

**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

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<b>Illinois Bell Telephone Company</b>	)	
	)	
<b>Filing to increase Unbundled Loop and Nonrecurring Rates</b>	)	<b>02-0864</b>
	)	

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**REPLY BRIEF OF AT&T COMMUNICATIONS OF ILLINOIS , INC.,  
CIMCO COMMUNICATIONS, INC., FORTE COMMUNICATIONS, INC.,  
MCLEODUSA TELECOMMUNICATIONS SERVICES, INC.,  
RCN TELECOM SERVICES OF ILLINOIS, LLC,  
TDS METROCOM, LLC,  
WORLDCOM, INC. D/B/A MCI AND  
XO ILLINOIS, INC.**

**\*\*\*PUBLIC VERSION\*\*\***

**Cheryl Hamill  
David J. Chorzempa  
222 West Adams, Suite 1500  
Chicago, Illinois 60606  
Attorneys for AT&T  
Communications of Illinois, Inc.**

**Darrell Townsley  
WorldCom, Inc. d/b/a MCI  
205 North Michigan Avenue  
Suite 1100  
Chicago, Illinois 60601  
Attorney for WorldCom, Inc. d/b/a MCI**

**Owen E. MacBride  
Keely V. Lewis  
6600 Sears Tower  
Chicago, Illinois 60606  
Attorneys for McLeodUSA  
Telecommunications Services, Inc.,  
RCN Telecom Services of Illinois,  
LLC and TDS Metrocom, LLC**

**Thomas H. Rowland  
Stephen J. Moore  
Kevin D. Rhoda  
Rowland & Moore LLP  
200 West Superior Street  
Suite 400  
Chicago, Illinois 60610  
Attorneys for CIMCO  
Communications, Inc, Forte  
Communications, Inc. and  
XO Illinois, Inc.**

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This Reply Brief is submitted on behalf of AT&T Communications of Illinois, Inc., CIMCO Communications, Inc., Forte Communications, Inc., McLeodUSA Telecommunications Services, Inc., RCN Telecom Services of Illinois, LLC, TDS Metrocom, LLC, WorldCom, Inc., d/b/a MCI, and XO Illinois, Inc., referred to herein as the “Joint CLECs.

## **I. INTRODUCTION AND SUMMARY OF POSITION**

SBC Illinois’ Initial Brief contains a Summary of Position at pages 9-20. Joint CLECs have reviewed the summary and believe they have responded to each of the assertions in SBC’s Summary of Position in the corresponding subsequent sections of this Reply Brief that address the various issues in detail. Therefore, Joint CLECs are not separately responding on a point-by-point basis to the assertions in SBC’s Summary of Position. By way of overview, Joint CLECs emphasize the following points:

- SBC Illinois has not demonstrated that its current unbundled network element (“UNE”) loop rates and related nonrecurring charges need to be increased. Under the FCC’s rules, as well as the Public Utilities Act (“PUA”), SBC has the burden of proof on all issues, including the burden to show that its proposed rates satisfy the FCC’s TELRIC standards. (47 C.F.R. §51.505(e); 220 ILCS 5/9-201(c)). The record shows that SBC has not met that burden. If anything, the record shows that SBC’s UNE loop rates should be *reduced*. This is not surprising given the decreases in telecommunications costs generally and SBC’s costs specifically (including productivity-driven cost reductions, lower interest rates and costs of capital, and cost savings and efficiencies resulting from the SBC-Ameritech merger) that have occurred since its TELRIC rates were first set.
- This case must be decided based on TELRIC rate-setting principles, not on traditional embedded cost ratemaking principles. SBC’s laments that its UNE loop rates do not recover its embedded costs are both erroneous and irrelevant. There is nothing in the FCC’s TELRIC rules that requires that UNE rates be set so as to recover embedded costs. To the contrary, the FCC’s rules expressly prohibit taking embedded costs into account in setting TELRIC-based UNE rates. (47 C.F.R. §51.505(d)(1)).
- Similarly, SBC’s assertions that the purportedly low level of its UNE loop rates is discouraging investment by CLECs are inaccurate and inapposite.

This case is primarily about the rates CLECs pay SBC to lease unbundled local loops, especially loops used to serve mass market customers. There are no economic or public policy considerations that favor having CLECs duplicate SBC's network by building their own loops to serve mass market customers. SBC's use of UNE-P prices to attempt to show that its UNE-L prices are too low are similarly inapposite and misleading.

- The loop costing model, “LoopCAT”, that SBC has used to produce its proposed loop costs in this case, is fundamentally flawed and is not capable of reliably and accurately estimating the costs of a new, efficient, forward-looking network (based on SBC's existing wire center and customer locations) as required by the FCC's TELRIC rules. One option available to the Commission in this case is to reject SBC's proposed loop costs, use the TELRIC loop costs developed in the TELRIC I proceeding<sup>1</sup>, and adjust SBC's current loop prices based solely on application of a revised Shared and Common Cost Factor developed in this case.
- Alternatively, should the Commission conclude that it wants to base the UNE loop rates set in this case on SBC's current loop cost model, the Commission should adopt the revised costs presented by the Joint CLECs or, in the alternative, direct SBC to re-run its LoopCAT studies with the numerous modifications and revisions recommended by the witnesses for the Joint CLECs, Staff and the Attorney General (as detailed in our Initial Brief and this Reply Brief).
- SBC has utterly failed to demonstrate that its current network capacity is representative of what would be found in an efficient, forward-looking network using the most efficient new telecommunications technology available, nor that its current, actual fill factors satisfy the FCC's TELRIC standards. The Commission should reject SBC's proposal to use its current actual fill factors to set TELRIC-based UNE prices in this case. The Commission should also reject Staff witness Dr. Liu's proposed fill factors, which despite their theoretical gloss represent nothing more than a modest and arbitrary upward adjustment to SBC's current actual fill factors. Rather, the Commission should utilize the fill factors presented by the Joint CLECs in this case.
- SBC has also utterly failed to demonstrate that the Commission should adopt, as the depreciation lives for setting TELRIC-based rates, the asset lives that SBC uses to calculate depreciation for financial reporting purposes. As it did in the TELRIC I Order, the Commission should continue to use SBC Illinois'

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<sup>1</sup>*Illinois Commerce Commission On Its Own Motion, Investigation into forward looking cost studies and rates of Ameritech Illinois for interconnection, network elements, transport and termination of traffic*, Dockets 96-0486 & 96-0569 (Cons.), Second Interim Order, issued Feb. 17, 1998 (“TELRIC I Order”).

FCC-prescribed depreciation lives for this purpose, as virtually every other state commission has done.

- SBC’s proposed cost of capital is excessive, among other reasons because it is based on a five-year old study that falls far short of reflecting current capital market conditions. SBC’s proposed cost of capital also includes an excessive amount of equity in the capital structure and fails to include any short-term debt, even though short-term debt is a prominent part of SBC’s actual capital structure. The Commission should adopt the cost of capital developed by AT&T/MCI witness Terry Murray.
- SBC’s proposed nonrecurring costs and nonrecurring charges (“NRCs”) are seriously inflated. A principal problem with SBC’s proposed NRCs is the inclusion of costs that should be recovered through recurring monthly charges. The Commission must carefully review SBC’s NRCs and the cost support for them, including the allocation of costs between recurring charges and non-recurring charges, because excessive NRCs can be just as detrimental to competition as excessive recurring charges, if not more so. The Commission should adopt the adjustments to SBC’s nonrecurring cost studies proposed by witnesses for the Joint CLECs.
- The “fully-loaded” labor rates used in SBC’s cost studies are excessive because they do not reflect the market costs that would be incurred by the owner of a new forward-looking network in a competitive market. The Commission should direct SBC to revise the loaded labor rates used in its studies by making the adjustments recommended by AT&T witness Robert Flappan.
- As both Staff and Joint CLEC witnesses have demonstrated, SBC’s proposed Shared and Common Costs Factor is seriously overstated, by a factor of two to three times. SBC is seeking to recover a number of inappropriate cost items in its Shared and Common Costs. The Commission should adopt the revisions to SBC’s Shared and Common Costs that Staff and Joint CLEC witnesses have proposed.
- SBC’s proposed Annual Charge Factors, Investment Factors, Support Asset Factors and Inflation/Deflation Factors should be revised in accordance with the recommendations of Staff and Joint CLEC witnesses.
- Any wholesale rates set by the Commission in this case must satisfy the imputation test required by Section 13-505.1 of the PUA (220 ILCS 5/13-505.1) and 83 Ill. Adm. Code Part 792. SBC’s proposed rates fail the imputation test with respect to its retail business rates and would fail an imputation test for its residential rates as well.

Joint CLECs also wish to comment on the charts appearing at pages 3 and 4 of SBC's Initial Brief. The chart on page 3, which purports to compare UNE-P prices set by various state commissions, was prepared (as the annotation under it indicates) by a third party who did not appear as a witness in this case, and is hearsay. Its reliability has not been challenged through cross-examination in this case, and is suspect. Further, because the chart purports to show UNE-P prices set by various commissions, it does not provide any useful information for this case. In any event, SBC Illinois' UNE prices and NRCs must be based on the specific cost data and information presented in this record, not on gross comparisons to other states' rates.

With respect to the chart on page 4 of SBC's Initial Brief, the bold-faced numbers in the second and third rows of that chart were taken directly from an SBC Illinois exhibit. However, the numbers appearing in the first row of this exhibit appear to have been calculated by SBC after the close of the record in this case.<sup>2</sup> Assuming that these numbers were correctly calculated based on the record, SBC's assertion that "[n]o carrier could construct, operate and maintain a loop for \$3.83 per month . . . [i]f loops could be built for such a small amount of money, CLECs would be tearing up streets all across Illinois to install their own networks at half the cost than the UNE loop rates they are currently paying – and they are not" (SBC Initial Br., p. 5) is misguided, because it shows a basic misunderstanding of TELRIC. CLECs do not enjoy the same economies of scale as the ILEC. Thus, while a CLEC might be able to build a given route for the same total investment as SBC, it would have far less demand over which to spread those costs, and thus could not have *per-unit* costs as low as SBC. This is why the FCC concluded in

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<sup>2</sup> Accordingly, these numbers are not matters of record and have not been submitted in accordance with Section 200.875 of the Commission's Rules of Practice.

establishing the TELRIC methodology, “As a result of the availability to competitors of the incumbent LEC’s unbundled elements at their economic cost, *consumers will be able to reap the benefits of the incumbent LECs’ economies of scale and scope*, as well as the benefits of competition.” (*Local Competition Order*, ¶679<sup>3</sup> (emphasis added)).

