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January 14, 2003

Via Electronic Submission

Chairman Michael Powell
Federal Communications Commission
445 12th Street, SW, 8th Floor
Washington, D.C. 20554

Re: Ex Parte Presentation
UNE Triennial Review Proceeding – CC Docket No. 01-338
Local Competition Proceeding – CC Docket No. 96-98
Deployment of Advanced Wireline Services – CC Docket No. 98-147

Dear Chairman Powell:

On January 8, 2003, WorldCom acknowledges for the first time, and contrary to its prior claims, that a CLEC may be able to serve residential customers without the UNE-P in certain wire centers.[1] After setting forth a putative analysis of the economics of using a UNE loop strategy to serve residential customers in particular-sized wire centers, it concludes that "UNE-L might prove to be a feasible alternative to UNE-P in some central offices, particularly those with relatively large numbers [25,000 or more] of residential lines."

SBC welcomes WorldCom's acknowledgement that facilities-based residential competition may be feasible after all. We take sharp issue, however, with the methodology and certain of the assumptions underlying WorldCom's analysis.[2] In fact, insofar as WorldCom

[1] Letter from Gil M. Strobel, Lawler, Metzger & Milkman, LLC, to Marlene H. Dortch, Secretary, FCC, January 8, 2003.

[2] In addition to presenting a purported economic analysis of the viability of a UNE loop strategy, WorldCom raises two operational issues. *First,* it claims that incumbent LECs can perform only a few thousand hot cuts per month. SBC already has shown this claim to be untrue, and it is noteworthy that WorldCom does not even purport to refute SBC's showing. Suffice it to say that SBC *today* performs more than a few thousand hot cuts per month; in fact, from June 2001 through May 2002, SBC performed 500,00 hot cuts. Moreover, as detailed in its previous filings, SBC can substantially increase the number of hot cuts it performs with its existing work force with no degradation in service quality. *See* Attachment 5. *Second,* WorldCom claims that it takes fourteen months to obtain and prepare collocation space and that, even where it has existing collocation arrangements, it would take eight months to obtain additional space and install and test new equipment These time estimates are grossly inflated. As an

bases its analysis on a comparison of UNE-P rates with the costs of a UNE loop strategy, its methodology has been squarely rejected by both the Supreme Court and the D.C. Circuit.[3] It also is "empirically and theoretically incorrect."[4] By contrast, we attach to this letter a legally sustainable, analytically sound analysis of the viability of a UNE loop strategy using appropriate assumptions – some of which actually result in higher estimated CLEC costs than WorldCom's assumptions.[5] As shown in the summary set forth in Table A, this analysis reveals that CLECs can earn a positive margin providing facilities-based residential service in wire centers with 5000 or more lines. To the extent they also serve business customers, they could profitably serve even smaller wire centers. These conclusions, moreover, are further buttressed by marketplace evidence, which shows that CLECs *today* are using their own switches to serve customers in more than three quarters of SBC's wire centers with 5000 or more lines and thus already have incurred many of the costs needed for facilities-based residential service in those wire centers.[6]

In its analysis, SBC compares the costs of a UNE loop strategy, not to the cost of the UNE-P, but to the revenue opportunity available to new entrants.[7] To calculate CLECs' costs, SBC developed a model that assumes the same principal network configuration that WorldCom uses in its cost estimate. Specifically, SBC assumes that a CLEC would connect unbundled loops to collocated GR 303 concentration equipment in each wire center and then use unbundled dedicated transport to haul its traffic to its own switch.[8] Because CLECs, as a rule, offer and

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initial matter, CLECs can and presumably would rely on virtual, not physical collocation to provision residential service, and virtual collocation intervals in SBC's region range from 70 to 110 days. Even if CLECs also relied on physical collocation, the intervals are far lower than suggested by WorldCom, ranging from 90 to 126 days for previously conditioned space and from 90 to 180 calendar days for unconditioned space. Those deadlines can be extended only 20 business days where space is not readily available.

[3] For a fuller explanation of why WorldCom's analysis is inconsistent with legal precedent, *see* Attachment 1.

[4] *See* Attachment 1, which explains, not only why WorldCom's analysis is inconsistent with the law, but also shows that this analysis is analytically flawed and rests on numerous unreasonable assumptions. *See also* letter from Dr. Howard Shelanaky to William Maher, a copy of which is set forth as Attachment 2, which shows that WorldCom's analysis is at odds with sound economic principles.

[5] *See* Attachment 3.

[6] SBC derived this evidence by looking at the percentage of its wire centers with 5000 or more lines in which one or more CLECs had ported a telephone number to their own switch. The Commission has recognized that ported numbers "provide insights into the number of customer lines served by competitors." *See, e.g., FCC Local Competition Report,* August 1999 at 43.

[7] Comparing costs with revenue opportunities for residential customers theoretically could implicate the D.C. Circuit's warning that below-cost, subsidized retail rates are not a source of impairment. Because CLECs pursue only relatively high-end customers, a real-world analysis of the ability of CLECs to earn a margin avoids this concern.

[8] For purposes of its analysis, which focuses exclusively on smaller wire centers in rural areas, SBC assumes that CLECs would use UNE transport. In larger wire centers, CLECs presumably would rely on

promote packages of local and long-distance services, SBC also included the costs of providing long-distance services. Although CLECs already have deployed more than 1300 switches and obtained thousands of collocation arrangements, SBC assumes, conservatively, that a CLEC would deploy a new switch (or switches) in every serving area and would require a new collocation arrangement in every wire center that we modeled.[9]

SBC also used extremely conservative assumptions in calculating the revenue opportunity available to CLECs. Specifically, we assumed that CLECs would serve only residential lines, notwithstanding that they already are serving substantial numbers of business customers with their own switches. Since the revenues available from business customers far exceed the revenues available from residential customers, the exclusion of business revenues from our analysis significantly understates the actual revenue opportunity available to CLECs and therefore overstates the line size required for CLECs profitably to serve a wire center.

To calculate the residential revenue opportunity on a per-line basis, we relied on the retail prices of the residential packages CLECs actually market and sell today. We thus assumed a revenue opportunity of $40 to $60 per line (an average of $50), plus $8 in switched access, EUCL, and universal service revenue. In a previous filing, a copy of which is provided as Attachment 4, SBC shows more fully why these revenue estimates are reasonable. For present purposes, we note that the average of $50 per line that we use is the *lowest* price point of MCI's The Neighborhood offering, which also is priced as high as $70. To calculate the revenue opportunity in the wire center as a whole, we used the same market share assumptions made by WorldCom – specifically, that a CLEC would capture five to ten percent market share in the wire center in question. Given the rapid pace at which CLECs have gained market share in states in which they have actively marketed residential service, and the even greater success they have had in winning business customers, these assumptions, particularly the low-end assumption, are quite conservative.

Based on the cost and revenue assumptions described above, we determined that a CLEC could earn a positive margin in a wire center with 5000 or more lines, assuming, consistent with WorldCom's analysis, that it could obtain a five to ten percent market share in that wire center. Because a five to ten percent market share in a 5000 line wire center represents 250 to 500 lines, we show in *Attachment 3* the per line costs and associated margins for a CLEC with 250 and 500 lines in wire centers in three representative SBC states: California, Michigan, and Texas.

While SBC's analysis shows that CLECs can earn margins when they use their own switches to serve residential customers in wire centers with 5000 or more lines, the fact that CLECs may or may not be able to earn margins in smaller wire centers does not warrant a finding of impairment in those wire centers. The critical issue is not whether CLECs can serve

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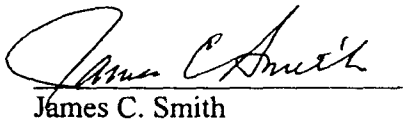
special access services or their own facilities because they would not be impaired without access to unbundled dedicated transport.

[9] To the extent CLECs can use their existing switches and collocation arrangements, their costs would be lower than assumed in SBC's model.

every wire center profitably, but whether they can viably serve a particular *market*. Because wire centers with fewer than 5000 lines account for a minority of all subscriber lines, notwithstanding that they represent almost half (42.3%) of SBC's wire centers, it is reasonable to assume that any losses a CLEC incurs in those wire centers will be more than offset by profits earned in larger wire centers in those same markets. Stated differently, just as incumbent LECs must offset losses incurred in certain wire centers with profits from others, the same should be expected of CLECs. Thus it would be reasonable for the Commission to conclude that CLECs are not impaired anywhere without access to unbundled switching.

Respectfully Submitted,



James C. Smith
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Attachments

cc: Scott Bergmann
Jeffrey Carlisle
Daniel Gonzalez
William Maher
Thomas Navin
John Rogovin
Robert Tanner
Lisa Zaina
Matthew Brill
Barbara Cherry
Linda Kinney
Jeremy Miller
Brent Olson
William W. Sharkey
Julie Veach
Michelle Carey
Jordan Goldstein
Christopher Libertelli
Steven F. Morris
Tamara Preiss
Don Stockdale
Simon Wilkie

Table A

CLEC Margin Analysis

California		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$2.31	**$5.69**	$13.69
	10%	-$0.65	**$8.65**	$16.65

Michigan		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$0.97	**$8.97**	$16.97
	10%	$6.48	**$14.48**	$22.48

Texas		CLEC Retail Price Points[1]		
		$40	**$50**	$60
		Margin[2]		
Market Share	5%	-$3.25	**$4.75**	$12.75
	10%	-$0.03	**$7.97**	$15.97

[1] Price points for bundled package of local, intraLATA toll and long distance service.

[2] Margins account for both operational costs and SG&A (SG&A is estimated as 20% of revenue).

Attachment 1

WORLDCOM'S ANALYSIS OF THE COST OF SERVING RESIDENTIAL CUSTOMERS USING UNE LOOPS IS INCONSISTENT WITH THE ACT AND FUNDAMENTALLY FLAWED

In its January 8, 2003, *ex parte*, WorldCom submitted "empirical facts" concerning the supposed economics of serving residential customers using unbundled local loops and self-provided switching (*i.e.*, UNE-L competition), which it claims show that CLECs generally are impaired without access to unbundled local switching and the UNE-P.[1] In particular, WorldCom submitted an economic analysis that compares CLECs' putative costs of providing residential local service using UNE-L with UNE-P rates, which, it claims, are "a surrogate for the incumbent LECs' costs of serving their retail customers[.]" Based on its finding that UNE-L costs generally exceed UNE-P rates, WorldCom asks the Commission to conclude that CLECs relying on UNE-L would be at a cost disadvantage relative to ILECs and that they are, therefore, impaired without access to the UNE-P. WorldCom's analysis is flatly inconsistent with the statute and binding legal precedent. It also is riddled with faulty reasoning and unsupported and unverifiable data.[2]

As an initial matter, WorldCom's analysis rests on a view of the Act that has been soundly repudiated by both the Supreme Court and D.C. Circuit. Both courts were presented with Commission decisions that defined impairment with reference to the relative cost of providing services with and without UNEs. Both courts rejected this analytical framework. The Supreme Court held that the mere fact that it may be cheaper to use UNEs than UNE alternatives says nothing about whether a competitor reasonably could provide service using the alternative. The D.C. Circuit similarly held that cost disparities alone could not constitute impairment because "average unit costs are necessarily higher at the outset for any new entrant into virtually any business."

Precedent aside, WorldCom's analysis is woefully flawed. Even assuming *arguendo* that a cost disparity between incumbent LECs and new entrants represents impairment, UNE-P rates are hardly a reliable indicator of incumbent LEC costs. To the contrary, as SBC has explained in its prior filings, and as numerous analysts have recognized, UNE-P rates have been set substantially *below* incumbent LEC costs. Indeed, TELRIC does not even purport to reflect actual costs. Rather, it purports to reflect the cost of a hypothetical, optimally efficient competitor using state-of-the-art equipment.

Furthermore, WorldCom's assumption that incumbent LECs with lower cost structures would be able to exclude new entrants by lowering retail rates ignores the realities of local

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[1] Letter from Donna Sorgi, Vice President Federal Advocacy, WorldCom, to William F. Maher (January 8, 2003) (WorldCom Letter), attaching Microeconomic Consulting Research Associates (MiCRA), "The Cost of Serving Residential Customers Using UNE Loops" (MiCRA Analysis).

[2] *See also* Letter from Dr. Howard A. Shelanski to William F. Maher, Chief, Wireline Competition Bureau (January 13, 2003) (Attachment 2), demonstrating that cost differences alone do not constitute impairment, and that, in any event, WorldCom's cost comparison is meaningless because it compares CLECs' putative costs with UNE-P rates rather than ILECs' actual costs.

exchange competition and retail rate structures. In the real world, incumbent LECs are forced to serve many, if not most, residential service customers at a loss. To the extent incumbent LECs earn margins serving other, high-end customers, they depend on those margins to recoup these losses. In contrast, new entrants do not have provider of last resort obligations and thus do not have to recoup losses when they target only high-end customers on whom margins are available. Therefore, the notion that a cost disparity would prevent new entrants from serving the high-end customers they singularly seek out is nonsensical.

In the final analysis, though, WorldCom's methodology proves too much. If it were the case, as WorldCom claims, that a CLEC could not compete wherever a UNE-loop strategy is more costly than the UNE-P, CLECs could not use their own switches to compete even for business customers because the same cheap UNE-P rates apply to business customers. Of course, as shown in the *UNE Fact Report* and the Commission's local competition reports, CLECs are serving millions of business customers using their own switches, thus disproving WorldCom's theory.

