useful as a way to identify factors that contribute to impairment,
24		but that the Commission should not use a business case analysis to determine
25		whether impairment exists. Mr. Wood argues that a business case analysis that

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1		does not demonstrate "impairment" is inherently flawed because many CLECs
2		have tried and failed to implement UNE-L over the past 7 years. Mr. Wood
3		therefore concludes that "impairment" is obvious. I interpret this testimony to
4		imply that Mr. Wood urges the FPSC to simply disregard the potential
5		deployment component of the FCC's impairment methodology as part of its
6		determination of the geographic markets in which BellSouth can be relieved of
7		the unbundled local switching obligation, on the grounds that he already knows
8		what the answer should be. (Wood Direct 4)
9		
10		Clearly, this is not what the FCC appeared to have in mind when it wrote
11		51.319(d)(2)(iii)(B). This rule requires states to evaluate potential deployment as
12		part of their impairment assessments if neither switching trigger is met. The
13		FCC's rule clearly requires a state commission to evaluate the bright-line triggers
14		tests, and then, in instances where the triggers are not met, to nevertheless find
15		that requesting carriers are not impaired without access to the local switching
16		UNE where it finds that self-provisioning of switching is economic. As a matter
17		of logic, the fact that the FCC includes the potential deployment test must be
18		understood to imply that the FCC considers it possible to demonstrate lack of
19		impairment thereby. The FCC's rules indicate a recognition that if the triggers
20	`	are not satisfied in a market, that does not necessarily imply that CLECs could not
21		economically do business there with UNE-L if unbundled switching were
22		unavailable. There is no doubt that the existence of UNE-P affects the desirability
23		and viability of pursuing a UNE-L strategy.
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1 CLECs may opt to use UNE-P rather than UNE-L when the former provides the 2 CLEC with a greater profit opportunity, or greater flexibility, than the latter. 3 However, greater (or lesser) profitability is not the standard that the FCC requires 4 for an evaluation of impairment. As I noted earlier, the FCC's standard of 5 impairment is whether an efficient CLEC could economically enter the market 6 without access to the unbundled element. (TRO ¶ 84) The FCC's trigger's tests 7 are asymmetric tests of impairment: satisfying the triggers tests demonstrates lack 8 of impairment, but failing them does not demonstrate impairment. If there is 9 "multiple, competitive supply" (TRO fn. 283) (as indicated by the triggers tests), 10 an efficient CLEC clearly is not impaired without access to the unbundled 11 element. Thus, passing a triggers test clearly indicates that there is no 12 impairment. But, if there is not multiple, competitive supply currently in the 13 market, this does not mean that competitors would be unable to enter the market 14 without access to the UNE. As I mentioned, CLECs might use UNE-P instead of 15 UNE-L because it promises greater profits, not because it uniquely resolves the 16 market entry problem. As FCC Chairman Powell noted, "[A]n honest inquiry into 17 this area [of impairment analysis using the triggers] must recognize what the 18 record amply demonstrates: there is a correlation between the availability of 19 UNE-P and the failure of competitors to utilize their own switching capacity." A 20 well-structured business case analysis can help identify those areas where CLECs 21 are not impaired, even when neither trigger test is satisfied. 22 23 Q. AREN'T THE PAST 7 YEARS THEMSELVES INDICATIVE OF IMPAIRMENT, AS CLAIMED BY MR. WOOD? (WOOD DIRECT 4) 24

1 A. No. First, Mr. Wood seems to argue that the triggers tests will demonstrate that 2 CLECs are not serving mass-market customers using their own switches. (Wood 3 Direct 4) Mr. Wood's entirely unsupported and conclusory rhetoric aside, he 4 provides no evidence that CLECs have experienced impairment in the specific 5 geographic markets that are at issue in this proceeding, and admits in discovery 6 that he performed no economic impairment analysis, study, or evaluation of 7 impairment associated with local switching. (AT&T Response to BellSouth 8 Interrogatories 4-152 and 4-153).

10 Second, even in those instances where the triggers are not met, CLECs are not 11 necessarily impaired, as the FCC has clearly recognized in its Rule requiring a 12 potential deployment analysis. As I have discussed, one reason that CLECs are 13 not necessarily impaired in geographic markets where the triggers are not met is 14 that the availability of UNE-P itself affects CLECs' business decisions. The 15 availability of UNE-P where there is no impairment provides a convenience for 16 CLECs, as noted by Chairman Powell in his Separate Statement to the TRO. 17 Even when UNEs are priced based on cost, CLECs may well have the incentive to 18 use UNE-P, rather than make their own investments, even in many areas for 19 which there is no genuine impairment. Moreover, the availability of UNE-P to 20 other CLECs in areas where there is no genuine impairment damages the business 21 cases of those CLECs that otherwise would invest in their own switching. In sum, 22 the forward-looking risks and potential profits of an efficient CLEC, rather than a 23 retrospective review of CLEC successes and failures in a world of ubiquitous 24 UNE-P availability, is the relevant indicator of impairment.