Joint CLECs respectfully recommend that the Commission adopt our proposed rates in total (for recurring costs, either the proposed rates of Messrs. Pitkin/Turner or the proposed rates of Messrs. Starkey/Balke, who recommend maintaining the present loop TELRIC with the new Joint CLEC-proposed shared and common cost markup and, for nonrecurring costs, either the proposal of Mr. Turner or the proposal of Dr. Ankum/Mr. Morrison) and that SBC be directed to substitute those rates in the appropriate places its tariff. However, if the Commission does not adopt outright the Joint CLECs’ proposed rates and directs, instead, that SBC’s cost studies be rerun using Commission-specified inputs, the Commission should direct CLECs, SBC and the Staff to rerun the costs studies and reach consensus about what the resulting rates are, with any disputes being brought back before the Commission for resolution within 45 days. In the interim, SBC Illinois’ existing approved rates should remain in effect.

## **II. GENERAL ISSUES.**

### **A. Legal Requirements For Setting UNE Rates**

As in our Initial Brief, Joint CLECs have provided discussions of the legal requirements for setting SBC Illinois’ UNE rates and NRCs applicable to each of the

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<sup>3</sup> FCC, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket 96-98, First Report and Order, FCC 96-325 (released Aug. 8, 1996) (“*Local Competition Order*”).

rates or cost components thereof in the individual sections of this Reply Brief, as appropriate.

Joint CLECs note that the legal matter briefly discussed in Section II.A (pp. 20-21) of SBC's Initial Brief is addressed in Section VIII.A of Joint CLECs' Initial Brief.

**B. Economic/Policy Issues Associated With UNE Pricing (Including Benchmarking Analyses and Trends in Telecommunications Costs)**

SBC urges in its Initial Brief that the “ultimate goal of TELRIC-based pricing is to ‘replicate[], to the extent possible, the conditions of a competitive market.’” (SBC Initial Br. at 21) (quoting *Local Competition Order*, ¶ 679). And so it is. It is for that reason that the Joint CLECs showed repeatedly in our Initial Brief that SBC's embedded cost-based cost studies should be rejected in favor of forward-looking efficient costs – the costs that would be seen in a competitive market. SBC argues that its existing UNE rates are not “sending the right economic signals or adequately compensating SBC Illinois or incenting facilities investment by CLECs.”<sup>4</sup> (SBC Initial Br. at 22) Upon examination, however, these arguments, and the data SBC rely on in making them, are

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<sup>4</sup> SBC's argument that greater incentives are needed to spur CLEC facilities investment is disingenuous. SBC has a large sunk investment in its network, and those facilities – particularly switching – have the capacity to serve the entire telecommunications market, as witnessed by the fact that not long ago it was doing just that. Today SBC provides wholesale service to CLECs via those network facilities, *i.e.*, in the form of UNEs. If CLECs were to dramatically increase the amount of service provided using their own switching facilities, *i.e.*, by using UNE-L, SBC would experience a marked decline in its wholesale revenues and a substantial portion of its existing network would serve no useful purpose. That cannot be what SBC wishes or expects to happen as a result of increased UNE rates. Rather, what SBC anticipates is that CLECs will be driven from the market and that it will reclaim their customers and their retail revenues. Moreover, with respect to UNE-L, there is no economic or policy justification for wanting CLECs to duplicate the ILEC's loop facilities for servicing mass-market customers. The Commission should be wary of any ILEC claims that it should take steps to spur CLEC investment in facilities.

not reflective of a competitive market but rather are based upon historical, embedded costs – just the opposite of what TELRIC requires.

For example, SBC invokes Dr. Aron’s testimony to the effect that at current UNE prices SBC Illinois does not cover its “out-of-pocket” costs for loops. (SBC Initial Br. at 22) As Dr. Selwyn showed in his rebuttal testimony, however, not only has Dr. Aron adopted the wrong standard for cost measurement, she has also applied it wrongly, and as a consequence presents highly misleading results. (AT&T Ex. 1.1, pp. 3-16) Dr. Aron herself testified that true forward-looking costs are unknown, and that her analysis of “actual, verifiable costs serves as a reality check to test the putatively forward-looking costs.” (SBC Ex. 2.1, pp. 7-8) But as Dr. Selwyn pointed out, that is tantamount to saying that whatever version of forward-looking costs is closest to SBC’s version of embedded (actual) costs must be the most accurate representation of “forward looking,” and that because SBC’s proposed forward looking costs are closer to embedded than the rates proposed by Joint CLECs or Staff, it must be a better representation of “forward looking.” That of course is an absurd contention for SBC Illinois to make.

In short, Dr. Aron’s “validity check” turns entirely on the unremarkable fact that UNE rates are below historic embedded costs. (AT&T Ex. 1.2, p. 7) But under the FCC’s rules, the only costs relevant to pricing unbundled network elements are TELRIC, not the ILECs’ embedded costs.<sup>5</sup> (See also Staff Initial Br. at 18)

Moreover, Dr. Selwyn presented a list of flaws in Dr. Aron’s analysis that showed that the analysis is incapable of providing any kind of “validity check.” Her embedded

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<sup>5</sup> Indeed, SBC itself in a recent pleading filed in the D.C. Circuit Court of Appeals stated that “ARMIS data contain allocations that are ‘economically irrational.’” (See AT&T Ex. 1.1, p. 6) SBC further quoted the FCC as saying that the category-specific data reported in ARMIS “does not serve a ratemaking purpose.” (*Id.*)

cost data include investments related to services and network elements that are not even subject to unbundling; she used an overstated cost of capital; she failed to apply the wholesale discount factor to the total embedded costs associated with retailing-specific expenses; she used capital expenditure data that included spending on advanced services; she improperly included volume-insensitive capital plant expenditures (whereas SBC's distribution plant does not require additional investment to accommodate UNE-L or UNE-P entry); and she used highly overstated capital expenditures. (AT&T Ex. 1.1, pp. 8-15) Indeed, all else being equal and without adjusting for any of the other errors just listed, if it is assumed that SBC Illinois' capital expenditures have experienced a decline similar to that reported by SBC's parent corporation, that fact alone would eliminate more than 97% of the alleged "discrepancy" report by Dr. Aron between UNE revenues and SBC Illinois' claimed "actual" expenditures. (AT&T Ex. 1.1, pp. 13-14)

SBC asserts that the allegedly below-cost loop prices have "reduced the CLECs' incentive to invest in their own facilities" and result in "CLECs mak[ing] no real investment in Illinois (because it is cheaper to lease loops)." (SBC Initial Br., p. 22) While Joint CLECs dispute that SBC loop rates are below cost, there is in any event no economic or public policy reason to encourage CLECs to build their own local loops to serve mass market residential and business customers, thereby duplicating the facilities that SBC has already installed. Certainly SBC, which elsewhere in its Initial Brief argues that is more efficient to design its network with substantial excess capacity at the outset than to have to later "dig new trenches, cut trees and shrubs, and restore damaged driveways and property" to install additional facilities in a neighborhood, cannot disagree with this. (SBC Initial Br., p. 40) Moreover, in making this argument, SBC misapplies

the data: SBC asserts that “the number of facilities-based CLECs in Illinois has declined since widespread use of the UNE-P began in 2001, while the number of UNE-P CLECs has expanded dramatically.” (*Id.*, p. 22) But both UNE-P CLECs and UNE-L CLEC lease unbundled local loops from SBC Illinois. The choice between UNE-P and UNE-L as a means of service does not impact the amount of loops otherwise leased from SBC.<sup>6</sup>

SBC further claims that current pricing has reduced SBC Illinois’ ability and incentive to invest in and maintain its network. (SBC Initial Br. at 22-23.) But as Dr. Selwyn observed, SBC’s analysis assumes that all of SBC’s infrastructure investment decisions are based solely upon UNE prices, which is implausible. (AT&T Ex. 1.1, p. 24) As the FCC concluded in the *Triennial Review Order*<sup>7</sup>, virtually all of the ILEC circuit switching capability that could possibly be required to serve the ILECs’ legacy networks has already been deployed. *Triennial Review Order*, ¶ 448. In other words, these are not facilities in which ILECs need to make any significant new investments. To the extent that ILECs deploy newer packet switching facilities, the FCC declined to unbundle this form of switching; thus, investment by the ILECs in newer, advanced

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<sup>6</sup> One might debate the public policy issues surrounding the provisioning of service by CLECs using leased unbundled ILEC switching versus the CLEC’s own switching facilities. But that is not a topic for this case which involves unbundled loop rates. SBC’s (and Dr. Aron’s) frequent reliance on cost, pricing and usage data that includes UNE-P, rather than just UNE-L, only muddies the issues in this case.

<sup>7</sup> FCC, *In the Matter of Implementation of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Dockets 01-0338, 96-98 and 98-147, Report and order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36 (released Aug. 21, 2003) (“*Triennial Review Order*”).

technologies that are not subject to unbundling are encouraged under the FCC's TELRIC regime.<sup>8</sup>

SBC also cites to the testimony of its witness Mr. Sneed, who discussed a number of "benchmarks" purporting to show that SBC's claimed loop costs are forward-looking. (SBC Initial Br. at 23) Again, Dr. Selwyn responded that while the principle of benchmarking is not inherently flawed, Mr. Sneed ignored the basic premise that, in order to be useful, a benchmark comparison must be performed against a related and meaningful standard. (AT&T Ex. 1.1, pp. 41-42) There is no reason to expect that SBC Illinois' efficient forward-looking costs bear any particular relationship to its inefficient backward-looking embedded costs. Mr. Sneed's benchmarking standard suffers from the same flaws as Dr. Aron's "validity check," and is similarly lacking in usefulness. Moreover, his comparisons are also unhelpful, as they compare data associated with several unrelated lines of business of different scales that would face very different embedded cost structures. There is simply no reason to assume any specific relationship between SBC's per-line investment costs with the per-line/customer investment costs for cable, long distance and wireless providers.<sup>9</sup>

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<sup>8</sup> Moreover, as Dr. Selwyn explained, Dr. Aron is displaying a fundamental misunderstanding of investment incentives. A decision by a firm to invest in new plant and equipment is always based upon forward-looking costs and expected revenues. The only thing relevant is not Dr. Aron's historic costs, but future costs versus revenues. If the price SBC can realize from UNE-P is sufficient to cover its forward-looking incremental costs (including recovery of investment and profit), then SBC will not be discouraged from making the investment. And that is precisely what the TELRIC standard represents – the forward-looking cost of expanding the ILEC's network.