WorldCom's analytical framework also is at war with the goals of the Act and this Commission of promoting innovation and investment in alternative facilities. Because UNE-P rates are designed to reflect the costs of a hypothetical, optimally efficient competitor using state-of-the-art technology, they are certain to be lower than the cost structure of any CLEC. As a consequence, given a choice, CLECs inevitably will continue to rely on the UNE-P, rather than invest in their own facilities.

While from a legal and theoretical standpoint, WorldCom's analysis is fatally flawed, so too is its analysis of the purported costs of competing with its own switches. WorldCom's cost estimates are inflated by a host of unexplained and inexplicable assumptions, including, to name a few examples, the assumptions that: (1) it would have to spend $30 million developing an UNE-L OSS system (an assumption that is not credible since WorldCom and many other switch-based CLECs already have UNE-L OSS systems); (2) each and every one of its collocation spaces would have to be expanded at an average cost of $120,000 per collocation space; and (3) each collocation space would be equipped with digitizing equipment capable of serving a minimum of 576 lines.

The bottom line is that WorldCom's analysis is legally, analytically, and factually deficient. Its claim that CLECs are impaired in any wire center with fewer than 25,000 lines is not credible and should be rejected outright by the Commission.

I. WorldCom's Analytical Framework is Contrary to the Act.

In its *ex parte*, WorldCom asserts that, to determine whether UNE-L competition is viable, competitive carriers' costs must be compared to the ILECs' costs of serving customers. It maintains that, if competitors' costs are higher than those of incumbents, the incumbent can reduce its retail price and thus undercut competitive carriers' offerings.[3] In that event, according

[3] WorldCom Letter at 2.

to WorldCom, CLECs would not be able to offer competitive services using their own switches, and thus would be impaired without the UNE-P.[4]

In undertaking this cost comparison, MiCRA (WorldCom's consultant) used UNE-P rates as a "surrogate" for ILEC costs. It offers little justification for this sleight of hand, claiming only that UNE-P rates "are available and verifiable."[5] Not surprisingly, since UNE-P rates are based on the forward looking costs of a hypothetical, optimally efficient competitor using state-of–the-art equipment, rather than ILECs' actual costs, MiCRA concluded that CLECs would be "severely disadvantaged relative to incumbents if they must use UNE-L."[6] MiCRA further concluded that the incumbents' advantage, and the CLECs' impairment, is largely due to ILEC economies of scale that CLECs cannot match.[7]

WorldCom's analytical framework for evaluating impairment is based on a view of the Act and impairment that has been expressly rejected by both the Supreme Court and the D.C. Circuit. In its original *Local Competition Order*, the Commission adopted an interpretation of "impairment" that, for all practical purposes, mirrors WorldCom's analysis here. In particular, the Commission found that an entrant's ability to offer a telecommunications service is impaired "if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises."[8] Thus, like WorldCom, the Commission interpreted the impairment standard "as requiring the Commission . . . to consider whether the failure of an incumbent to provide access to a network element would . . . increase the financial or administrative cost of the service a requesting carrier seeks to offer."[9]

In *Iowa Utils. Bd.*, the Supreme Court squarely repudiated the notion that the "impairment" standard in section 251(d)(2) of the Act is satisfied simply by a showing that a CLEC's costs of providing service would increase if it is denied unbundled access to a network element. Specifically, it found that the Commission's assumption that any increase in cost imposed by denial of a network element constitutes impairment "is simply not in accord with the ordinary and fair meaning of [that] term."[10] It noted that, while an increase in costs might reduce

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[4] *Id.* at 2-5, 7.

[5] *Id.* at 3. Of course, WorldCom's rationale provides no basis for using UNE-P rates as a surrogate for ILEC costs, especially when data concerning ILECs' actual costs are available through ARMIS.

[6] *Id.*

[7] *Id.*

[8] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket 96-98, First Report and Order, 11 FCC Rcd 15499, para. 287 (1996) (*Local Competition Order*), vacated and remanded, *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366 (1999).

[9] *Id.*

[10] *Iowa Utils. Bd.*, 525 U.S. at 389.

a firm's profits, such an increase says nothing about a firm's ability to provide the services it seeks to offer:

> An entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment has perhaps been 'impaired' in its ability to amass earnings, but has not *ipso facto* been 'impaired . . in its ability to provide the services it seeks to offer'; and it cannot realistically be said that the network element enabling it to raise its profits to 100% is 'necessary.' In a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost (or decreased quality) with 'necessity' and 'impairment' might be reasonable; but it has not established the existence of such an ideal world. [11]

Because it found the Commission's cost assumptions were unreasonable, and led to an impairment analysis that failed to comport with the goals of the Act or give substance to the "necessary" and "impair" requirements, the Court vacated the Commission's unbundling rules.[12]

On remand from the Supreme Court, the Commission once again gauged impairment by reference to the relative costs of using UNEs and UNE alternatives. In fact, in the *UNE Remand Order*, it adopted the *precise* theory that WorldCom now advances — namely that UNE rates are a surrogate for incumbent LEC costs and that "[i]f the cost of the alternative element is materially greater than the cost of obtaining the corresponding element from the incumbent, the requesting carrier will not be able to provide service at prices that are competitive with the incumbent's prevailing retail prices."[13] Without addressing whether UNE rates represent a reasonable proxy for incumbent LEC costs, the D.C. Circuit rejected this variation on the Commission's 1996 analysis. It noted that new entrants in virtually any business face higher unit costs and flatly rejected the notion that such cost differentials necessarily create impairment: "To rely on cost disparities [such as economies of scale] that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an

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[11] *Id.* at 389-90 (adding that, "[w]e disagree with JUSTICE SOUTER that a business can be impaired in its *ability* to provide services — even impaired in that ability 'in an ordinary, weak sense of impairment' . . . when the business receives a handsome profit but is denied an even handsomer one.").

[12] *Id.* at 391 ("Section 251(d)(2) . . . requires the Commission to determine on a rational basis *which* network elements must be made available, taking into account the objectives of the Act and giving some substance to the "necessary" and "impair" requirements. The latter is not achieved by disregarding entirely the availability of elements outside the network, and by regarding *any* 'increased cost or decreased service quality' as establishing a 'necessity' and an 'impair[ment]' of the ability to 'provide . . . services.'") (emphasis in original).

[13] *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd. 3696, at paras. 74-74 (1999) (*UNE Remand Order*), *vacated and remanded, U.S. Telecom. Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002) (*USTA v. FCC*).

initial mandate, to be reasonably linked to the purposes of the Act[]."[14] The court further indicated that any analysis of cost differentials must be "based on characteristics that would make genuinely competitive provision of an element's function wasteful," such as those "linked (in some degree) to natural monopoly."[15] WorldCom's theory that any cost advantage enjoyed by an ILEC constitutes impairment thus is flatly inconsistent with the Act.

II. WorldCom's Theory that Any ILEC Cost Advantages Create Impairment is Analytically Unsound

WorldCom's conclusion that any cost disparity between UNE-L and UNE-P constitutes impairment not only is unlawful it also is based on a flawed conception of the local telecommunications market. In particular, its theory that ILECs can and will take advantage of any cost disparity to selectively lower rates to levels that CLECs cannot match disregards the reality of local competition and local rate structures. As the Commission knows, local rates are not set based on the costs of serving particular customers. Rather, they are based on cost averaging and allocation principles designed to ensure universal service at reasonable rates. While ILEC retail rates thus permit ILECs to recover their costs of serving some customers, they are significantly below cost for many others. And, unlike CLECs, ILECs are required to serve all end-users, not just those that can be served profitably. As a consequence, ILECs depend on the revenue they receive from serving high-margin customers to offset losses they incur in serving other customers. WorldCom's assumption that any cost disparity between an ILEC and a CLEC in the residential market would enable the ILEC to undercut the CLEC's prices thus is wrong.

Indeed, WorldCom's theory is belied by the millions of business customers already served through an UNE-L strategy. If, as WorldCom claims, a CLEC could not compete wherever there is a cost disparity between UNE-L and UNE-P, CLECs could not use their own switches to compete even for business customers because the same cheap UNE-P rates apply to business customers. The fact that CLECs are serving millions of customers using UNE loops and their own switches conclusively establishes the fallacy of WorldCom's assumptions.

Moreover, because local rates for particular customers are largely divorced from costs, and CLECs are free to target only high margin customers, any comparison of ILEC and CLEC costs is beside the point. The only relevant inquiry is whether a CLEC's anticipated revenue exceeds its costs, and thus whether it profitably can serve customers using its own switch.

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[14] *USTA v. FCC*, 290 F.3d at 427. The court noted, for example, that, in evaluating local switching, the Commission focused on whether CLECs would enjoy economies of scale comparable to ILECs' "'*particularly in the early stages of entry.*'" *Id.* (emphasis in original), citing *UNE Remand Order*. The court further observed that "average unit costs are necessarily higher at the outset for any new entrant into virtually any business." The court found that, because the Commission did not consider "the presence of economies of scale '*over the entire extent of the market,*'" there was "no particular reason to think" that switching is unsuitable for "multiple competitive supply." *Id.* (emphasis in original), citing 2 Alfred E. Kahn, The Economics of Regulation: Principles and Institutions 119 (1989).

[15] *Id.*

Along with this critique, SBC proffers precisely that type of analysis, which reveals that CLECs can earn a positive margin providing facilities-based residential services in wire centers with 5000 or more lines, and may be able to earn positive margins in much smaller wire centers if those wire centers contain a sufficient number of business lines.

Even assuming, *arguendo*, a cost disparity between ILECs and new entrants has some legal significance, UNE-P rates fail accurately to reflect ILECs' actual costs. Rather, they are intended to recover the forward-looking costs of a hypothetical, optimally efficient competitor, and thus are substantially below an ILEC's actual costs. Indeed, as SBC has shown in prior filings, its operating costs alone (exclusive of any return on its investment) are nearly double the UNE-P rates in many of its states. Moreover, as a hypothetical proxy for the costs of an optimally efficient competitor, UNE-P rates also are bound to be less than the cost structure of any CLEC. WorldCom thus posits an analytical construct that is guaranteed to show "impairment" and is antithetical to the Act's goal of promoting facilities-based competition.

III. WorldCom's Analysis of CLEC Costs Relies on Unsupported and Flawed Assumptions

Not only is WorldCom's analysis legally and analytically unsound, it also relies on many assumptions concerning CLEC costs that are unsupported or demonstrably without foundation.

A. *OSS Costs*

In its CLEC-cost model, MiCRA claims to analyze the incremental cost — relative to UNE-P — to a CLEC of serving residential customers using unbundled local loops "based on the costs of connecting subscribers to the existing WorldCom local network."[16] Included in the model are the supposed costs of building, upgrading, and operating the systems necessary to provision UNE-L based local services and handle back-office operations. These include $30 million (7-year life) for building the OSS system, $1 million annually for system upgrades, and $0.66 monthly per line.

WorldCom offers no explanation as to why it included any of these costs in its analysis. WorldCom — and many other switch-based CLECs — already have deployed the OSS systems necessary to purchase unbundled loops, and they are using those systems today, primarily to serve business customers.[17] Far from imposing additional costs, the expansion into residential markets would only reduce the per-line OSS costs of these CLECs by permitting additional economies of scale and scope.[18]

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[16] MiCRA Analysis at 1.

[17] As reported in the *UNE Fact Report 2002*, "[m]ore than 200 CLECs of all sizes have actually deployed local circuit switches in the Bell companies' regions." *UNE Fact Report 2002*, Local Switching at II-1 (April 2002). Plainly, each of these carriers must have deployed the OSS and back office systems necessary to provide UNE-L or pure facilities based local services.

[18] The fact that a future new entrant might have to construct OSS systems is irrelevant to an impairment analysis. Given the number of CLECs, including AT&T and WorldCom, that already must have

In any event, the costs MiCRA includes in its analysis are completely unsupported. MiCRA offers no explanation of what is included in the one-time $30 million system cost, the $1 million annual cost for system upgrades, or the $0.66 monthly per line cost. As a consequence, neither the Commission nor interested parties has any basis for assessing the reasonableness of MiCRA's assumptions, even as to CLECs that have no UNE loop OSS systems.

B. *Collocation Costs*

As with OSS, WorldCom has grossly inflated collocation costs. As an initial matter, it includes $120,000 per central office in collocation build-out costs, *including in those central offices in which it already has collocation* (Case 1 in the MiCRA analysis). WorldCom fails to explain why *any* build-out cost would be appropriate where it already has collocation in place.

Even in those offices in which WorldCom does not already have collocation arrangements, it would not need to spend anything close to $120,000 in build-out costs. In order to provide mass market UNE-loop based service, a CLEC could virtually collocate the necessary concentration equipment using as little as a single bay to serve 2,048 customers. In the SBC region, that virtual collocation arrangement would cost approximately $31,000.[19]

Even assuming a CLEC would choose physical collocation, instead of virtual, WorldCom's $120,000 build-out estimate seems excessive. WorldCom purports to base this estimate on "actual charges paid for collocation," but, even if true (which is impossible to verify) the collocation arrangements purchased by WorldCom are most likely not the sort of collocation arrangements a facilities-based CLEC would need to serve mass market customers. WorldCom's collocation arrangements thus far have been used to serve business customers with significant data needs.[20] The equipment CLECs typically collocate to serve such customers requires significantly more space and power than the GR-303 and other equipment CLECs would collocate to serve mass-market customers. As such, the "actual charges" WorldCom previously has paid for collocation say nothing about the costs it would incur to collocate the equipment necessary to serve residential customers with its own switch.