25

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Q. IS IT TRUE, AS MR. WOOD ASSERTS, THAT "AN EFFICIENT CLEC
 THAT EXPERIENCES A COST DISADVANTAGE CANNOT COMPETE
 ON PRICE OVER TIME, AND THEREFORE CANNOT PRUDENTLY
 INVEST IN ASSETS WHOSE COSTS CAN ONLY BE RECOVERED
 OVER AN EXTENDED PERIOD OF TIME"? (WOOD DIRECT 10)

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7 A. No. Both in theory and in fact, competition can be viable when competitors have 8 varying levels of costs, and one would be hard-pressed to explain much of the 9 real world if one insisted on a worldview that permits the survival only of 10 competitors with identical costs. The claim that a cost disadvantage renders a 11 firm incapable of competing effectively and viably in a market is simply 12 inconsistent with much of modern economic theory, which provides a number of 13 models in which firms with different cost structures providing identical products 14 viably coexist. The notion that competition cannot accommodate heterogeneity 15 in costs reflects a shallow understanding of the richness of economic models of 16 competition.

17

18 Moreover, efficient CLECs need not compete only on price, but can compete by 19 differentiating their products from their rivals and earn a premium from those 20 customers who value the specific product characteristics offered by the CLEC.

21

Q. MR. WOOD ARGUES THAT REVENUES NEED NOT BE CONSIDERED
BECAUSE THE SAME REVENUE POTENTIAL EXISTS FOR BOTH
ILEC AND CLEC, SO THAT THE ONLY ISSUE IS COSTS. PLEASE
COMMENT. (WOOD DIRECT 9-10)

1	А.	Mr. Wood is incorrect on at least two grounds. First, as a matter of economic
2		principle, if the revenue potential is the same for two firms, a cost difference
3		nevertheless does not necessarily render the higher cost firm uneconomic, as I
4		just explained. Second, Mr. Wood is incorrect that CLECs and ILECs
5		necessarily face the same revenue potential. One of the advantages of a CLEC is
6		the ability to target high-profit customers, and ignore unprofitable ones. My own
7		analysis indicates that this "cream skimming" is occurring in the BellSouth-
8		served territories. Mr. Wood's entire approach, besides being rejected as
9		probative by the FCC, is based on a flawed premise.
10		
11		V. RESPONSE TO MR. GILLAN
12		
12	0	PLEASE COMMENT ON MR. GILLAN'S ASSERTION THAT
13	Q.	PLEASE COMMENT ON MR. GILLAN'S ASSERTION THAT
13	Q.	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN
	Q.	
14	Q.	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN
14 15	ų.	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN 2004 (BASED ON BELLSOUTH'S PROJECTIONS) BY NEARLY 90%."
14 15 16	Q. A.	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN 2004 (BASED ON BELLSOUTH'S PROJECTIONS) BY NEARLY 90%."
14 15 16 17	-	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN 2004 (BASED ON BELLSOUTH'S PROJECTIONS) BY NEARLY 90%." (GILLAN DIRECT 4)
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14 15 16 17 18 19 20 21 22	-	"ELIMINATING UNE-P WOULD REDUCE LOCAL COMPETITION IN 2004 (BASED ON BELLSOUTH'S PROJECTIONS) BY NEARLY 90%." (GILLAN DIRECT 4) As I noted in my response to Dr. Bryant, a market where CLECs are not impaired without access to unbundled local switching permits the opportunity for greater, not less, competition. The reason is that in those areas, after a transition period that provides CLECs with the opportunity to obtain any needed switching (either self-provisioned, from a wholesale switch provider or from the ILEC on

1	competition would be more robust than it is today. In areas where an efficient
2	CLEC would be impaired without access to the unbundled switching element,
3	UNE-P will remain available. Mr. Gillan's argument simply reduces to the
4	superficial tautology that eliminating UNE-P would eliminate UNE-P. It does
5	not address the more probative issue of the effect on innovation, consumer
6	welfare, or the future development of competition. Where unbundled local
7	switching is eliminated as a UNE due to lack of impairment, competition will be
8	enhanced, as envisioned by the Act.

10 Q. DOES MR. GILLAN ARGUE THAT THE FPSC SHOULD NOT REMOVE 11 A NETWORK ELEMENT BASED ON A POTENTIAL DEPLOYMENT 12 ANALYSIS?

13

14 A. Yes, I believe he does. Like Mr. Wood, Mr. Gillan argues that a potential 15 deployment analysis can indicate why impairment exists, but that it would not be 16 "reasonable" for the Commission to remove a network element unbundling 17 requirement based on a potential deployment analysis. (Gillan Direct 18) Hence, 18 like Mr. Wood, Mr. Gillan would have the Florida Commission ignore the plain 19 language of the federal rules. I believe that this is misguided for the reasons I 20 discussed in my response to Mr. Wood's recommendation. Nothing in the FCC's 21 discussion or its rules even hints at this ill-conceived proposal. Rather, the FCC 22 is very explicit that states must first examine the bright-line triggers tests and 23 then they must consider whether an efficient CLEC could economically provide 24 mass-market service without access to the unbundled switching UNE. This is 25 one way of addressing Chairman Powell's concern that CLECs use UNE-P even

1		in instances where there is no genuine impairment. Mr. Gillan's undisciplined
2		advocacy should be rejected.
3		
4	Q.	MR. GILLAN ARGUES THAT UNE-P ENCOURAGES INVESTMENT.
5		(GILLAN DIRECT 52) PLEASE COMMENT.
6		
7	A.	Mr. Gillan's opinions and conjecture on this are irrelevant to any determination
8		of "impairment" under the FCC's rules. The FCC clearly states that facilities-
9		based competition serves the public policy goal of innovation. (TRO fn. 233)
10		Moreover, removal of unbundling obligations is not optional if the impairment
11		test fails. It is mandatory. The public policy considerations weighing any pros
12		and cons of unbundling already are incorporated in the provisions of the Act
13		itself.
14		
15	Q.	DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
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17	A.	Yes it does.

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