<sup>9</sup> Moreover, Mr. Sneed compares investment per subscriber of SBC Illinois at the state level (which is appropriate) with that of AT&T, Sprint PCS and Comcast at the international, total company level; such apples to oranges comparisons are not meaningful. (AT&T Ex. 1.1, pp. 43-44)

SBC challenges the testimony of Messrs. Pitkin and Turner that addresses the fact that declines in equipment costs, merger savings, technological advancements, and growth in overall demand on SBC Illinois' network have resulted in declining costs, and thus, if anything, SBC Illinois' loop costs should be lower than those approved in the TELRIC I Order in 1998. (SBC Initial Br. at 24) SBC points, in particular, to labor costs, saying that they, and not equipment costs, account for the majority of loop costs, and that these costs are, in fact, increasing. Certainly labor costs are a major factor in loop costs, but what SBC ignores is that nominal increases in labor rates over the past decade have in fact been outpaced by gains in productivity. (See the discussions at pages 22, 328-331 and 406-411 of Joint CLECs' Initial Brief) Real labor costs have actually declined. For this same reason, SBC's argument that Messrs. Pitkin and Turner's "high level" assertion that telecommunications in general is a declining cost industry fails to address the particular costs at issue here – loop costs – misses the point. Loop costs are not somehow insulated from the cost-reducing factors that Messrs. Pitkin and Turner cite – merger savings, new technologies, increased purchasing power with increased size, and growth in overall demand on the network (see Joint CLEC Initial Br. at 23-27), and they are particularly affected by the decline in real labor costs.

SBC ultimately does not dispute that it has experienced cost reductions, but instead claims that its "cost studies already reflect greater purchasing power with vendors that has been experienced as a result of the merger. . .[and] also incorporate any operating efficiencies that have been achieved. . . ." (SBC Initial Br. at 26) That claim lacks plausibility. One look at SBC's enormous proposed shared and common cost factor – still over 30% – should tell the Commission that SBC's cost studies do not adequately

incorporate merger savings such as “reductions in the overhead costs of the firm [and] increased operating efficiencies.” (*Id.*) And how, it may be asked, could SBC’s cost studies reflect significant cost declines due to the collective impact of the factors cited by Messrs. Starkey and Turner and still produce an overall doubling of reported costs? That result implies an overall increase of enormous magnitude from some other source(s). And nowhere is such a cost increase identified by SBC.<sup>10</sup>

SBC’s true claim with respect to costs in this proceeding is revealed in its reliance on the testimony of Dr. Aron and Mr. Sneed attacking the loop rates established by this Commission in 1998 as inconsistent with TELRIC. (See, *e.g.*, SBC Initial Br. at 27) What SBC seeks is not a finding that its costs have increased, but rather that factors such as cost of capital, depreciation and fill factors should be established on a substantially and unjustifiably revised basis, producing higher rates. This is confirmed, *inter alia*, by Staff’s recommendations in this proceeding: Staff’s testimony supports loop rates that are little changed from those adopted in the TELRIC I Order in 1998 and, if Staff’s proposal on fill factors is corrected by adopting Joint CLECs’ more accurate implementation of Dr. Liu’s proposal, they will support reduced rates – corroborating Joint CLECs’ position that costs have in fact decreased in the intervening six years. In short, and in the end, SBC is proposing changes that amount to a departure from this

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<sup>10</sup> SBC argues that if telecommunications is a decreasing cost industry, then an increase in competition in that industry “could cause the average costs of a particular firm (such as SBC Illinois) to actually *increase*.” (SBC Initial Br. at 26 (emphasis in original)) This is a novel version of economics. TELRIC measures the unit cost of an efficient firm at demand levels currently served. Competition is conventionally thought to increase efficiency, and reduce costs. And SBC’s claim that it has experienced a decrease in demand for switched access lines as a result of competition is baseless. When all relevant demand is considered, and on a “voice grade equivalent” basis, demand has increased. (AT&T Ex. 2.1, pp. 8-9)

Commission's prior TELRIC decisions and that is inconsistent with a proper TELRIC analysis.

### **III. UNE LOOP RECURRING COST STUDIES.**

#### **A. Compliance With TELRIC-General (Including SBC's Loop Cost Analysis Tool, LoopCAT)**

##### **1. SBC's LoopCAT Model is Inherently Flawed**

The CLECs have provided the Commission with two approaches for dealing with SBC's severely-flawed LoopCAT "model":

- (1) find the model beyond repair (at least in the context of, and given the forced-march timetable that the Commission has dictated for, this case), and therefore reject its use in this case and continue to use the TELRIC loop costs adopted in the TELRIC I Order (but apply a current Shared & Common Cost factor to those loop costs to arrive at new UNE loop rates); or
- (2) attempt to fix the myriad flaws in LoopCAT by adopting the costs presented by the Joint CLECs or, in the alternative, adopting the adjustments proposed by the Joint CLECs, Staff and the Attorney General that correct the most egregious flaws of SBC's new loop cost model. (See Joint CLEC Initial Br., pp. 30-31)

The Commission should adopt one of these two approaches, as the record reflects that LoopCAT is riddled with errors that lead to vast overstatement of the forward-looking costs of providing loops, and that to adopt the model as proposed by SBC would violate TELRIC principles and governing law.

Turning to the first option, at pages 30-38 of our Initial Brief, Joint CLECs demonstrated that LoopCAT is inherently flawed and does not represent an improvement over the predecessor models used by Ameritech, which produced the loop costs adopted by the Commission in the TELRIC I Order. SBC attempts to show that this is not the

case, at pages 148-153 of its Initial Brief.<sup>11</sup> However, SBC's arguments fail to rescue LoopCAT.

With respect to the question of whether LoopCAT is an improvement over the AFAM/LFAM models previously used by Ameritech, SBC, in defense of LoopCAT, asserts that the prior models did not properly (in SBC's view) take into account the fact that cable is only available in certain size increments, and thus understated (again in SBC's view) fill factors. (SBC Initial Br., pp. 149-50) SBC is wrong. Joint CLEC witness Mr. Balke, who worked extensively with the AFAM model while an Ameritech employee, testified that the AFAM model used to produce the bop costs adopted by the Commission in the TELRIC I Order used exactly the same "cable sizing constraint" that is used by LoopCAT (although the two models perform the necessary calculations in different sequences), and would produce the same results given the same inputs. (Joint CLEC Ex. 1.2, pp. 7-11) As Mr. Balke explained, the approach attributed to AFAM at pages 149-50 of SBC's Initial Brief is in fact the approach used by another model subsequently adopted by Ameritech, which was not the model used to produce the loop costs adopted in the TELRIC I Order. (*Id.*, pp. 7-8)

SBC also asserts that the AFAM model used in the TELRIC I Order failed to account for several items of network equipment. (SBC Initial Br., p. 149) However, Mr.

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<sup>11</sup> SBC addresses these issues in Section III.B.9 of its Initial Brief entitled "Previous Methodologies." Joint CLECs covered these issues in Section III.A.1 of our Initial Brief and will respond to SBC in this same section of this Reply Brief to maintain consistency with the organization of our Initial Brief. Joint CLECs note that whether to use LoopCAT results or not in this case is a threshold question for the ALJs and the Commission (and one which would obviate the need to decide all of the myriad other loop cost issues in the case should the Commission decide to reject the use of LoopCAT and base loop rates on the loop TELRIC that the Commission adopted in the TELRIC I Order.)

Balke pointed out that AFAM reflected at least some of these supposedly “missing” components via the use of loop installation factors. (Joint CLEC Ex. 1.2, p. 11) In fact, SBC witness William Palmer, who was Ameritech’s cost witness in the TELRIC I case, ultimately agreed that at least some of the “missing” items were in fact reflected in LoopCAT through the loop installation factors. (SBC Ex. 14.1, p. 34) In connection with this point, SBC refers to a presentation made to the Commission Staff in 1999 that (according to SBC) showed that including the “missing” items in the cost study would result in significant increases in the loop investment and TELRIC costs per loop over those adopted in the TELRIC I Order. (SBC Initial Br., pp. 150-51) This is a misleading depiction of what that presentation showed. As Mr. Balke (who was involved in the presentation) explained, the 1999 presentation showed the impacts of numerous new inputs and assumptions that SBC sought to use, including installation factors (increased by as much as 28%) and cable and equipment prices (increased by as much as 15%). (Joint CLEC Ex. 2.1, pp. 12-13) He estimated that the cost impacts of the missing components” only was to increase the approved TELRIC costs by less than 50 cents per loop per month. (*Id.*, p. 14) At the same time, this increase would likely be offset by other factors that would decrease loop costs. (*Id.*)

SBC also relies on the fact that the previous models used much smaller samples of SBC’s cable inventory than does LoopCAT, and that those samples are aged. (SBC Initial Br., p. 150) In fact, however, despite being larger numerically, the samples used by LoopCAT are actually inferior because they only extract information on loop length from SBC’s loop data bases, and do not extract any of the section-by-section characteristics of the network that are critical in understanding the primary cost drivers

specific to the loop, such as density, tapering and engineering design. In contrast, AFAM extracted a much greater wealth of information on cable characteristics.<sup>12</sup> Further, the loop data samples used by AFAM were statistically valid when collected. (Joint CLEC Ex. 2.1, pp. 27-28) Given SBC's assertions that it has used the same engineering standards for many years, the AFAM samples should still be valid. (Joint CLEC Ex. 2.1, pp. 15-16, 25-28; see Joint CLEC Initial Br., p. 31)

In any event, whether or not the LoopCAT model is an improvement over the predecessor models or not is a secondary question; the principal question the Commission must resolve is whether LoopCAT itself is so flawed that it cannot be relied upon to produce a reasonably accurate estimate of the cost of the hypothetical efficient, forward-looking network as required by the TELRIC rules. At pages 31-38 of Joint CLECs' Initial Brief, we showed that it is not (taking into account both the problems inherent in the LoopCAT model itself and the problems caused by the "pre-processing" of data for use in LoopCAT). SBC makes only a limited effort to explain away these deficiencies (SBC Initial Br., pp. 151-52), and its effort does nothing to defuse the problems identified at pages 31-38 of our Initial Brief. A number of these problems are simply not addressed by SBC.

For example, SBC responds to the criticism that it is very difficult in LoopCAT to develop costs by wire center (see Joint CLEC Ex. 1.2, pp. 19-20) by asserting in effect that costs by wire center don't matter because this Commission has established three UNE loop rate zones for SBC. (SBC Initial Br., p. 152) This response misses the point,

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<sup>12</sup> SBC also contends that LoopCAT is easier to operate than AFAM. (SBC Initial Br., p. 149) Mr. Balke disagreed that AFAM was harder to operate. (Joint CLEC Ex. 1.2, pp. 8, 18-19) In any event, the "user-friendliness" of a model would not justify its use if it is flawed and produces inaccurate results.

which is that developing costs by wire center (or even smaller geographic areas) may identify opportunities for cost-effective design decisions in the forward-looking, efficient network. The existing SBC rate zones are grounded in SBC's existing, embedded network.<sup>13</sup>

SBC attempts to deflect the fact that LoopCAT does not incorporate important engineering information specific to loop architecture building blocks like Carrier Serving Areas, fails to accurately portray SBC's current engineering guidelines, and lacks any ability to re-design the loop network using efficient, forward-looking assumptions (see Joint CLEC Initial Br., pp. 31-32), by stating that SBC subject matter experts provide the data used in LoopCAT. (SBC Initial Br., p. 151) However, it is precisely the fact that LoopCAT relies so heavily on inputs dictated by the model operator (in a way that is hard to identify or trace) that is one of the sources of concern about its use. (See Joint CLEC Initial Br., pp. 32-34)

Simply put, LoopCAT is incapable of designing an efficient, forward-looking network. It is heavily dependent on embedded data about SBC's existing network and thus cannot produce or reflect the efficient facility and equipment sizing, economies of scale, efficient choices of technology (*e.g.*, fiber vs. copper) and cable sizes, optimal placement of equipment, and other considerations that one would expect to be taken into account in designing an efficient, forward-looking network that deployed the most efficient telecommunications technology available today. (See Joint CLEC Initial Br., pp. 32-38) The Commission cannot use LoopCAT's output with any confidence that it

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<sup>13</sup> Given that the FCC's TELRIC rules require that the efficient, forward-looking network be designed assuming the existing locations of the ILEC's wire centers, the failure to develop costs by wire center would seem to be a critical omission.

will represent the costs of an efficient, forward-looking network (assuming SBC's existing wire centers and customer locations) that TELRIC requires.