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deployed OSS systems for UNE loop service, competition does not depend the ability of new entrants to deploy such systems. An impairment analysis must focus on the viability of *competition*, not the needs of individual CLECs.

[19] A CLEC that focuses heavily on the provision of data services to business customers might prefer physical collocation, but in that case, the incremental costs of using physical instead of virtual collocation properly would be attributable to the business services that drove the decision to use physical, rather than virtual, collocation.

[20] On its face, moreover, WorldCom's cost estimate of $120,000 per central office for collocation is patently unreasonable as an estimate of the average collocation cost a facilities-based CLEC will incur in serving the mass market. Aside from undocumented and occasional anecdotes of high cost collocation arrangements, no CLEC has ever presented the Commission any data that would suggest that the average cost of collocation space throughout the country is anywhere near $120,000.

WorldCom also assumes ongoing monthly costs of $2500 per central office, including in those central offices in which it already uses collocation arrangements to serve business customers. To the extent that WorldCom is already incurring these costs to serve business customers, they should not all be loaded onto any residential customers that would be served out of these offices, yet that is what WorldCom appears to have assumed.[21]

WorldCom does not include with its analysis any of the underlying data it used to calculate its average collocation cost. WorldCom also fails to offer any insight into how it gathered its data, whether the data represent all or only a portion of the collocation purchased by WorldCom (*e.g.*, whether it is limited to collocation purchased by WorldCom over a certain time or in particular ILEC territory or includes all locations purchased any time), the nature of the collocation included in the estimate (*e.g.*, physical or virtual, caged or cageless), or the characteristics of the collocation space included in the estimate (*e.g.*, number of square feet, number of interconnection circuits, number of racks, and power arrangements). It is simply impossible for the Commission to accept WorldCom's collocation cost estimates based on the scant information included in WorldCom's analysis.

C. *Transport Costs*

MiCRA's estimated transport costs likewise are inflated and largely unsupported. MiCRA purports to rely on nationwide average rates for special access and unbundled transport. It does not explain, however, the basis on which it calculates those averages. The only explanation offered is a cite to an October 30 WorldCom *ex parte*, but that *ex parte* does not include or explain the calculation of national average rates. Rather, it purports to set forth separately special access and UNE rates in five states, three of which are in the SBC region. Significantly, the alleged special access rates for each of these three SBC states are inaccurate and inflated.[22]

MiCRA also provides no information concerning its assumptions regarding transport mileage. That omission, as well, makes it impossible to accord any credibility to MiCRA's analysis.

D. *Digitizing Equipment*

WorldCom's estimated cost of digitizing equipment appears improperly to assume that WorldCom would deploy digitizing equipment capable of serving a minimum of 576 lines in

[21] If WorldCom is suggesting that these costs are incremental in nature, it does not so indicate, and it certainly offers no evidence to support any such suggestion. Indeed, $2500 appears to be an inflated number even as to total recurring costs — all the more so, as an estimate of any incremental cost.

[22] For example, SBC's tariffed rate for DS1 transport under a 5 year term plan in Texas is $35 for all three zones; in contrast, Worldcom's October 30, 2002, *ex parte* cites a rate of $40 for zones 1 and 2 and $46 for zone 3.

every central office, irrespective of the number of lines WorldCom serves in that office.[23] In fact, GR-303 equipment can be purchased in blocks of 32 lines. WorldCom therefore assumes that it would purchase far more such equipment than it would actually need in smaller wire centers. For example, in a wire center in which WorldCom was serving 96 lines, GR-303 equipment would cost $20,000, instead of the $36,000 assumed by WorldCom.

IV. WorldCom Concerns Regarding Purported Operational Barriers are Overblown.

In addition to its analysis of the purported economic barriers to UNE-L competition, WorldCom posits two supposed "operational" barriers. *First,* WorldCom claims that incumbent LECs can perform only a few thousand hot cuts per month, and thus cannot provision UNE loops in mass market quantities. In its reply comments, and numerous *ex parte* presentations, SBC has offered overwhelming evidence that it can meet any reasonably anticipated demand for UNE loops; evidence that WorldCom does not even attempt to refute. *Second,* WorldCom asserts that it takes fourteen months to obtain and prepare physical collocation space and that, even where it already has physical collocation, it would take eight months to obtain the additional space, and install and test the new equipment purportedly necessary to provide switch-based residential services. These intervals are grossly inflated for physical collocation, and far exceed the intervals for virtual collocation, which facilities-based CLECs serving mass market customers are likely to use.

A. *Hot Cuts*

In its analysis, WorldCom raises again its canard regarding the supposed "operational barrier" created by the hot cut process. WorldCom claims that the "manual hot cut process is not suitable for mass market customers." In defense of this time-worn claim, WorldCom asserts, without support, that "the incumbents simply cannot handle the necessary volume of transactions—the hot cut process permits a few thousand transactions per month, not the millions needed to bring competition to the mass market." Like every other CLEC who claims that hot cuts cannot be provisioned in sufficient volumes, WorldCom has never presented any data or analysis to support its claim.[24]

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[23] It is impossible to know for sure how WorldCom calculated per line costs of digitizing equipment because it lumps those costs together with switching and OSS costs. Nevertheless, insofar as WorldCom states that digital loop carrier equipment costs $36,000 for each block of 576 lines and characterizes the cost of such equipment as "lumpy," it appears that WorldCom has assumed a minimum capacity of 576 lines in every wire center, irrespective of actual need.

[24] Dividing current hot cut volumes by current UNE-P volumes, assuming that an ILEC can provision no more hot cuts per month than it does today, and then claiming that it will take so many years to provision hot cuts at current UNE-P volumes is *not* an analysis of the ability of an ILECs to scale its hot cut provisioning. It is merely an algebraic exercise without significance. Current hot volumes reflect only CLEC ordering needs and are in no way determinative of the upper bounds of ILEC hot cut provisioning capability.

As SBC has repeatedly informed the Commission, SBC already provisions much more than "a few thousand" hot cuts per month.[25] Indeed, in the span of a year, from June 2001 through May 2002, SBC provisioned approximately half a million hot cuts. Thus, not only is WorldCom's assertion unsupported, it is patently untrue and contrary to the evidentiary record in this proceeding.

The record also demonstrates that SBC's performance in provisioning hot cuts is outstanding. In each of SBC's states, comprehensive performance measures for hot cuts have been established in collaboration with CLECs and state commissions. These measures capture SBC's performance in all critical aspects of hot cut provisioning, including incidences of premature disconnects, compliance with hot cut provisioning intervals, and frequency of trouble reports, and apply irrespective of the volume of hot cut orders submitted by CLECs. The performance results—undisputed by any of the CLECs—demonstrate that in virtually every instance and measure, SBC's performance is better than 95%. As a consequence, it is no surprise that in its SBC 271 Orders, the Commission has found that SBC's hot cut performance provides CLECs a meaningful opportunity to compete. Indeed, in its most recent California Order, the Commission dispensed with the issue in a single, short paragraph. Much as CLECs would like the Commission to believe otherwise, SBC's hot cut performance simply is not an issue.

In addition to current performance, the record demonstrates that SBC is fully capable of scaling its hot cut processes to handle significant increases in volumes.[26] SBC uses sophisticated force models to determine its staffing requirements and can allocate additional resources to meet increases in demand for hot cuts. Indeed, the current volume of hot cuts consume a very small amount—1.3%—of SBC's central office man hours. Thus, by increasing its CO man hours by less than 4%, SBC could quadruple the number of hot cuts it provisions. Such an increase represents more than 2 million hot cuts per year.

In addition, SBC demonstrated—using actual data as to hot cut provisioning and staffing—that if all 1.5 million UNE-P orders from May 2001 through June 2002 had been UNE-L orders requiring hot cuts, SBC could have accommodated the increase in hot cut volume with 6% overtime in Ameritech, 3.7% overtime in SWBT, and .9% overtime in Pacific Bell. SBC's analysis further reflects that, using 10% overtime, SBC could provision nearly 3.7 million hot cuts per year—a volume that is more than sufficient to accommodate any foreseeable increase in hot cuts ordered by CLECs in the event unbundled local switching is eliminated.

The facts demonstrate that SBC is currently provisioning hot cuts in substantial volumes at superior performance and is fully capable of increasing those volumes at the same level of performance. With the record before it, the Commission can not simply presume that SBC will not be able to provision hot cuts in increased volumes if unbundled switching is eliminated. The

[25] *See, e.g.*, Letter of Jarvis Bennett, SBC, to Marlene Dortch, Secretary, Federal Communications Commission (December 18, 2002) (Attachment 7).

[26] SBC does not, as some CLECs have claimed, impose any arbitrary caps or limits on the number of hot cuts it will perform in a central office per day. *See,* Letter from Stephen Gray, President, McLeodUSA to William F. Maher, Chief, Wireline Competition Bureau (December 17, 2002)

data demonstrate that SBC is fully prepared to meet any reasonably forseeable increase in hot cut demand, consistent with hot cut performance requirements.

WorldCom also alleges that because of the manual nature of the hot cut process, "provisioning takes considerably longer for UNE-L customers than for UNE-P customers (or for long distance customers)." As a preliminary matter, as the Commission itself has determined, there is nothing about the manual nature of hot cuts that renders hot cut provisioning inadequate. The basic component of a hot cut—cross connecting copper pairs on a distribution frame—is work that SBC technicians have been performing for decades. There are thus millions of operational cross-connects in SBC's central offices, each one manually placed by an SBC central office technician.

Moreover, it simply is not true that UNE-L provisioning takes "considerably longer" than UNE-P provisioning. For individual voice grade loop orders, the longest SBC loop provisioning interval is 5 days, and in many cases, loop provisioning intervals are even shorter. WorldCom's claim that UNE-L provisioning is "considerably longer" than UNE-P provisioning thus is implausible on its face. This is particularly true given that for its UNE-P-based The Neighborhood service, MCI tells customers that it may take up to three weeks for their service to be transitioned to MCI. Within a window of three weeks, it is ludicrous for WorldCom to suggest that a provisioning difference of 2 or 3 days rises to the level of impairment.

Finally, WorldCom suggests the need for a "project cut-over process" to address its phantom claims of hot cut deficiencies. WorldCom, however, offers no description of how such a process would work or how it would differ from provisioning processes in place today. More, fundamentally, WorldCom offers no basis for its suggestion that such a process would enhance an ILEC's ability to provision hot cuts in greater volumes or reduce the time to provision hot cuts. There simply is no substance to WorldCom's plea for a project cut-over process. Rather, as with its unsupported claims about hot cut volumes, it is nothing more than a smokescreen for its desire to perpetuate indefinitely the availability of UNE-P.

B. *Collocation Intervals*

WorldCom also asserts that obtaining new physical collocation space takes 14 months, and, even where WorldCom already has collocation, it would take 8 months to obtain the additional collocation space and deploy the additional equipment purportedly necessary to serve mass market customers. WorldCom's estimates are grossly inflated, fail to reflect the availability of virtual collocation, and are inconsistent with the assumptions underlying its cost estimates.

As an initial matter, the physical collocation intervals cited by WorldCom bear no relation to ILECs' actual provisioning intervals. For example, the physical collocation provisioning intervals in SBC's states range from a low of 90 to a high of 126 calendar days for conditioned space, and from 90 to 180 calendar days for unconditioned space. And, where states have not established collocation provisioning intervals, the Commission's rules require incumbent LECs to provision caged collocation space in 76 business days if the space already is conditioned and 91 business days where major construction is required. Those deadlines can be

extended no more than 20 business days where space is not readily available. Thus, on their face, the physical collocation intervals WorldCom cites are patently unreasonable.

In any event, CLECs are far more likely to use virtual, rather than physical, collocation to serve residential customers for several reasons. As discussed above, physical collocation generally is more expensive than virtual collocation, especially for the types of equipment used to provide mass market services. Physical collocation also offers no inherent advantages over virtual collocation for such equipment. In addition, the provisioning intervals for virtual collocation are shorter than for physical collocation. For example, SBC's intervals for virtual collocation range from a low of 70 days in Texas to no more than 110 days in California. The intervals that WorldCom cites thus far exceed a reasonable estimate of the time necessary to obtain any collocation space and deploy any equipment necessary to provide UNE-L based residential services.

Moreover, the collocation intervals WorldCom cites are impossible to square with the assumptions underlying its cost estimates. As described in more detail in its November 18, 2002, *ex parte* presentation, nine of the 14 month collocation interval WorldCom cites are devoted to pre-application activity; specifically, obtaining outside plant permits, identifying equipment and space requirements, and completing and submitting a collocation application. WorldCom does not specify how much of this time it assumes would be devoted to each activity, but it must attribute the vast majority of this time to obtaining outside plant permits because the other activities easily could be completed in virtually no time at all. And construction of fiber backhaul facilities accounts for much of the five remaining months in WorldCom's 14 month interval. WorldCom's three business cases, however, assume that CLECs either already have their own transport facilities (Case 1) or will purchase transport from the ILEC as unbundled dedicated transport or as a special access service (Cases 2 and 3). WorldCom's business cases thus assume that a CLEC will have no need to obtain a permit for outside plant or to construct transmission facilities. Consequently, even if a CLEC might need to obtain additional collocation to provide UNE-L based service, and in many cases it will not, it can do so in far less than 14 months.