**2. As Implemented in This Case, SBC's LoopCAT Model is Riddled with Errors and Reflects SBC's Erroneous View of TELRIC**

All the other parties in this case, except for SBC, agree that LoopCAT and its results, as implemented and presented by SBC in this case, violate TELRIC. Staff, the Attorney General, and CUB all agree that significant modifications to LoopCAT are necessary to make it as TELRIC-compliant as possible. SBC tries to flick these criticisms away, arguing that they are all based upon a misreading of the TELRIC rules and current law. However, SBC's response is not based largely upon what the TELRIC rules *might* provide some time in the future (or what SBC would *like* them to provide), rather than on what the TELRIC rules *currently* provide. In particular, SBC cites liberally to the FCC's TELRIC NPRM<sup>14</sup> in support of its assertions that TELRIC must reflect the inefficiencies inherent in SBC's "real world" network. (SBC Initial Br. at 33-37)

As the Joint CLECs discussed at length in our initial brief, the TELRIC NPRM is not law, nor might it ever be. (Joint CLEC Initial Br., pp. 45-47) Most importantly, in the TELRIC NPRM, the FCC specifically "declined" to open an inquiry into whether a costing methodology that is anything but forward-looking should be considered for UNE pricing. TELRIC NPRM ¶¶29, 37 ("We conclude that our decision remains sound to base UNE prices on the forward-looking cost of providing UNEs. . . . Accordingly, we

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<sup>14</sup> Notice of Proposed Rulemaking, *Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements*, WC Docket No. 03-173, FCC 03-0224 (rel. Sept. 15, 2003) ("TELRIC NPRM").

decline to open an inquiry into alternative pricing theories.”) Thus, whatever the outcome of the TELRIC NPRM proceeding, it is clear that UNE prices must be based upon forward-looking assumptions and that this will continue to be the case.

All the parties, other than SBC, have cited numerous examples of how LoopCAT flagrantly violates the very core of the currently-effective, forward-looking TELRIC rules. Both the Joint CLECs and Staff have recommend numerous modifications to LoopCAT that would have to be implemented were the Commission to decide to use LoopCAT for the purpose of setting rates in this case at all. Most notably, LoopCAT, as implemented and presented by SBC in this case, fails to adhere in any significant respect to either of the following FCC TELRIC rules:

- Scorched Node Rule. The scorched node rule requires that the ILEC must assume that it has replaced its existing network with the least-cost, most efficient technology currently available assuming that its customer locations and wire centers remain static. (47 C.F.R. § 51.505(b)(1); *Local Competition Order* ¶685). Even the TELRIC NPRM affirms this requirement: “TELRIC Models typically are designed to answer the following question: If a single carrier were to build an efficient network today to serve all customer locations within a particular geographic area, taking as given only the locations of existing wire centers, how much would it cost to construct and maintain the network?” (TELRIC NPRM, ¶49)
- The Prohibition on use of Embedded Data. The FCC has specifically prohibited any reliance on embedded costs, which it defines as “costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC’s books of accounts.” 47 C.F.R. §56 505(d)(1).

As Staff and the Joint CLECs have pointed out, LoopCAT fails to account for these two basic TELRIC rules in numerous respects:

- SBC’s linear loading factors derive installation costs based upon historic, embedded data included in SBC’s accounting systems. Even if linear loading factors were appropriate, SBC’s reliance on historic data (from its General Ledger) to derive those factors violates TELRIC. SBC’s installation factors are unlawfully based upon the relationship between

material and installation costs of backward-looking, inefficient equipment (such as old DLCs and repeaters). (Tr. 477-482) As Staff put it, this data reflects “historical inefficient cost relationships rather than efficient forward-looking cost relationships.” (Staff Initial Br. at 105)

- SBC’s installation costs, based as they are on historical data, fail to account for the economies of scale demanded by the TELRIC methodology. As Staff correctly explained, the embedded data SBC used to develop its installation factors reflect “reinforcement” jobs and “do not reflect the economies of scale associated with large-scale network construction” that should be reflected in a TELRIC study and therefore “tend to overstate costs.” (Staff Initial Br. at 105)
- SBC’s loop costs studies do not incorporate discounts to which SBC was entitled under its contract with a major equipment vendor, but which SBC waived in order to receive benefits in other portions of its business. These equipment discounts should be reflected in the costs of the forward-looking network that an efficient competitor would build.
- LoopCAT fails to account for the fact that IDLC is the forward-looking network technology that should be assumed in a TELRIC study, as the FCC has already definitively concluded. (*Virginia Arbitration Order*<sup>15</sup>, ¶¶ 312, 315, 322)
- LoopCAT fails to reflect the obvious fact that if SBC redesigned its network today, with full knowledge of current demand, it could better design its distribution network and cable sizing – in contrast to its current network and cable sizing that were generally placed as “reinforcement jobs” absent full knowledge of what demand would eventually be. LoopCAT, however, “designs” and costs out the “hypothetical” network based upon SBC’s inherently inefficient, embedded distribution area design and cable sizing mix. See also TELRIC NPRM, ¶58 (CLECs “should not pay for UNE rates that compensate the incumbent LECs for post inefficiencies.”)

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<sup>15</sup> *In the Matter of the Petition of WorldCom, Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc. and for Expedited Arbitration*, CC Docket No. 00-218; *In the Matter of the Petition of AT&T Communications of Virginia, Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc.*, CC Docket No. 00-251, Mem. Opinion and Order, DA 03-2738 (rel. Aug. 29, 2003) (“*Virginia Arbitration Order*”).

SBC attempts to provide some explanation for these deviations from TELRIC, positing arguments that bludgeon the TELRIC rules. First, SBC -- citing again to *proposals* in the TELRIC NPRM<sup>16</sup> -- argues that TELRIC does not demand that the hypothetical forward-looking network “be built simultaneously from scratch” because that could not happen in the “real world” (SBC Initial Br. at 33-36) SBC thus attempts to refute the Joint CLECs’ and Staff’s demonstration that a TELRIC study – which assumes construction of an entire new network -- should reflect larger construction jobs with less travel time and more efficiencies, than the piecemeal installation and reinforcement jobs that characterize work on the existing, embedded network.

Of course, SBC is simply wrong in disputing these assumptions, as they are embodied in the plain terms of the governing FCC TELRIC rules. 47 C.F.R. §505(b)(1) (“The total element long-run incremental cost of an element should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent LEC’s wire centers.”); *Local Competition Order* ¶685 (“We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that wire centers will be placed at the incumbent LEC’s current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements.”) As the FCC stated in promulgating the TELRIC rules in the *Local*

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<sup>16</sup> Moreover, despite SBC’s heavy reliance on it, nothing in the proposals in the TELRIC NPRM come close to supporting SBC’s interpretations of TELRIC, whether current or anticipated.

*Competition Order*, this assumption is a key to providing the economies of scale and scope that TELRIC requires be reflected in UNE pricing. (*Id.*, ¶679)

Moreover, when that assumption favors SBC, SBC itself assumes that TELRIC requires that the forward-looking network is constructed all at once from scratch. For example, SBC's loop cost studies assume that depreciation expense begins on the entire network from day 1, not over a period of time as facilities are installed incrementally. SBC, of course, derives quite a benefit from that assumption in the calculation of the forward-looking costs used to compute its UNE prices, because a substantial portion of its facilities and equipment in its "real world" network is already fully depreciated.<sup>17</sup> Yet SBC ignores the flipside of this same TELRIC assumption about the hypothetical network, as it also demands that SBC's TELRIC costs reflect the scale and scope efficiencies that would result from wholesale (rather than piecemeal) replacement of its entire network. SBC cannot have it both ways. It cannot accept TELRIC principles when it benefits SBC (*i.e.*, depreciation) but ignore them when it does not (*i.e.*, efficiencies in large-scale construction and installation activities).

SBC also relies on a rather bizarre view of what the FCC meant by the term "embedded" costs. (SBC Initial Br. at 33-34; SBC Ex. 4.1 at 15, 23) Playing a bad game of semantics, SBC seeks to define embedded costs as those that would represent the "cumulative, historical investment in . . . facilities that SBC Illinois has placed over the years" – whatever that means. (SBC Initial Br. at 34) Regardless, SBC's argument ignores controlling law. There is no debate concerning what the FCC meant when it held that "embedded costs" "may not be considered" in a TELRIC study. In fact, the FCC

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<sup>17</sup> As of 2002, SBC's depreciation reserve percentage was 56.5%. (AT&T/MCI Jt. Ex. 1, p. 13)

specifically defined embedded costs as “costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC’s books of accounts.” (47 C.F.R. § 51.505(d)(1)) SBC’s proposed installation costs violate this rule, as they are based solely on SBC’s books and, as such, those costs are necessarily based on SBC’s embedded equipment and embedded installation costs. SBC’s installation costs are derived using SBC’s books of accounts based on the costs that SBC incurred in the past. They are embedded costs and cannot be included in a TELRIC study.

**B. Major Inputs To Cost Studies**

**1. Fill Factors**

**a. Response to SBC Illinois**

**i. SBC Has Not Demonstrated that its Current Actual Fill Factors are Representative of the Efficient Forward Looking Network Specified by the FCC’s TELRIC Requirements**

Relying on the FCC’s TELRIC NRPM and the Seventh Circuit’s decision in *AT&T Communications of Illinois v. Illinois Bell*<sup>18</sup>, SBC Illinois argues that it is “clear that fill factors based on the *actual* utilization of a carrier’s network are a permissible choice for TELRIC pricing purposes.” (SBC Initial Br., p. 38; emphasis in original) The sources relied on by SBC are neither persuasive nor dispositive. As SBC’s own fill factor witness acknowledged, the TELRIC NPRM has not changed any of the FCC’s existing rules. (Tr. 903-904) It would no more be appropriate for this Commission to decide an issue in this case based on something the FCC said or proposed in the TELRIC NPRM than it would be for the Commission to depart from one of its own regulations in deciding

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<sup>18</sup> *AT&T Communications of Illinois, Inc. v. Illinois Bell Tel. Co.*, 349 F.3d 402 (7th Cir. 2003) (“AT&T”).

a case because it had a rulemaking docket in progress to consider amendments to that rule. With respect to the statement cited by SBC from the *AT&T* decision, that statement was *dicta*, *i.e.*, gratuitous statements not necessary to the decision of the precise issue before it. The precise issue before the Court of Appeals was whether the final judgment and permanent injunction of the District Court declaring recently enacted Sections 13-408 and 13-409 of the Public Utilities Act unlawful was correct. The holding of the Court of Appeals was simply that the decision of the District Court was “AFFIRMED.” (349 F. 3d at 411)

SBC also asserts that “The Commission Staff agreed with SBC Illinois that actual network design practices are the right starting point in determining fill rates.” (SBC Init. Br., p. 38) This statement is inaccurate. An accurate statement of what SBC Illinois is attempting to say would be, “a single Staff witness agreed with SBC Illinois that actual network design practices are the right starting point in determining fill rates.”<sup>19</sup> As Joint CLECs showed in the Fill Factors section of our Initial Brief, **three of the four Staff witnesses who testified on the topic of fill factors categorically rejected any use of SBC’s actual fill factors as being in any way representative of the efficient, forward-looking network required by the FCC’s TELRIC rules.**<sup>20</sup> And, the fourth Staff fill

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<sup>19</sup> The statement might be much closer to being accurate if what SBC meant was that its *current* network design practices – which presumably utilize current, efficient design standards, practices and techniques, currently available technology, and so forth – were used as the starting point. But that is clearly not SBC’s position here. Rather, it is SBC’s position that its actual design practices that have been in effect over the 30 or more years during which its existing network has come to be are “the right starting point”. No witness not employed by SBC has endorsed that viewpoint in this case.

<sup>20</sup> The three Staff witnesses who unequivocally opposed the use of SBC’s actual fill factors included two Staff witnesses who have actual, extensive employment experience with Bell companies and thus some actual experience with the historical BOC practices

factors witness, Dr. Liu, did not exactly endorse the use of SBC's actual network design practices. Indeed – and remarkably – the lengthy quote at pages 38-39 of SBC's Initial Brief from Dr. Liu's rebuttal testimony – which presumably was the most useful quote that SBC could find in Dr. Liu's four pieces of prepared testimony – *does not actually say that SBC's network that design practices are the right starting point in determining fill rates.* A more straightforward expression of Dr. Liu's views is her statement at page 54 of Staff Exhibit 34.0 that “[I]t is unreasonable for SBC to assume that its network capacity (as it is) is forward looking”. Moreover, Staff states in its Initial Brief (p. 45) that “Staff agrees with Joint CLECs that SBC's existing network may not reflect an efficient, forward-looking capacity.”

However, resolving whether the FCC (or any other applicable authority) would allow an ILEC's actual network utilization to be used as its fill factors for TELRIC pricing purposes is really unnecessary for purposes of this docket. Even if we assume that an ILEC's actual network utilization could properly be used as the fill factors for TELRIC pricing purposes – because (in the words of the statement from *AT&T v. Illinois Bell* cited by SBC) the “current fill factors are the efficient ones” – SBC has failed completely to demonstrate that its existing network is the efficient, forward-looking network that would be designed and installed *today*, as required by the FCC's TELRIC rules, or that SBC's existing network utilization is the utilization one would find in that efficient, forward-looking network. The Joint CLECs overwhelmingly demonstrated this at pages 66-80 of our Initial Brief. Staff agrees. (Staff Initial Br., pp. 45-46)

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that have resulted in the current incumbent networks. (Staff Ex. 2.0, pp. 1-2, Staff Ex. 10.0, p.3)

SBC provides nothing in its Initial Brief that should persuade anyone that its existing network or its current fill factors represent the efficient, forward-looking network required for TELRIC purposes. Instead, SBC makes a series of assertions that range from exaggerated to incomplete to wrong. For example, SBC states that its “engineers use rigorous planning methods to ensure that facilities are installed in a timely and economical manner.”<sup>21</sup> (SBC Initial Br., p. 39) Even if that is true about SBC’s methods *today*, however, it does nothing to establish that SBC’s existing embedded network, which is the product of all the design, installation and equipment selection standards and decisions over the past 30 or more years, represents the efficient, forward-looking network using the most efficient telecommunications technology currently available and the most efficient network configuration given the locations of existing wire centers and customers, that an efficient provider would design *today*. In fact, the record shows the opposite is true. (See examples discussed at pages 67-69 of Joint CLECs’ Initial Brief.)

Next, SBC asserts that its engineering practices are driven by the “CSA/SAC concept,” which “has been the industry standard for decades.” (SBC Initial Br., p. 39) But pages 5-6 of Mr. White’s rebuttal testimony, SBC Exhibit 8.1 (erroneously described as his direct in SBC’s Brief) don’t say that.<sup>22</sup> Moreover, the record indicates that parts of

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<sup>21</sup> One might ponder exactly what “timely” means in this statement. The record shows that for many parts of its service area, SBC follows a practice of installing more than two times the distribution capacity required by current demand in the area to be served by the facilities being installed. (See Joint CLEC Initial Br., p. 77) This is because SBC is installing sufficient capacity to serve not only the current demand but also long-term “ultimate” demand in the area. (See SBC Initial Br., p. 40) (Unless of course senior management tells it not to do so because it wants to hold down capital spending to meet short-term financial objectives, as it did during 2002. (See SBC Ex. 8.0, p. 10 and Joint CLEC Initial Br., p. 77 n.87))

<sup>22</sup> Nor is there anything in the record to show that Mr. White would be able to draw such a conclusion based on personal experience: his entire 17-year career has been spent in

SBC Illinois' network were engineered prior to adoption of the CSA approach. (See AT&T/Joint CLEC Ex. 1.0, pp. 176-77) SBC also argues that it has engineered an efficient amount of spare capacity into its network.<sup>23</sup> (SBC Initial Br., p. 40) Again, even if SBC Illinois is installing an efficient, forward-looking amount of spare capacity *today* (a proposition that is disputable, as discussed below), the amount of spare capacity in SBC's existing network today is simply a mathematical calculation that is the result of decades of design decisions and, more importantly, decades of demand growth and declines in various areas throughout SBC's service territory, as witnesses for Staff, the Attorney General and CUB all demonstrated.<sup>24</sup> (See, *e.g.*, testimony discussed at Joint CLEC Initial Br., pp. 69-70, 72, 74)

Further, the record shows that SBC's engineering practices with respect to spare capacity – which are built on the concepts of installing 2.25 pairs per living unit and on installing capacity to meet “ultimate” demand – do not necessarily represent efficient, forward-looking practices at this time, for a number of reasons. First, the competitive

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the employ of the former Ameritech companies (Tr. 584), and he did not cite any industry literature or any other sources that would objectively demonstrate that SBC Illinois' current engineering practices have been the “industry standard” for decades.

<sup>23</sup> SBC also argues, more abstractly, that the efficient, forward-looking network must have spare capacity. (See, *e.g.*, SBC Initial Br., p. 39) That is not really an issue in this case. All of the fill factor proposals encompass some amount of capacity in excess of demand. The issue is *how much* spare capacity is efficient and compliant with TELRIC principles. As this Commission stated in its Comments on the FCC's TELRIC NPRM with respect to fill factors, “using actual (embedded) data would not be indicative of forward-looking costs or an efficient network.” Initial Comments of the ICC, *In the Matter of Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers*, WC Docket No. 03-173 (Dec. 16, 2003), pp. 51-52 (“TELRIC NPRM Comments”).

<sup>24</sup> That mathematical calculation also includes the “defective pairs” in SBC's network that SBC counts as available capacity even though some of the defective pairs will never be economical to repair or recover.

threats that SBC argues elsewhere in its Initial Brief warrant a higher rate of return and higher depreciation rates – such as customer switching to cable telephony or wireless service – call into serious question the continued need to install facilities into an area using a ratio of 2.25 pairs per living unit.<sup>25</sup>

Second, it is correct that the availability of cable only in certain size increments limits SBC's ability to install exactly the amount of capacity indicated by projected demand. (SBC Initial Br., p. 41) SBC uses the following example: “[I]f an engineer determines that a certain route requires 150 pairs, a 200 pair cable must be placed because 150-pair cables are not manufactured.” (*Id.*) What this practice also means, however, is that if an engineer determines (based on 2.25 pairs per living unit) that a certain route requires 210 pairs, a 400 pair cable will be placed, resulting in massive excess capacity. SBC's evidence gives no indication that in such instances SBC would install only a 200 pair cable (even though that decision would still seem to provide plenty of spare capacity). The practice of always installing the next largest cable size would not seem to be efficient.

Third, the assertion that it is always more efficient and economical to install all the capacity needed to serve projected long-term or “ultimate” demand at the outset, rather than installing additional capacity at a later date as demand grows (see SBC Initial

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<sup>25</sup> Some households (although probably not a lot, for reasons articulated by Staff witness Dr. Staranczak and summarized at pp. 67-68 of Staff's Initial Brief) have or will switch from wireline service to cable telephony. Some customers (but again, probably not a lot, see *Id.*) have or will switch completely from wireline service to wireless service, and a greater number are likely to replace second wireline lines with wireless service (or not order a second wireline, choosing instead to use wireless). While the overall impact of these trends is unlikely to be abandonment and massive stranding of SBC's wireline network, they clearly indicate that SBC's long-standing practice of installing 2.25 lines per living unit is probably now excessive.

Br., p. 40), cannot and should not be categorically accepted in all situations. By installing the capacity required to serve projected “ultimate” demand at the outset, SBC forces customers (both retail and wholesale) to pay for excess capacity until it is actually needed to serve demand. Whether this approach is economic from the point of view of those customers depends on a number of variables, including the projected date or dates at which additional demand is projected to manifest itself and additional capacity would otherwise be needed (if not installed today), the incremental cost of installing the additional capacity needed to meet future demand at a future date versus today, and the discount rate (which would be used to determine the present value to today’s customers of expenditures made at a future date to install additional capacity). Installing today the additional capacity projected to be needed to meet ultimate future demand is efficient and economical only if the present value of the carrying costs on that investment over time will be less than the discounted present value of the incremental cost of installing that capacity some years in the future when it is actually warranted by demand growth. SBC has provided no indication in its evidence that it performs this type of economic calculation in deciding whether and how much spare capacity to install at the outset. To the extent that SBC does not perform this analysis, it may be installing inefficient and uneconomical amounts of spare capacity.