Attachment 2

Jay Bennett
Executive Director-
Federal Regulatory

SBC Telecommunications, Inc.
1401 I Street, N.W.
Suite 1100
Washington, D.C 20005
Phone 202 326-8889
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Via Electronic Submission

January 14, 2003

Memorandum of Ex Parte Communication

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
TW-A325-Lobby
Washington, D.C. 20554

Dear Ms. Dortch:

Re: *CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*

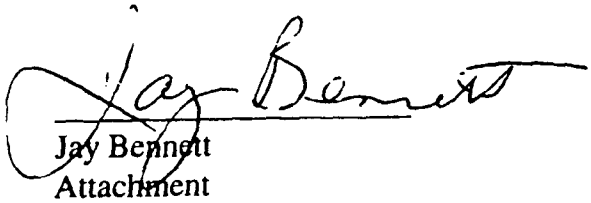
CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

Today Dr. Howard Shelanski sent the attached letter to Wireline Competition Bureau Chief William Maher, Jr. The letter was submitted on behalf of BellSouth, Qwest, SBC and Verizon.

We are submitting the original and one copy of this Memorandum to the Secretary in accordance with Section 1.12 of the Commission's rules. Please include a copy of this submission in the record of the above-listed proceedings. You may contact me at (202) 326-8889 should you have any questions.

Sincerely,



Jay Bennett
Attachment

cc: C. Libertelli
M. Brill
D. Gonzalez
J. Goldstein
L. Zaina
W. Maher, Jr.
J. Carlisle
S. Bergmann
R. Lerner
M.Carey
T. Navin
J. Veach
J. Miller
R. Tanner
B. Oslon
S. Wilkie
R. Pepper

January 14, 2003

William F. Maher, Chief
Wireline Competition Bureau
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: Response to WorldCom's January 8, 2003 *Ex Parte* filing

Dear Mr. Maher:

This letter makes two broad points in response to WorldCom's ex parte filing of January 8, 2003 on the cost of serving residential customers over UNE loops. In its filing WorldCom argues that it will in many cases be "impaired" by the substitution of UNE-L for UNE-P because under UNE-L it will be at a cost disadvantage to the ILECs. I do not here address the details or mechanics of the calculations that WorldCom submits in support of its contention. My purpose is to address two fundamental concerns with WorldCom's argument. First, and most importantly, WorldCom offers no theory of "impairment" beyond implicitly equating it with any disparity in costs. WorldCom's premise therefore appears to be that CLECs should be considered "impaired" any time ILECs have demonstrable cost advantages over new entrants. That premise is incorrect, as I will discuss below. Second, even to the extent cost disparities are relevant to the Commission's impairment analysis, WorldCom's analysis does not do the comparisons necessary to demonstrate the scale or scope of any such disparities.

Cost differences do not in themselves necessarily constitute impairment

Cost disparities are common, if not the norm, among competing businesses. Firms that vie for customers in most markets differ in their scale, scope, efficiency, and investment strategies. New entrants, in particular, will almost always have to incur costs that incumbents no longer face. Few businesses involve only short run, variable costs without any fixed or sunk costs. Yet new competitors enter many industries viably and successfully even though they lack cost parity with incumbents. It would be a weak and economically meaningless definition of impairment that hinged on such normal and ultimately non-determinative cost differences. New entrants often survive and thrive despite cost disadvantages because they have offsetting comparative advantages that help them over the long run; because the industry structure permits positive margins even for firms with comparatively higher costs; because demand is heterogeneous such that they find sufficient numbers of customers even though their product or service might not be identical in price/quality to incumbents' product or service; and/or because initial cost disparities may erode over time.

Consider the first of the above factors. A new firm can make technological and other strategic decisions with less constraint than an incumbent can. This is true even, as in local exchange service, if the entrant uses part of the incumbent's existing infrastructure. The entrant can pick and choose which markets to enter, which customers to target within those markets, and to some degree which kinds of technological inputs to use in serving those customers. The less the new entrant relies on the incumbent's facilities, the greater the entrants' freedom to choose new, incrementally more efficient inputs and system architectures to provide competing service. That the entrant must incur some costs that the incumbent does not or has short run costs that are initially higher than the incumbent's does not mean that the entrant is at an overall or long-run disadvantage to the incumbent. The Commission has in the past clearly recognized this point. In its 1991 AT&T Streamlining Order the Commission stated the following:

> "Some parties argue that AT&T enjoys market power by virtue of its size and superior resources, financial strength, and technical capabilities. Any such advantages that AT&T may have, however, do not necessarily confer market power. The issue is not whether AT&T has advantages, but, if so, why, and whether any such advantages are so great as to preclude the effective functioning of a competitive market. An incumbent firm in virtually any market will have certain advantages -- including, perhaps, resource advantages, scale economies, established relationships with suppliers, ready access to capital, etc. Such advantages do not, however, mean that these markets are not competitive, nor do they mean that it is appropriate for government regulators to deny the incumbent the efficiencies its size confers in order to make it easier for others to compete. Indeed, the competitive process itself is largely about trying to develop one's own advantages, and all firms need not be equal in all respects for this process to work." 6 FCC Rcd 5880 (1991) at para. 60.

Precisely the same reasoning applies in this context and to the Commission's determination of what constitutes impairment. The simple fact of cost disparities, cannot, as WorldCom implies in its filing, suffice to show economic impairment. This point has more recently been emphasized by the United States Court of Appeals in *United States Telecom Ass'n v. FCC*, 290 F.3d 415, 426-427 (D.C. Cir. 2002) (*USTA v. FCC*) (finding that impairment cannot be based on the kinds of cost disparities usually faced by new entrants in a given sector of the economy).

It is important to note that cost disparities do not necessarily take on additional significance just because some of the asymmetries relate to sunk costs or to scale economies. WorldCom argues that sunk costs create barriers to entry and are thus particularly impairing. It is certainly true, as WorldCom argues, that the higher the sunk costs the greater the risk of entry into a market. Yet exit from a market is rarely costless and the risk of stranding costs is a normal part of business in most industries. In fact, it is a risk that incumbents face as well. WorldCom nonetheless appears to believe that any sunk cost for a new entrant constitutes impairment. Indeed, in footnote 10 of its filing WorldCom suggests that even where a piece of equipment can be redeployed, there is impairment because the costs of initially installing the equipment cannot be recovered. But these are clearly the kind of normal set-up costs that new firms incur all the time. To recognize such costs as "impairment" simply because they are sunk does not make economic sense.

Similarly, the existence of scale advantages for the incumbent does not necessarily create meaningful impairment for new competitors. The Commission recognized as much in the above-quoted excerpt from its 1991 AT&T streamlining order, as did the Court of Appeals in *USTA v. FCC*.

See 290 F.3d at 427. To be sure, scale economies may become so substantial that they make competition practically impossible, as in the case of natural monopoly. But, again, new entrants will often if not usually be at a scale disadvantage to incumbents and scale disparities over even a large range need not pose a substantial or long-term barrier to entry. The mere fact that an entrant might not, for example, initially be able to deploy a switch as efficiently as an ILEC is to be expected and cannot in itself prove material "impairment."

In the end, WorldCom's filing ignores the many reasons why cost differences alone do not constitute competitive impairment. Their premise that the Commission must set policy so as to eliminate any disadvantages for CLECs in cost or service quality is, as an economic matter, empirically and theoretically incorrect. It has moreover been rejected by the Supreme Court. The Commission had originally found, in paragraph 285 of the 1996 Local Competition Order, that impairment exists if the quality of the service the entrant can offer, absent access to the requested element, declines and/or the cost of providing the service rises. The Supreme Court specifically rejected the Commission's statement and explained that "[i]n a world of perfect competition, in which all carriers are providing their service at marginal cost, the Commission's total equating of increased cost (or decreased quality) with "necessity " and "impairment" might be reasonable; but it has not established the existence of such an ideal world." 525 U.S. at 389-90. To the extent WorldCom here again argues that any cost disparity or service disadvantage constitutes impairment, the Commission must reject WorldCom's premise.

Even where cost differences do matter, WorldCom does not provide the necessary analysis to demonstrate such differences

WorldCom bases its case with an economic analysis purporting to show that under a UNE-L regime ILECs will have lower costs than CLECs. It bears emphasizing that, as an economic matter, cost comparisons are only one aspect of any meaningful examination of competitive impairment, which would focus more broadly on whether markets are contestable. WorldCom's submission does not address the evidence that local markets are not only contestable, but actually contested. WorldCom's impairment analysis focuses solely on comparing estimated CLEC costs under UNE-L with estimated ILEC costs, for which the model uses UNE-P rates as a proxy. But even if such a cost comparison, standing alone, were appropriate to evaluate impairment, WorldCom's version of that comparison is not helpful. WorldCom's calculation by definition does not incorporate any real-world ILEC operating costs or even any estimates of such costs. It instead incorporates proxy costs generated by a model of a hypothetical, rather than real, network.

WorldCom argues that its analysis is conservative because the TELRIC rates it uses to proxy ILEC costs are higher than the ILEC costs generated by the HAI model WorldCom uses to measure its own costs. Yet it is possible for a model (or different models) to proxy one carrier's costs well and another's poorly. More importantly, WorldCom cannot deny that TELRIC is a hypothetical network model that specifically eschews measurements of an ILEC's real-world operating costs. Indeed, that hypothetical nature of TELRIC was the central issue in *Verizon v. FCC*, in which the Supreme Court upheld TELRIC pricing. Once that hypothetical nature of TELRIC is acknowledged, then WorldCom's economic analysis becomes irrelevant to the question of impairment. There is nothing conservative about comparing one hypothetical model with another if an ILEC's real costs are in fact much higher than TELRIC prices for UNE-P. And one would be hard pressed to assume a correspondence between an ILEC's operating costs and UNE-P prices given the great differences in the latter that exist across jurisdictions. Yet actual competitive impairment depends on actual market factors, including issues relating to actual ILEC costs and actual CLEC costs. WorldCom's model addresses neither.

WorldCom devotes much of its analysis to arguing that UNE-L would impose higher costs than UNE-P on CLECs. Only by the circular logic of equating UNE-P with ILEC costs, and moreover by ignoring actual empirical evidence of entry by means other than UNE-P, does that comparison possibly say anything about competitive impairment. WorldCom never undertakes another calculation that would be useful to making competitive predictions: whether, under current retail rates, UNE-L would provide positive margins for CLECs. WorldCom's implicit answer is that current retail rates do not matter because the ILEC will use its alleged cost advantage to lower retail prices. But even if one assumes a material cost disparity to exist, one cannot simply assume the real-world feasibility of downward pricing by the ILECs, especially in the residential context to which WorldCom restricts its analysis. Indeed, such assumptions of downward pricing responses are particularly unwarranted where they are based on a TELRIC proxy that likely understates ILEC costs and therefore overstates the margins available to be decreased.

Respectfully submitted

/s/ Howard A. Shelanski
Howard A. Shelanski

Attachment 3

SBC's Analysis Of The Economic Viability Of Facilities-Based UNE-L Residential Serving Arrangements

SBC developed a model to determine the economic viability of serving residential customers using a local serving arrangement consisting of CLEC switching and UNE loops ("UNE-L"). Specifically, SBC compares the cost of a UNE-L-based serving arrangement with the revenue stream a CLEC could reasonably anticipate when serving residential customers.

To calculate CLECs' costs, SBC developed a model that assumes the same principal network configuration that WorldCom uses in its cost estimate. Specifically, SBC's model calculates the recurring and non-recurring cost of obtaining and using unbundled loops, collocation, GR-303 DLC concentration equipment, switching, and transport.[1] Although CLECs already have deployed more than 1300 switches and obtained thousands of collocation arrangements, SBC assumes, conservatively, that a CLEC would deploy a new switch (or switches) in every serving area and would require a new collocation arrangement in every wire center that SBC modeled. Because CLECs, as a rule, offer and promote packages of local and long-distance services, SBC also included the costs of providing long-distance services.

SBC evaluated profitability under various assumptions regarding the number of lines a CLEC could expect to serve in each wire center. The analysis shows that using conservative assumptions, a CLEC could earn a positive margin in a wire center with 5000 lines. The model assumes, consistent with WorldCom's analysis CLEC market shares of five to ten percent. Because a five to ten percent market share in a 5000 line wire center represents 250 to 500 lines, SBC calculated the per line costs and associated margins for a CLEC with 250 and 500 lines in wire centers in three representative SBC states with the highest UNE-P volumes: California, Michigan, and Texas.[2]

In its analysis, SBC compares the costs of a UNE loop strategy, not to the cost of the UNE-P, but to the revenues a CLEC could reasonably expect in each wire center. In calculating this revenue opportunity, SBC used extremely conservative assumptions. Most notably, SBC used only *residential* revenue, notwithstanding that CLECs already are serving large numbers of business customers with their own switches. Since the revenues available from business customers far exceed the revenues available from residential customers, the exclusion of business revenues from SBC's analysis significantly understates the actual revenue opportunity available to CLECs and therefore overstates the line size required for CLECs profitably to serve a wire center.