SBC also asserts that its existing fill levels are a reasonable projection of efficient, forward-looking fills because “The fill levels for the distribution and feeder component of SBC Illinois’ network plant have been very stable over time.” (SBC Initial Br., p. 41) However, SBC has not substantiated this assertion with data. SBC attempts to support this assertion solely by a citation to a statement in the testimony of its witness Mr. White

that “The fill levels for these components have been very stable over time.” (*Id.*; SBC Ex. 8.0, p. 24) The only fill factor data SBC presented was for the three-year period from year-end 1998 to year-end 2001 and by month for the period October 2001 – September 2003. (*Id.* and Schedules RSW-10 and RSW 11 Revised) No data was presented for any prior period.<sup>26</sup> In fact, SBC witness William Palmer testified that as recently as 1996, actual fill data was not available from SBC Illinois’ systems, and SBC lacked historical fill data. (SBC Ex. 14.0, p. 5) Moreover, Mr. Palmer testified in the TELRIC I case that SBC had determined that actual fill factors *vary over time* as demand shifts occur.<sup>27</sup> As Staff witness Bud Green (who was an Illinois Bell engineering employee for an extended period beginning in the 1970’s (Staff Ex. 10.0, p. 3)) concluded based on this information:

I concur with Mr. Palmer that there are demand shifts over time due to factors such as changes in population size, growth, density, and changes in technology (e.g., growth in multiple residential lines for internet, faxes, etc.). Therefore, in my opinion, Mr. Palmer’s position is more reasonable than that of Mr. White. Consequently, current embedded fills cannot be used as predictors of an efficient, forward looking network and Mr. White’s confidence that fills are fairly consistent over time is misplaced. (*Id.*, p. 10)

Given that SBC’s assertion that its fill factors have been consistent over time is at best unsubstantiated and at worst wrong, SBC’s subsequent conclusion that is premised on that assertion (“Since SBC Illinois’ fills have remained relatively stable, they *do*

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<sup>26</sup> Even though it would be unusual to see much change in fill factors in a network the size of SBC’s within the short time frame of the data presented by SBC (Staff Ex. 10.0, pp. 10-11), in fact Mr. White’s data showed that SBC Illinois’ actual fill factor dropped by 2.7% in just the 24 months from December 1999 to December 2001. (SBC Ex. 8.0, Sched. RSW-11 Revised)

<sup>27</sup> Staff Ex. 10.0, p. 10, citing Mr. Palmer’s testimony, Ameritech Ill. Ex. 3.1, p. 15, in the TELRIC I case.

represent an efficient, forward-looking estimate of network utilization” (SBC Initial Br., p. 41)) is also baseless. In any event, and contrary to SBC’s assertion just quoted, whether or not SBC’s actual fill factors have been consistent over time does not show that they should be used for TELRIC purposes, as Staff witness Mr. Green explained:

Nonetheless, even if the fill rate were proven to be consistent over time, this embedded fill used as the fill factor would truly be backward looking. The size of SBCI’s current embedded network masks any inefficient designs and renders the embedded fills a poor indicator for a forward-looking efficient network. The fill factor would be based on the embedded network that evolved from past practices, old technologies, past forecasts and past demands, hence backward-looking when we should be basing the fill factor on a forward-looking efficient network. (Staff Ex. 10.0, p. 11)

SBC next asserts that its actual fill factors are consistent with those of other network providers and with those used by other states in TELRIC studies. (SBC Initial Br., p. 41) SBC attempts to support this assertion with a chart purportedly showing copper distribution fill factors approved by commissions in 18 other states. (*Id.*, p. 42) Conspicuously absent from this chart is any information from any of the other Ameritech-SBC Midwest states. The underlying data (a chart sponsored by SBC witness Mr. Palmer (see SBC Ex. 14.0, Sched. WCP-R2)) shows the distribution fill factors approved for the SBC companies in Wisconsin, Michigan and Ohio to be 70%, 75% and 85%, respectively.<sup>28</sup> (See also AT&T/Joint CLEC Ex. 1.0, pp. 208-09) In fact, Mr. Palmer’s underlying chart shows 18 other states with ordered fill factors higher than the

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<sup>28</sup> Presumably, since the SBC companies in these other states operated as part of the Ameritech corporate family from 1984-1999 before the SBC merger, much of their networks have been built over the last 20 years using the same engineering standards and methods as has the SBC Illinois (Ameritech Illinois/Illinois Bell) network. Further, the other SBC Midwest states have comparable population density and terrain to Illinois, which should lead to comparable network costs. (Staff Initial Br., p. 33; see also Joint CLEC Ex. 2.0, pp. 13-15)

values listed on the chart on page 42 of SBC’s Initial Brief. In other words, SBC has chosen to present in its brief only one-half of Mr. Palmer’s data – the half that SBC thinks supports its position!<sup>29</sup>

Additionally, Mr. Palmer acknowledged that the fill factor values shown on his chart are not (necessarily) the current actual fill factors of the respective ILECs. Rather, they are simply the fill factors that were ordered by the respective state commissions (based on Mr. Palmer’s research which, as discussed in the preceding footnote, may be subject to question) on whatever basis each state utilized. (Tr. 932-33) In any event, to the extent that SBC is attempting to use other states’ fill factor decisions to justify its proposed actual distribution facility fill factor of less than 50% as TELRIC-compliant, SBC ignores what this Commission recently told the FCC: “high fill factors would exist in an efficient network, *while a fill factor of less than 50% would indicate that the network was not designed for efficiency.*” (ICC TELRIC NPRM Comments, pp. 33-34)

Despite the recent drop in SBC’s fill factors shortly prior to the date that SBC chose to use for its fill factor data in this case, as shown by SBC witness White’s data (discussed above), SBC contends that its copper fill factors have not been depressed by

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<sup>29</sup> The accuracy of the data on the chart is suspect. As Mr. Palmer admitted, the data for at least 7 of the states, and maybe more, did not come from (and could not be ascertained from) state commission orders, but rather was compiled by calling up unidentified persons at the applicable ILECs. (Tr. 928-932) Additionally, some of the data was taken not from state commission orders but from FCC orders in Section 271 cases that found the RBOC’s rates were generally consistent with what application of TELRIC principles would produce. However, in a Section 271 case (due to the 90-day time limit) the FCC does not conduct a *de novo* review of the RBOC’s rates. Instead, the FCC often “benchmarks” the subject RBOC’s UNE rates against those of other RBOCs who have received Section 271 approval, without looking into the individual components. Finally, some RBOCs have satisfied this Section 271 criterion by simply agreeing to an arbitrary reduction in their UNE rates to bring them within the acceptable benchmark range. (Tr. 925-27; see TELRIC NRPM, ¶¶26-28)

its “Project Pronto” fiber overlay project because Project Pronto was not deployed in Illinois until after the date of the data used for SBC’s fill factors in this case. (SBC Initial Br., p. 43) SBC’s assertion should be disregarded because it is contrary to its responses to CLEC discovery, in which SBC stated that its fiber fill factors included fiber facilities from Project Pronto. (AT&T/Joint CLEC Ex. 1.2, p. 128) In any event, Project Pronto has not been SBC’s only fiber/broadband project. As Joint CLEC witnesses Mr. Starkey and Mr. Fischer explained, in a broadband overlay project, SBC places additional facilities in areas where there are already enough facilities in place to accommodate all the demand; these fiber facilities will eventually replace the existing copper facilities as new customers are placed on the new fiber facilities. This process causes utilization of copper facilities to decrease during the transition. Thus, a fiber overlay project will cause the fill factors for both fiber facilities and copper facilities to decrease. (*Id.*, pp. 82-83, 128-129) This observation is consistent with the declining fill factors in the 1998-2001 data presented by Mr. White.

Finally, SBC tries to defend the high level of defective pairs in its network (which are included as “available capacity” in its fill factor calculations) by stating that defective pairs are recovered only when economically appropriate. (SBC Initial Br., p. 43) SBC misses the point of the Joint CLECs’ concerns over the level of defective pairs in SBC’s network. (See Joint CLEC Initial Br., pp. 78-79) First, even if defective pairs are recovered when “economically appropriate”, the fact remains that the percentages of defective pairs in SBC’s feeder and distribution networks are much higher than one

would expect (or tolerate) in a newly-installed, efficient network.<sup>30</sup> (AT&T/Joint CLEC Ex. 1.2, p. 112) Second, Joint CLECs do not dispute that defective pairs should only be recovered when economically appropriate, but that means that there are defective pairs in SBC Illinois' network that will never be recovered – SBC will choose simply to install new facilities instead of repairing the defective pairs. What this means is that SBC's fill factor numbers are inflated by defective pairs that are counted as available capacity because they could in theory be used to serve future demand, but in fact never will be – because SBC will determine that it is not “economically appropriate” to repair these defective pairs, but rather will install new capacity.

In fact, as discussed in the Joint CLECs Initial Brief and as set forth in SBC's own engineering documents, there are a substantial number of situations in which SBC does not attempt to recover defective pairs. Among other things, it appears that there needs to be a minimum number of defective pairs in a feeder or distribution section before SBC will attempt to recover the defective pairs. (See AT&T/Joint CLEC Ex. 1.2, pp. 119-123; TDS Cross Exs. 23P and 24P; Tr. 600-614) There is also no indication that, having made the decision to install new facilities rather than to attempt to repair defective pairs, SBC removes the bypassed defective pairs from “available capacity.” Thus, defective pairs that customers have been paying for on the theory that they represented spare capacity but which have been bypassed when it became necessary to use the spare capacity, continue to be carried as spare capacity. The facts relating to SBC's treatment of defective pairs further show that SBC does not maintain an efficient amount of spare

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<sup>30</sup> Further, as pointed out at page 79 n. 90 of Joint CLECs' Initial Brief, defective pairs in SBC Illinois' network have been increasing in recent years, both in absolute terms and as a percentage of available and usable pairs. This would seem to be the opposite of the trend one would expect in an efficient, forward-looking network.

capacity and that its current actual fill factors do not represent the utilization to be expected in an efficient, forward-looking network, and that under SBC's fill factor proposals, customers would pay for an excessive amount of spare capacity.