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[1] For purposes of its analysis, which focuses exclusively on smaller wire centers, SBC assumes that CLECs would use UNE transport. In larger wire centers, CLECs presumably would rely on special access services or their own facilities because they would not be impaired without access to unbundled dedicated transport.

[2] Although SBC does not include the per line cost at line counts higher than 500, such costs are even lower.

SBC based its revenue calculations on the retail prices of the residential services CLECs market and sell today. SBC thus assumed a revenue opportunity of $40 to $60 per line (plus $8 in switched access, EUCL, and universal service revenue). In a previous filing, a copy of which is provided as Attachment 4, SBC shows more fully why these revenue estimates are reasonable. As an example, however, the average of $50 per line that SBC used is the *lowest* price point of MCI's The Neighborhood offering, which also is priced as high as $70.

To calculate the revenue stream available to CLECs in a wire center as a whole, as noted above, SBC used the same market share assumptions made by WorldCom. Specifically, SBC assumed that, on average, a CLEC would capture five to ten percent market share per wire center. Given the rapid pace at which CLECs have gained market share in states in which they have actively marketed residential service, and the even greater success they have had in winning business customers, these assumptions, particularly the low-end assumption, are quite conservative. Based on these 5% and 10% market share assumptions, SBC's calculations show that CLECs can earn positive margins when they use their own switches in wire centers with 5000 or more lines and offer the same service packages they are offering today.

I. Cost

The SBC model calculates the per line cost of each of the following components of a UNE-L-based local serving arrangement:

A. *UNE Loop*

SBC's model calculates the monthly recurring and amortized monthly non-recurring cost of the two-wire analog loops and cross-connects that a facilities-based CLEC would purchase to serve mass-market customers. In order to calculate UNE loop costs, SBC's model uses the actual UNE loop rates established by the California, Michigan, and Texas Commissions.

SBC determined that 56% of its wire centers with 10,000 lines or less are in the Zone 3 (highest) deaveraged UNE loop pricing zone, and 44% are in either the Zone 1 (lowest) or Zone 2 (middle) deaveraged UNE loop pricing zones. SBC's model thus uses a blended recurring UNE loop rate, reflecting 56% of the Zone 3 loop rate and 44% of the Zone 2 loop rate in each state.[3] In Michigan and Texas, the model also adds the recurring monthly charges for loop-to-collocation cross connects. (There is no such charge in California).

California:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Blended Recurring UNE Loop Rate
$19.64	$11.27	(.56*19.64)+(.44*11 27) = $15.96

[3] SBC's loop cost calculation is thus conservative because it uses only the Zone 2 loop rate for the 44% component of the blended rate, even though some wire centers represented by the 44% are in Zone 1.

Michigan:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Cross Connect	Blended Recurring UNE Loop Rate
$12.54	$8.73	$0.13	(.56*12.54)+(.44*8.73) + 0 13 = $10.99

Texas:

Zone 3 Recurring Loop Rate	Zone 2 Recurring Loop Rate	Cross Connect	Blended Recurring UNE Loop Rate
$18.98	$13.65	$1.24	(.56*18.98)+(.44*13.65) + $1 24 = $17.87

For non-recurring loop costs, the SBC model reflects current CLEC ordering activity for both coordinated hot-cut ("CHC") and frame due time ("FDT") loop cutovers. The model thus calculates non-recurring loop costs based on the percentage of CHC and FDT ordering activity in each state. For California, the model reflects that 32% of a CLEC's total hot cut orders will be CHCs and 68% will be FDTs. In Texas, it reflects that 43% of a CLEC's total hot cut orders will be CHCs and 57% will be FDTs.[4] Currently, there are no separate charges for CHCs in Michigan (or any of the Ameritech states). However, to be conservative, the model assumes that there may be such charges in the future. SBC therefore used the Texas percentages of CHCs and FDTs, as well as the Texas CHC and FDT rates, for calculating Michigan hot cut costs.

The model also includes all additional UNE loop non-recurring charges, including service order charges, that may be assessed for each UNE loop service order submitted by a CLEC. In addition, although WorldCom failed to provide any support for its estimated $10 internal CLEC cost associated with hot cuts, SBC's model conservatively includes an additional $10 to reflect such costs. Finally, similar to WorldCom's estimate, SBC's model assumes that UNE loop non-recurring costs are amortized over 18 months.[5] The following are the per line, monthly amortized non-recurring costs used in SBC's model:

California	$3.77
Michigan	$3.16
Texas	$2.82

[4] By reflecting current CHC and FDT ordering activity, the model is overly conservative in its assumptions. For mass-market customers, CLECs likely will rely on FDT cutovers, and the overall ratio of FDT to CHC cutovers would thus be much greater.

[5] For all monthly amortizations, SBC used a 12.19% interest rate.

The total monthly per line loop costs calculated by the model are thus:

California	(15.96 + 3.77) = $19.73
Michigan	(10.99 + 3.16) = $14.15
Texas	(17.87 + 2.82) = $20.69

B. *Collocation*

The SBC model assumes that a facilities-based CLEC will purchase virtual collocation. CLECs can collocate GR-303 equipment in virtual collocation, and physical collocation offers no advantage over virtual collocation for serving mass-market customers using GR-303 equipment. Virtual collocation also tends to cost less than physical collocation, especially for the equipment and configurations that likely would be used by CLECs to serve mass-market customers, and virtual collocation generally has shorter provisioning intervals than physical collocation.

Using SBC's tariffed virtual collocation rates, the model calculates the cost of the virtual collocation arrangements that a facilities-based CLEC would actually use for the GR-303 concentration equipment necessary to serve mass-market customers. The SBC model, moreover, is overly conservative in that it assumes a CLEC will have to purchase virtual collocation in each SBC wire center, and it does not discount the cost of collocation to account for the fact that many CLECs already are collocated in many of SBC's wire centers and in ILEC wire centers throughout the country.[6]

The following are the virtual collocation costs by line count used in SBC's model:

California:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$4,775	$539.16
500	$4,775	$539.16

Michigan:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$8,743.21	$1,152.06
500	$10,475.11	$1,164.78

[6] The *UNE Fact Report* calculates that by year-end 2001, CLECs had purchased almost 25,000 collocation arrangements throughout the country, and that BOC end offices serving more than 80% of all BOC access lines have one or more collocators. *UNE Fact Report* at II-16.

Texas:

Lines	Non-recurring Cost	Monthly Recurring Cost
250	$9,937.54	$542.97
500	$12,349.10	$555.85

Consistent with WorldCom's collocation costs estimates, collocation were amortized over 10 years. The resulting amortized monthly collocation costs per line are:

California:

Lines	Amortized Monthly Cost Per Line
250	$2.43
500	$1.22

Michigan:

Lines	Amortized Monthly Cost Per Line
250	$5.11
500	$2.63

Texas:

Lines	Amortized Monthly Cost Per Line
250	$2.75
500	$1.47

C. *CLEC GR-303*

SBC's model includes the Engineered, Furnished & Installed ("EF&I") cost of the hardware, software, and cabling and wiring associated with GR-303 DLC concentration equipment in a configuration representing a 4:1 concentration ratio. Specifically, the model reflects actual prices of GR-303 equipment produced by a major manufacturer and the installation costs for that equipment in virtual collocation space in a configuration similar to that used by SBC's CLEC affiliate. A CLEC entering the mass-market on a significant scale could obtain similar prices and installation costs. SBC amortized GR-303 costs over 9 years to obtain a monthly per line cost.

Lines	Per Line GR-303 Cost	Amortized Monthly Per Line GR-303 Cost
250	$84.98	$1.30
500	$50.38	$0.77

D. *CLEC Switch*

SBC's cost calculation for switching is based on a switch equipped to serve 16,128 customers with a 4:1 concentration ratio for both GR-303 and trunking.[7] SBC also assumed an 85% switching fill factor consistent with WorldCom's analysis. As with collocation, SBC's switch costs are conservative because the model does not discount switch costs to reflect the fact that CLECs already have deployed a substantial number of switches.[8]

The calculated per line monthly switch cost includes initial switch investment as well as EF&I costs and annual charge factors for building, land, power, maintenance, and other switch-associated deployment costs. The calculations are based on a switch cost estimator used by SBC's CLEC subsidiary. The switching cost data are based on SBC Telecom's contract with a major switch vendor and thus represent real-world costs that a facilities-based CLEC would incur in purchasing switches.

The cost of the switch modeled is $2,061,188, to which SBC added the cost of multiplexing equipment in the amount of $99,297 to account for the DS1 level signal for transport. The total cost of the switch in SBC's model is thus $2,160,485. This includes installation, transportation, cabling and wiring, and miscellaneous equipment, and is representative of the real installation costs a CLEC would incur for this switch configuration. On a per line basis, with 85% fill, the cost is $158.00. Adding in all associated switch deployment costs, SBC's model calculates the total cost of switching to be $216.60 per line in California, $198.32 per line in Michigan, and $205.22 per line in Texas. SBC also calculated switch maintenance and other operating costs of $1.19 per line per month in California, $0.99 per line per month in Michigan, and $1.08 per line per month in Texas. Amortizing over 10 years, SBC calculated the total monthly switch cost to be $4.32 per line per month in California, $3.68 per line per month in Michigan, $4.05 per line per month in Texas.

E. *Transport*

For purposes of this analysis, which focuses on relatively small, predominately rural and suburban wire centers, SBC calculated the cost of transport based on unbundled dedicated transport prices. As with collocation and switching, the model is conservative in that it does not discount the cost of transport to reflect the fact that CLECs may have their own transport networks and thus would not need to purchase additional transport from SBC. SBC used the unbundled dedicated transport rates established by the California, Michigan and Texas Commissions. SBC assumed 25 air miles of transport.

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[7] The switch reflected in the cost model has the capacity to grow to serve over 100,000 customers. Adding additional lines would reduce the cost per line for switching. Thus, a switch equipped to serve 32,256 lines would cost $3,115,036, or $96.57 per line. At 64,512 lines, the cost would drop to $77.88 per line.

[8] The *UNE Fact Report* demonstrates that CLECs already have deployed more than 1,300 circuit switches throughout the country and are currently using those switches to serve customers in BOC wire centers accounting for nearly 86% of all BOC access lines. *UNE Fact Report* at II-1, II-6

For non-recurring transport costs, the model assumes that only one LSR is required for all DS1s needed to provision each line count. The non-recurring transport costs are amortized over 18 months.

The monthly transport costs used in the model are:

California:

Lines	Amortized Monthly Cost Per Line
250	$5.49
500	$5.49

Michigan:

Lines	Amortized Monthly Cost Per Line
250	$2.89
500	$2.87

Texas:

Lines	Amortized Monthly Cost Per Line
250	$5.11
500	$4.98

F. *Miscellaneous Costs*

In order to provide a complete picture of CLEC costs, SBC included SG&A costs of 20% of revenue. Consistent with its December 11, 2002, *ex parte* presentation, and to properly compare costs with the revenue opportunities available to CLECs selling bundles of local and long distance services, SBC also included long distance costs of $5.00.

G. *Total Cost*

Adding together all of the above cost components, SBC calculated the total per line costs of providing a package of local and long-distance services using a UNE-L serving arrangement to be:

California:

Lines	Amortized Monthly Cost Per Line (@$40)	Amortized Monthly Cost Per Line (@$60)
250	$50.31	$54.31
500	$47.35	$51.35

Michigan:

Lines	Amortized Monthly Cost Per Line (@40)	Amortized Monthly Cost Per Line (@$60)
250	$47.03	$51.03
500	$41.52	$45.52

Texas:

Lines	Amortized Monthly Cost Per Line (@40)	Amortized Monthly Cost Per Line (@$60)
250	$51.25	$55.25
500	$48.03	$52.03

II. Revenue Opportunities

Consistent with its November 18, 2002, *ex parte* presentation, SBC used a low total revenue estimate of $48.00 and a high total revenue estimate of $68.00. As SBC thoroughly documented in its December 11, 2002, letter to the Commission, these estimates are fully consistent with the local and long distance service package sold by CLECs to residential customers. SBC thus assumes that CLECs would continue offering the same services at the same prices they sell today using the UNE-P. Notably, WorldCom has recently raised the maximum price of the Neighborhood from $59 to $69. SBC's analysis does not take this increase into account, but if CLECs increased the prices of their packages, their margins obviously would grow concomitantly larger. As noted, the conservative nature of SBC's revenue estimates is further underscored by the fact that SBC assumed that CLECs would serve only residential customers, notwithstanding that business revenues tend to be much higher.

III. Margin Analysis

In order to determine the economic viability of UNE-L based service arrangements, SBC compared the cost of such arrangements with the revenue opportunities available to CLECs. At 250 and 500 lines, SBC compared the total cost per line of using a UNE-L serving arrangement with the low and high revenue estimates. SBC then calculated the margin for each line count for both the low and high revenue estimate.

The results demonstrate that CLECs can earn positive margins when they use their own switches and UNE-L-based serving arrangements for residential service in wire centers of 5,000 or more lines. *See Table A, supra.*

Attachment 4

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December 11, 2002

Via Electronic Delivery

Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 12th Street, SW – Lobby Level
Washington, D.C. 20554

Re: ***Ex Parte Presentation***
In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket Nos. 01-338; 96-98; and 98-147

Dear Ms. Dortch:

On November 18, 2002, SBC proposed to the Commission a transition plan under which it would continue to make available the functional equivalent of UNE-P for two years after the elimination of unbundled switching from the Commission's UNE list. SBC showed further that, under this plan, CLECs would be able to earn reasonable margins on residential retail service.[1] Specifically, SBC demonstrated—using realistic estimates of CLEC residential retail rates, non-retail revenue opportunities (access, SLC, etc.), and CLEC costs—that its proposed $26 rate would allow CLECs the opportunity to earn healthy margins of 15% to 34% for the customers they typically serve, and even higher margins when serving the heaviest users of vertical features and long distance services.[2] SBC further explained that these margins are more than sufficient, considering that CLECs incur virtually no incremental capital investment when using UNE-P functionality to provide local residential service. Two days later, AT&T disparaged SBC's compromise proposal, calling it a "competitive dead-end."[3]

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[1] *See Letter from Jay Bennett, Executive Director—Federal Regulatory, SBC, to Marlene H. Dortch, Secretary, Federal Communications Commission*, November 19, 2002 ("SBC Proposal").

[2] *Id.*, Att. at 8.

[3] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission*, November 21, 2002, at 1 ("AT&T 11/21 Letter").

That AT&T was so quick to attack SBC's proposed transition plan should come as no surprise. AT&T has told analysts that, consistent with its strategy of "maximizing cash," it will not offer local residential service unless it can earn at least a 45% gross margin on such service.[4]

AT&T obviously could not complain to the Commission about the unavailability of 45% margins on virtually no investment. Instead, it attacked SBC's proposed transition plan with a spreadsheet that purports to show that AT&T would face "negative margin opportunities" if the Commission adopted SBC's plan. As shown below, AT&T's spreadsheet is a model of hypocrisy and disingenuous advocacy. It fails to reflect the service packages that AT&T and other UNE-P CLECs actually sell in the marketplace or the revenue streams available from the high-value customers they target. It also contains incorrect data even for the fictitious business model it represents.[5]

- AT&T Failed to Include Long Distance and Access Revenue Associated with Its Provision of Long Distance Services

The most glaring deficiency in AT&T's spreadsheet is its failure to account for long distance and access revenue associated with the combined local and long distance retail packages that AT&T and other CLECs sell to residential customers. Indeed, AT&T omits not only interLATA long-distance and access revenue, but intraLATA toll and access revenue as well, from its margin analysis. These omissions cannot be squared with the retail services AT&T and every other UNE-P CLEC actually market and sell to residential customers.

AT&T's lead UNE-P-based residential offering in SBC's states is its "Local and Long Distance Together" service. AT&T is aggressively promoting this combined local and long distance service in television commercials, print advertisements, and mass mailings. Attached hereto as Exhibit 1 are numerous examples of marketing materials used by AT&T to tout this service in SBC's states where UNE-P is most heavily used by CLECs: Michigan, Illinois, Ohio, Texas, and California. As those materials show, AT&T not only promotes the convenience of its combined offering of local and long distance service by telling customers they can "get all [their] calls" with AT&T and to "get it all" with AT&T, but also sends checks to consumers that, if cashed, will switch *all* of a customer's services—local, local toll, and long distance—to AT&T.

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[4] *Transcript*, Q2 2002 AT&T Earnings Conference Call—Final at 19 (July 23, 2002)("AT&T Earnings Transcript").

[5] On November 25, WorldCom submitted an *ex parte* letter echoing AT&T's claim that SBC's compromise proposal would offer negative margins. Like AT&T, WorldCom bases its claim on retail prices for basic POTS service. But even WorldCom concedes, albeit tacitly, that this argument is a red herring, when it follows this claim with a discussion of local and long-distance packages. The fact of the matter is that SBC *showed* that CLECs could earn healthy margins with packages of local and long distance services priced at $40-$60 per month. MCI does not even purport to challenge this showing, and it certainly does not explain why it could not continue to offer The Neighborhood – which is priced at either $50 or $60 today – under SBC's proposal.

There are several reasons CLECs focus their marketing on bundled service packages. One is that customers want them. As AT&T itself told the Commission: "Consumers buy bundles—Local and LD together just makes sense to them."[6] Another is that bundles help CLECs reduce churn. A customer that purchases a bundled service package is less likely to switch to another carrier than a customer who purchases stand-alone services. A third reason is that under a UNE-P regime, CLECs that provide both local and long distance services reduce the cost of their long distance offerings by eliminating originating access costs. In addition, UNE-P CLECs eliminate terminating access charges for long distance calls between their own subscribers and collect terminating access charges for long distance calls from customers of other long distance carriers. Significantly, and in specific recognition of the importance CLECs have attached to this benefit of the UNE-P, SBC's transition proposal treats access charges just as they would be treated under a UNE-P regime.

None of this is new. Five years ago, AT&T's Senior Vice President and General Counsel, John Zeglis, recognized the value proposition of using UNE-P functionality to provide bundled services when he laid out to the investment community the tremendous margins available to AT&T by using the UNE-P to provide packages of services to residential customers.[7] After showing that a 26% resale discount "[g]ives you a chance to market a combined local and long-distance package,"[8] he went on to discuss how the UNE-P makes much higher margins possible. He used as an example "a consumer that buys $25 of long-distance and five dollars of local toll service per month."[9] He noted that, by using the UNE-P to serve that consumer, AT&T could earn $20 in local service fees, $3.50 for the subscriber line charge, $30 in toll charges, and save $10 in access charges to boot – all told, a $63.50 value.[10] He then went on to note that "none of this is the right way to look at the new AT&T's business. "We are more than an all distance business. On top of that all distance stack of revenue we intend to add Internet service, information services, we intend to add anything that requires local connectivity."[11]

To be sure, AT&T's access costs, and thus its savings, are lower today than they were at the time of the Zeglis presentation, and long-distance prices have come down as well. The bottom line, though, is the same: it makes much more sense for AT&T to sell packages of services, rather than stand-alone POTS service, to consumers, and that is what AT&T does. Indeed, in AT&T's Second Quarter 2002 Earnings Conference Call, Betsy Bernard, AT&T's

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[6] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission*, October 4, 2002, Att. 3 at 3.

[7] *Transcript*, AT&T Investment Community Meeting at 5 (March 3, 1997).

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] *Id.*

Consumer Services President and CEO, characterized AT&T's combined long distance and local package as its "lead initiative."[12]

Nor is AT&T alone in using the UNE-P to sell combined residential local and long distance services. Virtually every UNE-P CLEC targets the same residential customers that AT&T targets. MCI's local offering, The Neighborhood, for example, is a combined offering of residential local, intraLATA toll, and long distance service.[13] Other UNE-P CLECs, such as TalkAmerica and Birch, also offer residential local service as part of a combined local and long distance service.[14]

Because AT&T, WorldCom, and other UNE-P CLECs promote bundles of local and long distance service, rather than stand-alone local, residential service, it should come as no surprise that these bundled packages are primarily what customers buy from them. SBC regularly conducts interviews with customers who have left SBC for other carriers, and the most recent of those interviews reveal that more than 80% of SBC customers who switch to a CLEC subscribe to that CLEC not only for local service, but also for local toll and long distance services. In short, common sense and marketplace evidence indicates that AT&T and other CLECs use UNE-P to sell residential customers combined retail offerings of local and long distance services. It is, therefore, inappropriate for AT&T not to include in its CLEC margin calculations toll revenue and access revenue and cost savings associated with long distance services.

SBC estimates that by omitting long distance revenue, AT&T underrepresented its potential revenue by at least $15 per line, and probably more. In attempting to counter evidence that UNE prices in the SBC region do not permit SBC to recover its costs, AT&T has argued that any such losses are offset by an average of $11.69 per line in interLATA toll revenues.[15] Presumably, the high-margin customers AT&T targets for its bundles of local and long distance service generate even higher long-distance revenues. Taking AT&T's figure at face value, however, would require an upward adjustment of $11- $12 per line per month to account for the interLATA toll revenue AT&T obtains from such customers. In addition, this figure must be revised to account for intraLATA toll revenue, which SBC estimates is $3-4 per line per month, for a total upward adjustment in the range of $15 to account for long distance revenue.

Moreover, AT&T not only understated its *customer* long distance revenue, but also appears to have omitted entirely the access revenue and cost savings it realizes when it provides long distance services. As Mr. Zeglis indicated, AT&T not only gains terminating access revenue as a UNE-P CLEC, it also avoids all originating access and some terminating access costs for its local customers who subscribe to AT&T long distance services—in other words, the

[12] *AT&T Earnings Transcript* at 11.

[13] *See* Ex. 2.

[14] *See* Ex. 3.

[15] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene H. Dortch, Secretary, Federal Communications Commission*, September 30, 2002, Att. 1 at 6 ("AT&T 9/30 Letter").

very customers AT&T targets and the services it sells. SBC estimates that by failing to reflect the fact that it uses UNE-P to sell bundled packages of local and long distance services, AT&T omitted an additional $1.50 or more in access revenue and cost savings from its margin calculations.[16] Thus, on the whole, AT&T understated its revenue estimates by $16.50 or more by failing to reflect the packages of local and long distance services that it sells to its customers.

- AT&T Also Underestimated Its Local Revenues

AT&T's analysis also underestimates the revenues available from the local component of the services offered by CLECs. Specifically, AT&T's analysis does not reflect the fact that AT&T successfully targets high-end customers – that is, customers who purchase multiple vertical features and other services in addition to basic POTS and long distance services.[17]

The revenue estimates used by AT&T in its November 21st *ex parte* are the same as the estimates used by AT&T in its September 30, 2002, *ex parte* submission to the Commission.[18] Belying its claim that its spreadsheet was "built using actual, verifiable data,"[19] AT&T has never fully identified the source of its data or the manner in which they were collected, nor has it made this information available to the Commission. Thus, while AT&T claimed in its September 30th *ex parte* that its features revenue data come from a "TNS Telecoms Bill Harvesting database,"[20] AT&T has never actually provided the data that it allegedly obtained from the TNS database and used in its September 30th *ex parte* calculations. Nor has it identified specifically what information it used from the TNS database, the characteristics of that information (*e.g.*, when it was harvested, how it was harvested, etc.), or whether AT&T performed any calculations or revisions to the information in the database.

The reason AT&T has never provided this or any of the data it used in constructing its margin calculations is self-evident. The customers whose bills ostensibly were harvested are not AT&T's own local customers. Indeed, AT&T would have no reason to rely on TNS data, as opposed to its own, if it actually were providing a revenue estimate for its own customers. Instead, AT&T apparently has purported to provide average local service revenue per line for all residential customers, including the low-end customers that AT&T and other CLECs eschew. Aside from the fact that this number is significantly lower than SBC's own data regarding average local revenues across its entire residential customer base, these data are obviously

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[16] Moreover, Legg Mason noted that even AT&T's access revenue estimates are understated in that they do not reflect the high value profile of AT&T's targeted long distance customers. *AT&T Pleads its UNE-P Case*, Legg Mason Report at 2 (September 18, 2002).

[17] Moreover, SBC estimates that AT&T's estimates of subsidy and other regulatory revenue are too low. SBC estimates that AT&T's figures should be at least $1.25 per line higher.

[18] *See AT&T 9/30 Letter*, Att. 1 at 5.

[19] *AT&T 11/21 Letter* at 1.

[20] *Id.* at 3.

irrelevant to any calculation of the revenue opportunity available to AT&T and other CLECs under the SBC proposal.[21]

If AT&T had provided estimates of the local revenue streams it obtains from the customers it actually serves, those estimates would be higher because of the revenue generated by vertical features and other non-POTS services purchased by AT&T's customers. As Betsy Bernard has admitted, AT&T's strategy in the marketplace is to use the UNE-P to retain its "high valued customers" and to attract other such customers from its competitors.[22] Ameritech data shows that AT&T and other CLECs are, in fact, successful in this endeavor. A study by Ameritech of the average local revenue that Ameritech had received from residential customers who switched their service to a UNE-P CLEC was significantly higher than Ameritech's average local revenue for all of its residential customers.[23]

That is not say that AT&T has not *tariffed* basic POTS offerings. But what AT&T tariffs and what it aggressively promotes are two very different things. For example, AT&T claims to offer basic local service for $15.00 in Texas,[24] but AT&T does not actively market this offering. In fact, a consumer who accesses AT&T's web site would search in vain for any mention of it.[25]

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[21] SBC estimates that its average revenue per line for local service, including local line and usage charges, EUCL and regulatory assessments, vertical and non-regulated services, and access charges are between $30 and $35, significantly higher than the $27 average estimated by AT&T.

[22] *AT&T Earnings Transcript* at 10. Prior to joining AT&T, David Dorman likewise talked about how the UNE-P would be used by CLECs to target high-end customers:

> So if you do something new and innovative, such as building a fiber coaxial network, you must unbundle it into pieces and offer those pieces to your competitors on any technically feasible basis for your incremental cost. It's hard to imagine a more perfect way to stifle competition. Why would you want to spend billions of dollars building a new network if your competitors can say: "I don't want all that other stuff. I just want the wires from her house and his house because they spend $200 a month. And I don't want your wires to low-income areas because those people only spend about $5 a month."