**ii. SBC's Criticisms of Dr. Liu's Approach Help to Demonstrate the Invalidity of SBC's Own Approach**

SBC Illinois, like Joint CLECs, opposes Staff witness Dr. Liu's "forward looking actual fill factor" approach, albeit for different reasons. (SBC Initial Br., pp. 44-47; see Joint CLEC Initial Br., pp. 81-86) Joint CLECs have several comments on SBC's response to Dr. Liu's proposal. First, SBC states that Dr. Liu implemented her proposed "forward looking actual fill" approach by adjusting SBC Illinois' actual fill rates for certain inefficiencies. (SBC Initial Br., p. 44) This is not an accurate statement of what Dr. Liu did, and appears to have been presented in this manner to further the incorrect impression that Dr. Liu endorsed the use of SBC's current actual fill factors. In fact, Dr. Liu found that she was *unable* to implement her highly-theoretical "forward-looking actual fill" approach due to data unavailability, and so chose instead to propose fill factor values that were based on adjustments to SBC Illinois' actual network capacity to remove the effects of SBC's inefficiencies.<sup>31</sup> From her testimony, it is clear that if Dr. Liu could have obtained the information to calculate "forward looking actual fill" based on the mathematical formulas she presented in her surrebuttal testimony (Staff Ex. 25.0), she would not have proposed "proxy" values based on inefficiency-cleansing adjustments to SBC's actual network capacity. For that reason, SBC is incorrect in characterizing Staff

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<sup>31</sup> This point was discussed in greater detail at pages 84-85 of Joint CLECs' Initial Brief.

as believing that actual fill rates should be the starting point for the analysis.<sup>32</sup> (SBC Initial Br., p. 44)

Second, SBC states that nothing in the FCC's orders suggests that fill factors should be adjusted to remove *ex post* inefficiencies (as Dr. Liu did in her proxy approach). (SBC Initial Br., p. 45) SBC is sort of re-arranging deck chairs on the Titanic here. The FCC's orders and rules require that the fill factors used in a TELRIC study be those that would be found in an efficient, forward-looking network designed today, using the least-cost, most efficient network configuration and the most efficient telecommunications technology available today, and taking into account reasonable projections of demand. (See Joint CLEC Initial Br., pp. 50-52) The network capacity and the fill factors in a TELRIC-compliant cost study should incorporate **no** impacts of historic, actual inefficiencies.<sup>33</sup>

Third, SBC reiterates the argument made by its witnesses Mr. Smallwood and Mr. White in rebuttal that all of SBC's network engineering and design decisions over the many years during which its current network was being built were prudent, and therefore there is no basis for adjusting (as Dr. Liu did) SBC's actual capacity for "inefficiencies". (SBC Initial Br., pp. 45-46) But as Joint CLECs explained in our Initial Brief (pp. 74-75), this is not a "prudence" case, and the historic "prudence" of SBC's network design decisions is irrelevant to a TELRIC determination. The task for the Commission here is

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<sup>32</sup> SBC, of course, omits to mention that three other Staff witnesses (Mr. Green, Dr. Staranczak and Mr. Hoagg), each with more relevant experience and expertise than Dr. Liu, categorically rejected the proposition that use of SBC's current embedded fill factors would be TELRIC compliant. (See Joint CLEC Initial Br., pp. 70-76)

<sup>33</sup> Other than, perhaps, any inefficiencies that might arise from the location of the ILEC's existing wire centers, since a newly-designed network for purposes of a TELRIC study is supposed to assume the existing wire center locations.

to determine the costs of a hypothetical efficient, forward-looking network. Certainly, the competitive market, which the TELRIC methodology is supposed to replicate, does not allow a competitor to recoup its historic incurred costs, even if those costs were “prudent”, if that competitor is not also efficient. Moreover, the assertion that Dr. Liu’s proxy calculation “disallows” a portion of SBC’s historic costs is also irrelevant. In fact, none of SBC’s historic network capital costs are taken into account in a TELRIC study, but rather only the costs of a hypothetical efficient, forward-looking network built today, so the assertion that part of SBC’s prudently-incurred embedded costs are being “disallowed” by Dr. Liu’s proxy calculation is also irrelevant.

Finally, SBC argues that Dr. Liu’s adjustments to SBC’s actual network capacity for purposes of arriving at her proxy fill factor values are too high. SBC discusses certain adjustments that SBC witness William Palmer made to Dr. Liu’s adjustments. (SBC Initial Br., pp. 46-47) However, since Dr. Liu’s adjustments were completely arbitrary and lacking in any empirical basis whatsoever (see Joint CLEC Initial Br., pp. 84-85), any attempt to adjust her adjustments is a similarly arbitrary act. For this reason, the Commission must reject any SBC proposed fill factor values that involve further adjustments to Dr. Liu’s original adjustments, just as the Commission must reject Dr. Liu’s proposed fill factors themselves in their entirety.

**iii. SBC’s Criticisms of Usable Capacity Fill Factors Are Unfounded**

Surprisingly, SBC criticizes Joint CLECs’ proposal to use “usable capacity” fill factors on the basis that “to the extent the FCC has made anything clear about fill factors, it is that they must account for future demand.” (SBC Initial Br., p. 47) But this is one of the principal failings of SBC’s use of current actual fill factors – it (by definition) takes

into account only current actual demand, and not future demand, in calculating the fill factors. That is, SBC's approach combines a network sized to serve long-term "ultimate" demand (the denominator) with current actual demand (the numerator). SBC's approach takes no account of the future demand that the network was ostensibly designed to serve and thus does not represent an efficient state. Usable capacity fill factors, in contrast to SBC's approach, represent the point of perfect efficiency of the utilization of the network, at which all capacity is being used to serve demand except for that capacity that must be set aside for testimony, maintenance and administrative purposes.<sup>34</sup> To the extent SBC is here arguing, again, that the FCC's TELRIC rules require use of a network capacity sized to meet long-term "ultimate" demand, SBC is incorrect: What the TELRIC rules require is the use of "reasonably foreseeable capacity requirements" and "a reasonable projection of the actual total usage of the element." (*Local Competition Order*, ¶¶685, ¶¶682) Although SBC tries to downplay the guidance recently provided by the FCC in the *Virginia Arbitration Order*, the FCC there stated that "ultimate demand" is "too speculative" and contrasted it with the *Local Competition Order's* "requirement that the network should be sized to meet reasonably foreseeable demand." (*Virginia Arbitration Order*, ¶73; see AT&T/Joint CLEC Ex. 1.2, pp. 79-80)

SBC also takes issue with the proposition that the same fill factor methodology should be used in the TELRIC studies used to set wholesale rates as are used in the LRSIC studies used to set retail rates. (SBC Initial Br., pp. 50-51) As noted in Joint

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<sup>34</sup> As it does throughout the fill factors section as well as other parts of its Initial Brief, SBC here continues to rely heavily on statements made by the FCC in the TELRIC NPRM (SBC Initial Br., pp. 48-49) as though those statements reflected rules that the Commission has adopted. As discussed earlier in this section, they do not, and thus they should not be given any weight in this case.

CLECs' Initial Brief (p. 60), this is a 180 degree departure from the position previously taken by SBC Illinois on this question. SBC asserts that the purposes of LRSIC and TELRIC studies are different, *i.e.*, one is used to set a price floor while the other is used to set a price ceiling (SBC Initial Br., p. 51), but that distinction does not dictate that different inputs can or should be used in the two studies. The underlying costs of the network that SBC uses to provide its retail products and its wholesale products are the same. (AT&T/Joint CLEC Ex. 1.0, pp. 197-98) Nor is there any basis for SBC to assume that the efficient network it would use to provide wholesale products should have substantial excess capacity while the efficient network it would use to provide retail products would have very little spare capacity. (*Id.*, p. 198)

In summary – and contrary to SBC's arguments – the “usable capacity” fill factors represent the most reasonable interpretation of the FCC's fill factor requirements for TELRIC, for the reasons shown at pages 56-59 of Joint CLECs' Initial Brief.

**iv. SBC's Criticisms of Target Capacity Fill Factors Are Meritless**

With respect to the Joint CLECs' second option – that the Commission adopt the same “target fill factor” values it adopted in the TELRIC I Order – SBC suggests that the Commission did not believe these fill factors were TELRIC compliant at the time it adopted them. (SBC Initial Br., p. 51) There is no basis for this assertion. In the TELRIC I Order, the Commission stated:

We will adopt “target” fill factors as suggested by Mr. [Ameritech witness William] Palmer, because we agree with him that TELRIC-based prices are reasonably based on the “optimal usage level above which it is more cost effective to add plant and capacity rather than increase the utilization of existing plant.” (TELRIC I Order, p. 34)

Mr. Palmer's testimony in that case had essentially demonstrated that the difference between Ameritech's target fill factors and its actual fill factors was the difference between a forward-looking cost study and an embedded cost study. (See AT&T/Joint CLEC Ex. 1.0, pp. 205-06) As detailed at pages 63-64 of Joint CLECs' Initial Brief, Ameritech specifically developed and presented the target fill factors (using its "usable capacity" fill factors as a starting point) to meet the requirements of the TELRIC concepts of forward-looking economic costs based on efficient network use and the use of "reasonably accurate" fill factors.<sup>35</sup>

**v. SBC's Criticisms of Joint CLECs' More Accurate Implementation of Dr. Liu's Approach Are Unwarranted and Ineffective**

Finally, SBC criticizes Joint CLEC witnesses Starkey and Fischer's more accurate implementation of Staff witness Dr. Liu's adjusted actual capacity approach, which is the Joint CLEC's third option. (SBC Initial Br., pp. 52-54) The starting point for any discussion of Starkey/Fischer's presentation must be recognition that of the fill factor values based on adjustments to SBC's actual capacity that were presented by various witnesses, the Starkey/Fischer approach is the only one with any logical and empirical basis. Indeed, one almost wonders why SBC is criticizing rather than embracing the Starkey/Fischer approach, since it is the only fill factor approach based on SBC's actual network capacity that the Commission would have an evidentiary basis to adopt.

SBC makes four criticisms, but those criticisms neither individually nor collectively cast doubt on the usefulness of Messrs. Starkey and Fischer's analysis. First,

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<sup>35</sup> SBC's assertion that the Commission did not reject actual fill factors in the TELRIC I docket (SBC Initial Br., pp. 51-52) is incorrect. See AT&T/Joint CLEC Ex. 1.0, pp. 203-206)

SBC claims that the Starkey/Fischer adjustment for efficiency was based on only 20 wire centers and that these wire centers are unduly skewed towards tiny, rural offices.<sup>36</sup> (SBC Initial Br., pp. 52-53) However, the transcript pages that SBC cites (Tr. 1782-87) do not support SBC's assertion and in fact show that Mr. Starkey repeatedly disagreed with SBC counsel's assertions to that effect. Mr. Starkey testified affirmatively that the selected offices were fairly well distributed among larger and smaller offices, and that the analysis contained fairly large, medium size and fairly small offices. (Tr. 1782, 1783, 1787) Among wire centers used in the analysis are Wilmette, Grayslake, Chicago Kildare, Cary, Hickory Hills, Oak Lawn, Fox Lake, Wauconda, Chicago Beverly, Chicago Edgewater, Algonquin, Collinsville, Plainfield, Frankfort, Romeoville, Chicago Stewart and New Lenox, as well as offices in Schaumburg and Northbrook. (SBC Cross Ex. 48P) Mr. Starkey explicitly testified that the 20 wire centers selected for each of the network components produced a reasonable distribution of communities and geographic areas served in terms of demographics.<sup>37</sup> (Tr. 1851-52)

Second, SBC suggests that Messrs. Starkey and Fischer should have somehow "controlled" for the fact that some of the wire centers selected are (according to SBC) in "mature" communities with no capacity for growth. (SBC Initial Br., p. 53) SBC asserts that the wire centers selected by Starkey/Fischer include both wire centers in "mature" communities with no capacity for growth and wire centers in "young" communities that