Telecom's Tragic Reform Tale, The Big, The Bad and The Ugly at 5 (March 16, 1998).

[23] *See Letter from Brian J. Benison, Associate Director, SBC, to Marlene H. Dortch, Secretary, Federal Communications Commission*, September 6, 2002, Att. 1 at 16.

[24] *Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, Federal Communications Commission*, October 4, 2002, Att. 3 at 7.

[25] From www.att.com, a consumer who clicks on "consumer" can then click on "local service." From there, a Texas consumer who enters his or her phone number is presented with three AT&T local offerings: a $25.00 per month package of local service plus three features (which AT&T mentions in its October 4th *ex parte*), a $27.00 per month package of local service plus 5 features, and a $32.00 per month package of local service plus 10 features (neither of which AT&T mentions). AT&T also fails to mention that the $80.00 check it offers to consumers to switch to its $25.00 package also requires them to choose AT&T for long distance services). Even if a consumer had the wherewithal to search for AT&T's

The fact is that regardless of the local services that may be available to customers who know enough to ask AT&T about them, AT&T markets, sells, and obtains revenue from service packages that include high value vertical features and other non-POTS services.

AT&T's spreadsheet does, in fact, claim to reflect revenue from basic service plus features, but the local service revenue estimates used by AT&T in its spreadsheet are impossible to square with the rates of the local service plans AT&T promotes in SBC's states. AT&T actively markets two residential local service plans with features in Michigan, one for $31.00 per month, and the other for $27.00 per month—much higher than the $24.18 average revenue per line estimate used by AT&T in its spreadsheet.[26] Similarly, AT&T used in its spreadsheet an average revenue per line in Ohio of $20.78 and in Texas of $19.96, but the prices for the local service packages that it promotes in Ohio are $25.00, $26.00, and $29.00; and the prices for the local service packages that it promotes in Texas $25.00, $27.00, and $32.00.[27]

AT&T's spreadsheet thus not only omits revenue associated with long distance and access services, it also understates the revenue from the local component of the services AT&T and other UNE-P CLECs market and sell.

Looking at the whole picture, a review of CLEC prices for combined packages of local and long distance services demonstrates that SBC's estimate of $40 to $60 in revenue is a conservative estimate of the revenues available to CLECs. MCI's The Neighborhood is priced at either $50.00 or $60.00, depending on the state—well within the range used by SBC.[28] SBC's range also is consistent with AT&T's unlimited Local Plus Long Distance Offers (local service plus AT&T Unlimited long distance plan), which in California, Michigan, Illinois, Ohio, and Texas are priced between $43 and $50, plus 7¢ per minute for long distance calls to non-AT&T customers.[29] SBC's revenue estimates are thus far more appropriate than the understated local only revenue estimates used by AT&T.

- AT&T Distorted the SG&A Calculation

Finally, the SG&A estimates used by AT&T demonstrate that AT&T will go to any lengths in its attempt to mislead the Commission about the profitability opportunities it enjoys using UNE-P functionality to target high end residential customers. In its November 18th

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tariffed local service offerings in Texas to try and find a basic local service rate, he or she would find that AT&T's "[t]ariffs are not posted on the web for this state at this time." *See* Ex. 4. The figures in AT&T's October 4th *ex parte* are also misleading in another respect. AT&T fails to mention that consumers pay (and thus AT&T obtains as revenue) an additional $.07 per minute for all calls under the One Rate plan and for all calls to non-AT&T subscribers under the AT&T Unlimited plan.

[26] *See* Ex. 5.

[27] *Id.*

[28] Ex. 2.

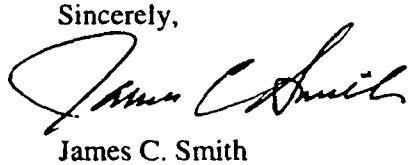
[29] *See* Ex. 5.

presentation, SBC used a 20% of total revenue estimate for SG&A costs. This is a common industry standard estimate of SG&A costs.[30] AT&T claims that the SG&A costs in its spreadsheet are "per SBC low estimate." But instead of calculating SG&A as 20% of its own revenue estimates per state, AT&T used the number ($9.60) that SBC calculated using its higher (and more reasonable) revenue estimates, and AT&T hard-coded that in each line of its calculations as the SG&A cost per state. In doing so, AT&T effectively used an SG&A estimate that is, on average, 35% of its own revenue estimates. AT&T cannot have it both ways. It cannot argue that SBC's revenue estimates are overstated but then calculate SG&A based on those estimates, and its suggestion that 35% SG&A costs are "low" is absurd. Indeed, this kind of claim is indicative of the overall lack of credibility of AT&T's analysis.

- Conclusion

It is unfortunate that rather than engage in serious discussion on the merits of a UNE-P transition plan, AT&T has chosen the path of tired rhetoric and misleading and inaccurate statistics. SBC stands by its proposed transition plan and its estimates of the potential CLEC margins available under its plan. SBC believes that its plan offers the Commission a realistic and meaningful approach to a national transition plan for a sustainable model for local competition.

Sincerely,



James C. Smith

Enclosures

[30] Moreover, SBC's estimate was overly conservative in that SBC applied the 20% to total revenue, including toll revenue, and SBC included a separate cost estimate for the provision of long distance service, which likely already includes some or all of the SG&A costs of providing long distance service.

cc: Chris Libertelli – *via electronic delivery and facsimile*
Jordan Goldstein – *via electronic delivery and facsimile*
Matthew Brill – *via electronic delivery and facsimile*
Dan Gonzalez – *via electronic delivery and facsimile*
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Brent Olson – *via electronic delivery and facsimile*
Rob Tanner – *via electronic delivery and facsimile*
Jeff Carlisle – *via electronic delivery and facsimile*
Rich Lerner – *via electronic delivery and facsimile*
Scott Bergmann – *via electronic delivery and facsimile*
Jeremy Miller – *via electronic delivery and facsimile*
William Maher – *via electronic delivery and facsimile*
Joan Marsh – *via facsimile and first class mail*

Attachment 5

Jay Bennett
Executive Director –
Federal Regulatory

SBC Telecommunications, Inc
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December 18, 2002

VIA ELECTRONIC SUBMISSION

Ms. Marlene H. Dortch
Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Dear Ms. Dortch:

Re: **Memorandum of Ex Parte Communication**
CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers

CC Docket No. 96-98, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996

CC Docket No. 98-147, Deployment of Wireline Services Offering Advanced Telecommunications Capability

On December 17, 2002, Jim Smith (Senior Vice President – FCC), Gary Phillips (General Attorney and Assistant General Counsel) and Jim Lamoureux (Senior Counsel) met with Daniel Gonzalez, Senior Legal Advisor to Commissioner Martin to describe the facts of SBC's hot cut performance. SBC described the scalability of its hot cut performance and explained that the record in this proceeding demonstrates that the hot cut process does not pose an impairment to competitors.

The attached materials were distributed during the meeting and are consistent with information that SBC has previously submitted into the record of the above-listed proceedings.

Pursuant to Section 1.1206(b) of the Commission's rules, this *ex parte* is being electronically filed. I ask that this *ex parte* be recognized with the proceedings identified above.

Please call me should you have any questions.

Sincerely,

Attachment

cc: D. Gonzalez

SBC Hot Cuts

The Facts

December 17, 2002

CLEC Claims of a Hot Cut "Problem" Have No Basis in the Record

- Quality: SBC provisions hot cut orders on a timely basis, with minimal disruption to end users
- Scalability: Moving forward, SBC has the capacity to meet any reasonably foreseeable increase in demand for hot cuts at the same superior level of performance
- Cost is not an impediment

Quality: Hot Cuts Are Not "Inherently" Risky

- Assertion rejected by Commission in its KS/OK 271 Order (¶ 207)
- Work performed by central office technicians for decades
- Millions of operational cross-connects in place today in SBC central offices -- each "manually" placed by central office technicians

Quality: Performance Metrics

- Comprehensive performance metrics for hot cuts are in place today in each of SBC's states -- key measures of quality and timeliness include premature disconnects, hot cut intervals and provisioning trouble reports
- Established through state collaborative processes based on needs of CLECs and reasonable operational requirements
- These metrics apply irrespective of the number of orders submitted by a CLEC

Quality: SBC's Hot Cut Performance

- In each of its SWBT 271 Orders, the FCC found that SBC provisions hot cuts in a manner that allows CLECs a meaningful opportunity to compete
- SBC provisioned approximately 500,000 hot cuts from June 2001 through May 2002, and the results demonstrate that quality of performance is not an issue

The Record Shows that SBC Can Scale its Hot Cut Processes

- SBC is prepared to meet any increase in hot cut demand, consistent with existing performance standards, resulting from the elimination of the UNE-P
- SBC uses sophisticated force models to determine staffing requirements
  - On a day-to-day basis, SBC can allocate additional resources, as needed, to meet any spikes in demand
- SBC does not cap the number of hot cuts it can or will perform

The Record Shows that SBC Can Scale its Hot Cut Processes

- Hot cut work from June 2001 to May 2002 required only 1.3% of SBC's CO man-hours
  - SBC could *quadruple* the number of hot cuts it performs by increasing the total number of central office man-hours by less than 4% - an increase that could be handled through overtime
  - Berringer/Smith declaration: if all UNE-P orders from June 2001 to May 2002 had instead been UNE-L orders, Ameritech could handle increased hot cut volume with 6% overtime, SWBT with 3.7% overtime, and Pacific with .9% overtime

Scalability: CLEC Misrepresentations of the Record

- 500,000 hot cuts provisioned from 6/1/01 to 5/31/02 does not represent SBC's provisioning capacity (CompTel/Pace, 10/31/02)
- SBC has never suggested that it could only provision 1 million loops in a year (Z-Tel 12/16/02 and CompTel/PACE 10/31/02)
- Inflated claims of time to match current UNE-P volumes (*e.g.* 8 years) are based on past volumes rather than capacity

Scalability: SBC Historical Experience in Handling "Spikes" in Volume

- SBC regularly experiences spikes in ordering activity -- e.g., at the start and end of the school year, as families and college students establish and disconnect telephone service
  - At beginning of University of Michigan's school year, retail orders in the Ann Arbor Main CO increased from a norm of 150 retail orders for new service per day to 800 per day
- SBC handled this and other similar spikes all over its region seamlessly

UNE-P Peak Volume Data Shows Future UNE-L Demand is Manageable

- In 2002, the peak weekly volumes for the COs with the highest UNE-P demand were approximately:
  - in Michigan - 2,290
  - in Texas - 420
  - in California - 450
- Since SBC could process an average increase of 650 orders *per day* in the Ann Arbor example, there should be no question that SBC can successfully process the volumes of UNE-L orders which follow the elimination of UNE-P

Cost: Hot Cut Charges are Not a Barrier

- Cost of a Hot Cut is Not a Source of Impairment
- Prices are established using TELRIC methodology
- SBC waives labor charges for FDT loop cutovers
- Weighted average loop cutover charge in CA from Jan-Sept 2002 was less than $30.00 per line
  - only SBC state where such information was available
- Consistent with 11/20/02 WorldCom estimates:
  - CA less than $20
  - average of 8 SBC states (AR, CA, IL, KS, MI, MO, OK, TX) approximately $34.00

Conclusions

- Record evidence demonstrates SBC's excellent hot cut performance at significant volumes today
- The record also shows that processes, metrics, and capacity to scale are in-place today
- The FCC cannot assume impairment based on unsubstantiated speculation about capacity to scale

Attachment 6

CA Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month

	UNE Loop Zone Weightings	Tranpsort Zone/Type/OPP	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 5.49	$ 19.73	$2.43	$3.73	$4.32		$ 35.71
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	RURAL/UDT	$ 5.49	$ 19.73	$1.22	$1.99	$4.32		$ 32.75

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 35.71	$ 14.60	$ (2.31)	-5%
500 Lines	$ 48.00	$ 32.75	$ 14.60	$ 0.65	1%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 35.71	$ 18.60	$ 13.69	20%
500 Lines	$ 68.00	$ 32.75	$ 18.60	$ 16.65	24%

UDT (Statewide - no Geographic Deaveraging)

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)												
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	**TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)**	# of Whole DS1's	# OF VG Channels	**UDT RECURRING TRANSPORT PER CHANNEL RATE**	NRC per Order	Amortized per Channel	**UDT Recurring + Non Recurring Monthly per Line**
CA		$ 32.32	$ 46.00	$ 38.78	$ 255.58	$ 372.68	3.00	250	$ 4.47	$ 4,572.58	$ 1.02	**$ 5.49**
CA		$ 32.32	$ 46.00	$ 38.78	$ 255.58	$ 372.68	6.00	500	$ 4.47	$ 9,145.00	$ 1.02	**$ 5.49**

DS1 UDT Rates CA Generic Interconnection Agreement

	MRC	NRC
Fixed Mileage	$ 32.32	$ 67.62
Variable Mileage	$ 1.84	$ 57.35
Multiplexing	$ 255.58	$ 80.12
Cross Connect	$ 19.39	
Service Order		$ 0.16

UNE 2W Analog Loop MRC and NRC Costs

Factors	
Number of Loops per LSR	1
NRC Amortization Period(months)	18
CHC Amortization Period(months)	18
% of Coord. Hot Cuts (CHC)	32%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	**UNE Recurring + Non Recurring (monthly per line)**
CA	URBAN	$ 8.38	$ -	**$ 8.38**	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	**$ 12.16**
CA	SUBURBAN	$ 11.27	$ -	**$ 11.27**	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	**$ 15.05**
CA	RURAL	$ 19.64	$ -	**$ 19.64**	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	**$ 23.42**
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL.														
CA	BLEND	$ 15.96	$ -	**$ 15.96**	$ 0.16	$ 18.56	$ 4.72	$ 0.16	$ 8.54	$ 40.52	$ 2.25	$ 54.48	$ 10.00	$ 1.52	**$ 19.73**

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
CA	250	$ 19.10	$0.28	$ 2.16	$2.43		$84.98	$ -	$1.30	$3.73
CA	500	$ 9.55	$0.14	$ 1.08	$1.22		$50.38	$ -	$0.77	$1.99

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance & Other Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
CA	$ 158.00	$ 58.60	$ 216.60	$0.00		$1.19	$3.13	$4.32

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the CA Generic Interconnection Agreement
25 Air miles of transport assumed
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 do not vary with number of DS1 on each order.
Total NRC is spread across 18 months

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from the CA Generic Interconnection Agreement
Service Order NRC is divided by 1 Loops per LSR.
Coordinated Hot Cuts are based on 1 Loop per CHC
WorldCom's $10 CHC internal costs are included and applied to both CHC and FDT activity
CHC related NRCs are spread across 18 months
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs do not vary based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses

FACTORS

Amortization
Applied to Collo, GR303 and CLEC Switch

Annual Interest Rate	12.19%
Number of Years Switch	10
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC)	32%
CLEC SG&A	20%

MI Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month									
	UNE Loop Zone Weightings	Transport Type	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	UDT	$ 2.89	$ 14.15	$5.11	$6.41	$3.86		$ 32.43
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL.	UDT	$ 2.87	$ 14.15	$2.63	$3.40	$3.86		$ 26.92

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 32.43	$ 14.60	$ 0.97	2%
500 Lines	$ 48.00	$ 26.92	$ 14.60	$ 6.48	13%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 32.43	$ 18.60	$ 16.97	25%
500 Lines	$ 68.00	$ 26.92	$ 18.60	$ 22.48	33%

UDT (Statewide - no Geographic Deaveraging)

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)											
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	**TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)**	# of Whole DS1's	# OF VG Channels	**UDT RECURRING TRANSPORT PER CHANNEL RATE**	NRC per Order	Amortized per Channel	**UDT Recurring + Non Recurring Monthly per Line**
MI		$ 20.12	$ 9.00	$ 0.54	$ 178.18	**$ 207.84**	3	250	**$ 2.49**	$ 1,781.90	$ 0.40	**$ 2.89**
MI		$ 20.12	$ 9.00	$ 0.54	$ 178.18	**$ 207.84**	6	500	**$ 2.49**	$ 3,426.98	$ 0.38	**$ 2.87**

DS1 UDT Rates MI MPSC Tariff # 20

	MRC	NRC
Fixed Mileage	$ 10.06	$ -
Variable Mileage	$ 0.36	$ -
Multiplexing	$ 178.18	$0.00
Cross Connect	$ 0.27	$ -
Admin Charge Install (Per Service Order)	$ -	$ 136.82
Design & Central Office Connection Charge - Per Circuit - Install	$ -	$ 339.17
Carrier Connection Charge Per Termination - Install	$ -	$ 209.19

UNE 2W Analog Loop MRC and NRC Costs

Factors	
Number of Loops per LSR	1
NRC Amortization Period(months)	18
CHC Amortization Period(months)	18
% of Coord. Hot Cuts (CHC)	43%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	**UNE Recurring + Non Recurring (monthly per line)**
MI	URBAN	$ 8.47	$ 0.13	$ 8.60	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 11.76
MI	SUBURBAN	$ 8.73	$ 0.13	$ 8.86	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 12.02
MI	RURAL	$ 12.54	$ 0.13	$ 12.67	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 15.83
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL.														
MI	BLEND	$ 10.86	$ 0.13	$ 10.99	$ 3.16	$ 17.82	$ -	$ 1.54	$ 5.85	$ 28.37	$ 1.58	$ 42.88	$ 10.00	$ 1.58	$ 14.15

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
MI	250	$ 34.97	$0.51	$ 4.61	$5.11		$84.98	$ -	$1.30	$6.41
MI	500	$ 20.95	$0.30	$ 2.33	$2.63		$50.38	$ -	$0.77	$3.40

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
MI	$ 158.00	$ 40.32	$ 198.32	$0.00		$0.99	$2.87	$3.86

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the MPSC Tariff #20
25 Air miles of transport assumed
In AIT the Fixed Mileage rate is applied at both ends of the IOF pipe.
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 do not vary with number of DS1 on each order.
Total NRC is spread across 18 months

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from MPSC Tariff #20
Service Order NRC is divided by 1 Loops per LSR.
Coordinated Hot Cuts % and rate are set to TX values as a proxy
Worldcom's $10 CHC internal costs are included and applied to both CHC and FDT activity.
CHC related NRCs are spread across 18 months
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL.

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs are variable based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses

FACTORS

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Annual Interest Rate	12.19%
Number of Years Switch	10
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC) TX value	43%
CLEC SG&A	20%

TX Summary by CLEC Line Size

All $ Amounts are Per Line/Per Month

	UNE Loop Zone Weightings	Tranpsort Zone/Type	Transport Recurring + Non Recurring	UNE Loop Recurring + Non Recurring	Total Collo	Amortize CLEC GR303	Total CLEC Switch Amortized Investment + Operating Expense		Total CLEC Facility Expense
250 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL	RURAL/UDT	$ 5.11	$ 20.70	$2.75	$4.05	$4.05		$ 36.65
500 Lines	0% URBAN, 44% SUBURBAN, 56% RURAL	RURAL/UDT	$ 4.98	$ 20.70	$1.47	$2.24	$4.05		$ 33.43

Revenue		
Local & LD Offering	Other (Access, SLC, etc.)*	Total Revenue
$ 40.00	$ 8.00	$ 48.00
$ 60.00	$ 8.00	$ 68.00

Other Expenses		
LD Costs*	Est. SG&A @ 20%	LD Costs + SG&A@20%
$ 5.00	$ 9.60	$ 14.60
$ 5.00	$ 13.60	$ 18.60

CLEC Margin Analysis @ $40 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 48.00	$ 36.65	$ 14.60	$ (3.25)	-7%
500 Lines	$ 48.00	$ 33.43	$ 14.60	$ (0.03)	0%

CLEC Margin Analysis @ $60 Offering

	Total Revenue	Total CLEC Facility Expense	LD Costs + SG&A@20%	CLEC EBITDA Margin per Line	CLEC EBITDA Margin %
250 Lines	$ 68.00	$ 36.65	$ 18.60	$ 12.75	19%
500 Lines	$ 68.00	$ 33.43	$ 18.60	$ 15.97	23%

RURAL UDT

Factors	
Loop Concentration Ratio	4
# of UDT Transport Miles	25
NRC Amortization Period(months)	18

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K] = [H]+[J]
UNBUNDLED DEDICATED TRANSPORT(UDT)											
STATE		Fixed Mileage	Variable Mileage	Cross Connect	Multiplexing	**TOTAL DS1 UDT TRANSPORT per DS1 (UNCHANNELIZED)**	# of Whole DS1's	# OF VG Channels	**UDT RECURRING TRANSPORT PER CHANNEL RATE**	NRC per Order	Amortized per Channel	**UDT Recurring + Non Recurring Monthly per Line**
TX	RURAL	$ 44.49	$ 77.76	$ 15.02	$ 81.15	$ 218.41	3.00	250	$ 2.62	$ 11,196.77	$ 2.49	**$ 5.11**
TX	RURAL	$ 44.49	$ 77.76	$ 15.02	$ 81.15	$ 218.41	6.00	500	$ 2.62	$ 21,219.77	$ 2.36	**$ 4.98**

DS1 RURAL UDT Rates TX T2A

	MRC	NRC-First	NRC-Addt'l
Fixed Mileage	$ 44.49	$ 174.43	$ 130.08
Variable Mileage	$ 3.11	$ 174.43	$ 130.08
Multiplexing	$ 81.15	$ 96.84	$ 48.51
Cross Connect	$ 7.51	$ 57.08	$ 40.49
Service Order		$ -	$ -

UNE 2W Analog Loop MRC and NRC Costs

Factors	
Number of Loops per LSR	1
NRC Amortization Period(months)	18
CHC Amortization Period(months)	18
% of Coord. Hot Cuts (CHC)	43%

		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]
STATE		2W Analog Loop	2W Loop to Collo Cross Connect	**Total Recurring UNE Rate**	Install Service Order NRC	Loop Connect NRC	Cross Connect NRC	Disconnect Service Order NRC	Loop Disconnect NRC	Total NRC	NRC Amortization (over 18 months)	Coordinated Hot Cuts (CHC)	CLEC Internal CHC/FDT Costs	CHC Amortized	***UNE Recurring + Non Recurring (monthly per line)***
TX	URBAN	$ 12.14	$ 1.24	**$ 13.38**	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	**$ 16.20**
TX	SUBURBAN	$ 13.65	$ 1.24	**$ 14.89**	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	**$ 17.71**
TX	RURAL	$ 18.98	$ 1.24	**$ 20.22**	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	**$ 23.04**
	BLEND = 0% URBAN, 44% SUBURBAN, 56% RURAL.														
TX	BLEND	$ 16.63	$ 1.24	**$ 17.87**	$ 2.58	$ 15.03	$ 4.72	$ -	$ -	$ 22.33	$ 1.24	$ 42.88	$ 10.00	$ 1.58	**$ 20.70**

CLEC GR303 Equipment and Collo

Factors	
Annual Interest Rate	12.19%
Number of Years Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

		[A]	[B]	[C]	[D] = [B] + [C]		[E]	[F]	[G]	[H] = [D]+[G]
STATE	Line Size	Collo NRC Per Line	Amortized NRC(per Line per Month)	Collo Monthly Recurring(per Line per Month)	Total Collo per Line Per Month		CLEC GR303 Equip Capital per Line	Residual Value(exclude from Amortization)	Amortize Non-Residual portion of CLEC GR303(per Line per Month)	Total Collo + Amortized GR303 per Line Per Month
TX	250	$ 39.75	$0.57	$ 2.17	$2.75		$84.98	$ -	$1.30	$4.05
TX	500	$ 24.70	$0.36	$ 1.11	$1.47		$50.38	$ -	$0.77	$2.24

CLEC Switch Investments

Factors	
Annual Interest Rate	12.19%
Number of Years	10
Number of Pmts./Year	12
Residual Value	0%

	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]
STATE	CLEC Switch Investment(per Line)	CLEC Switch Support Investment	Total CLEC Switch Investment(per Line)	Residual Total CLEC Switch Investment (per Line)		Total CLEC Switch Investment Maintenance & Other Expense	Amortize Non-Residual portion of Total CLEC Switch Invesment	Total CLEC Switch Amortized Investment + Operating Expense per Line per Month
TX	$ 158.00	$ 47.22	$ 205.22	$0.00		$1.08	$2.97	$4.05

Assumptions

Unbundled Dedicated Transport (UDT)

All UDT rates are from the TX T2A Pricing Appendix
25 Air miles of transport assumed.
NRC assumes only one LSR required for all DS1s within each Line Size Configuration
NRCs per DS1 vary with number of DS1 on each order, based on the 'First and Additional' structure.
Total NRC is spread across 18 months

UNE Loop

2W Analog Loop, Cross Connect and NRC rates from the TX T2A Pricing Appendix
Service Order NRC is divided by 1 Loops per LSR
Coordinated Hot Cuts are based on 1 Loop per CHC
Worldcom's $10 CHC internal costs are included and applied to both CHC and FDT activity.
CHC related NRCs are spread across 18 months.
Remaining NRCs are spread across 18 months.
Blended Loop Rate = 0% URBAN, 44% SUBURBAN, 56% RURAL.

Collo/GR303

Virtual Collocation is assumed
Collocation MRC and NRCs are variable based on Line Size Configuration
GR303 Digital Loop Concentration equipment costs are variable based on Line Size Configuration

CLEC Switch

Cost estimate for a switch equipped to serve 16,128 GR303 customers assuming 4:1 concentration ratio on both GR303 and Trunking
Per line per month expense includes Switch Investment w/EF&I and Annual Charge Factors(ACF) for Building Land, Power, Maintenance and Other Expenses.

FACTORS

Amortization
Applied to Collo, GR303 and CLEC Switch

Annual Interest Rate	12.19%
Number of Years Switch/Collo	10
Number of Years GR303	9
Number of Pmts./Year	12
Residual Value	0%

Loop Concentration Factor(all states)	4
# of UNE Loops per LSR	1
UNE NRC Amoritzation(months)	18
UNE % of Coord. Hot Cuts (CHC)	43%
CLEC SG&A	20%