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<sup>36</sup> As explained in greater detail in Joint CLECs' Initial Brief, for each network component, the 20 wire centers with the highest fill factors were selected as indicative of SBC's potential for efficient utilization of facilities. (Joint CLEC Initial Br., pp. 87-88)

<sup>37</sup> SBC also makes the somewhat inconsistent criticism that for each network component, a few of the offices accounted for a large proportion of the total lines among the 20 offices (SBC Initial Br., p. 53), but that is the natural result of having a wide distribution of larger, medium-sized and smaller offices.

have not yet “grown into” their capacity (*Id.*), although there is nothing in the record to support that characterization. Indeed, Mr. Starkey expressly disagreed with SBC’s hypothetical assumption that a “mature” community would have no potential for growth in demand, because the fact that a community has a stable population does not necessarily mean that it cannot experience increased demand for telecommunications services.<sup>38</sup> (Tr. 1758, 1848-49)

As part of this second criticism, SBC complains that the 20 wire centers selected by Starkey/Fischer did not include any Zone A (*i.e.*, downtown Chicago) wire centers. (SBC Initial Br., p. 53) However, as Mr. Starkey pointed out, certain of the network components (such as DLC chassis) typically are not used in downtown Chicago wire centers. (Tr. 1792-1793) Moreover, not including downtown Chicago wire centers is not inconsistent with the focus of this case which is primarily on the TELRIC rates for UNE loops used to serve mass market customers (*e.g.*, 2-wire analog loops). Further, the wire centers that Messrs. Starkey and Fischer used include several large wire centers within Chicago even if not in Zone A. (Tr. 1791-1792; see SBC Cross Ex. 48P)

In any event, SBC’s first two criticisms miss the point of Messrs. Starkey and Fischer’s analysis. The purpose of the analysis was not to take a statistically valid random sample of all of SBC’s wire centers – the resulting fill factors would have simply devolved to SBC’s existing fill factors. Rather, the point of the analysis was to identify the wire centers in which SBC has achieved the most efficient utilization of its capacity, as a benchmark against which the overall efficiency of all SBC wire centers could be

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<sup>38</sup> Mr. Starkey disagreed with SBC counsel’s hypothetical that any community could have no potential for growth in demand for telecommunications services. (See Tr. 1758-59)

judged. (See Joint CLEC Initial Br., pp. 87-88) Moreover, as Mr. Starkey explained, regardless of whether a wire center is “mature” or not, or large or small, the point of a TELRIC study is to build a network efficiently sized to meet the reasonably foreseeable demand. (Tr. 1849-50) The point of the Starkey/Fischer analysis is to show that in some wire centers SBC has been able to do that more effectively than in others, and that the more efficient wire centers should provide a benchmark for the efficiency of the entire forward-looking network. (See AT&T/Joint CLEC Ex. 1.3, pp. 18-22)

SBC’s third criticism is that Starkey/Fischer failed to take into account the fact that in some areas SBC may have installed copper and fiber facilities side by side with one set of facilities having a higher fill factor and the other set having a lower fill factor. (SBC Initial Br., pp. 53-54) It is surprising that SBC would raise this point since it tends to substantiate some of the reasons cited by Starkey/Fischer as to why SBC’s current actual fill factors do not represent an efficient, forward-looking network, namely, that SBC’s current fill factors are depressed due to SBC’s installation of fiber overlays to the copper distribution network, in anticipation of future demand for advanced services. It also helps to illustrate the distortion created by SBC’s inclusion of defective pairs in “available capacity”, because SBC may have decided to install new fiber facilities to serve demand growth rather than repair the defective pairs in the existing copper facilities. (See Tr. 1803-04) (These points were discussed earlier in this Section III.B.2.a.)

More generally, SBC’s third criticism illustrates why SBC’s current actual fill factors are not representative of a newly-designed, efficient, forward-looking network: low fill factors for one network component may be the consequence of high fill factors

for another component. While the installation of new fiber facilities next to existing copper facilities may be a result of the historical evolution of technology and the SBC network, SBC has not suggested that anyone would design a new, efficient network based on existing wire centers and existing customer locations using such duplicative and overlapping facilities of different types. Finally, SBC's third criticism again misses the point of the analysis, which was to identify where SBC has been able to achieve the most efficient utilization of each network component.

SBC's fourth criticism is that Messrs. Starkey and Fischer adjusted the defective pair percentages for copper distribution in all SBC central offices to 1% of usable capacity, without attempting to determine if 1% defective pairs was a sustainable percentage for the entire network.<sup>39</sup> SBC implies it is not a sustainable percentage because it is not economically justified for SBC to repair defective pairs unless necessary to meet an immediate capacity need. (SBC Initial Br., p. 54) While Joint CLECs do not dispute SBC's practices as a matter of fact, this criticism is irrelevant to determining the defective pair percentage likely to be observed in a newly-designed and newly-installed efficient network. In such a network, the only defective pairs to be expected would be those that resulted from manufacturers' defects in the newly-purchased and installed cables. Certainly, neither SBC nor this Commission would tolerate defective pair percentages in a newly-installed network anywhere near as high as the actual defective pairs percentages in SBC's existing network. (See AT&T/Joint CLEC Ex. 1.3, pp. 20-21)

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<sup>39</sup> As discussed at page 87 of Joint CLECs' Initial Brief, Messrs. Starkey and Fischer observed defective pair percentages of 1% (or less) in a number of SBC wire centers.

In summary, none of SBC's criticisms do anything to diminish the validity or usefulness of Messrs. Starkey and Fischer's more accurate implementation of Staff witness Liu's adjusted actual capacity approach. As noted earlier, the Starkey/Fischer analysis is Joint CLECs' third option for fill factors in this case, behind (1) usable capacity fill factors and (2) target capacity fill factors. However, should the Commission decide to base the fill factor values used in this case on SBC Illinois' actual network capacity utilization data, the adjusted fill factors calculated by Messrs. Starkey and Fischer provide a superior, more logically-grounded and empirically-based set of values than the fill factor values proposed by Dr. Liu.

**b. Response to Staff**

**i. Introduction**

Staff gets itself off on the wrong foot by representing that the information necessary to calculate fill factor values under Dr. Liu's newly-created "forward-looking actual fill" method "is not available in this proceeding." (Staff Initial Br., p. 38) What Dr. Liu in fact explained was that the information necessary to calculate "forward-looking actual fill factors" as posited by Dr. Liu will never be available *in any proceeding*. (Tr. 999-1000) Thus, although her "forward-looking actual fill factor" approach might have some theoretical appeal, it is incapable of being implemented to calculate actual fill factor values.

What the Commission must be very clear on is that the "proxy" fill factor values provided by Dr. Liu, and the method by which they were "developed" (a charitable at best phrase to describe the completely arbitrary assumptions Dr. Liu employed), have no relationship to the theory behind Dr. Liu's "forward-looking actual fill factor" approach. In other words, Dr. Liu's lengthy theoretical discussions about her "forward-looking

actual fill factor” approach and her “proxy” method should not dazzle the Commission into thinking that the actual values Dr. Liu presented are anything more than a completely arbitrary and empirically unsupported small upward adjustment to SBC’s proposed current actual fill factors. In the end, Dr. Liu’s lengthy presentation amounts to nothing more than cover for the Commission to grant SBC almost exactly what it has asked for with respect to fill factors, without appearing to do so. To borrow from SBC’s Initial Brief (p. 9), there is no reason to adopt Dr. Liu’s proposed fill factor values other than politics.

As discussed at pages 86-89 of Joint CLECs’ Initial Brief, the Joint CLECs presented a more accurate (and a logically and empirically-based) implementation of Dr. Liu’s proxy approach, should the Commission (inappropriately) decide to use SBC’s actual, existing network capacity as the starting point for the fill factor calculation. Staff’s Initial Brief includes criticisms of the Joint CLEC approach that are wholly without foundation in the record. In fact, Staff’s “rebuttal” on this topic is really new testimony which Staff is introducing for the first time in its brief. (Staff Initial Br., pp. 38, 60-64) This portion of Staff’s Initial Brief is improper and must be ignored by the Commission.

In discussing the Commission’s determinations on fill factors in the TELRIC I Order, Staff states that the Commission there determined that the “target fill factors” it adopted were not in compliance with the FCC’s TELRIC requirements. (Staff Initial Br., p. 44) As shown in Section III.B.2.a.iv above, that assertion is not correct. Further, Staff’s assertion – which appeared for the first time in Dr. Liu’s rebuttal testimony, after other Staff witnesses, in Staff’s direct case, had already endorsed the continued use of the

target fill factors in Staff's direct case (see Joint CLEC Initial Br., §III.B.1.d, e and f) – is simply not credible. If Staff had actually believed that the target fill factors adopted by the Commission in the TELRIC I Order were not TELRIC-compliant, Staff would not have endorsed continued use of the target fill factors in Staff's direct testimony in this docket.

**ii. Staff's Criticisms of Usable Capacity Fill Factors and Target Fill Factors Are Unfounded and Erroneous**

Staff's criticisms of Joint CLECs' proposed use of usable capacity fill factors are largely irrelevant digressions. (Staff Initial Br., pp. 46-54) First, Staff takes issue with Joint CLEC witnesses Starkey and Fischer's statement that the efficient, forward-looking network that is designed using the most efficient telecommunications technology available today will need much less spare capacity because that network will be designed using modular equipment which enables additional facilities to be added in response to increases in demand. Staff's entire discussion on this point does nothing more than establish that the efficient forward-looking network would incorporate some spare capacity. (Staff initial Br., pp. 48-49) That proposition is not really in dispute here. The issue is how much spare capacity is needed in the efficient forward-looking network (as compared to the amount that exists in SBC's existing network as a result of the historical evolution of that network). The point that Messrs. Starkey and Fischer were making is that the efficient, forward-looking network that would be designed today could have much less spare capacity than exists in SBC's actual network today (and that SBC has historically engineered into its network).

Staff also places great emphasis, both in discussing "usable capacity" and throughout the Fill Factors section of its Initial Brief, on the fact that there are fixed and

sunk costs associated with loop deployment (a phrase that Staff essentially uses to encompass the concept that there are efficiencies and economies associated with installing network facilities in advance of the actual manifestation of demand). That is true with respect to the embedded network but not the TELRIC network -- Staff's preoccupation with fixed and sunk costs ignores the fact that the FCC's methodology assumes that all costs are variable:

In a TELRIC Methodology, the "long run" used shall be a period long enough that all costs are treated as variable and avoidable. (*Local Competition Order*, ¶692)

In any event, that there are sunk and fixed costs in the loop network is not in dispute in this case. What *is* in dispute – and what Staff has failed to shed any useful light on – is *how much* fixed and sunk costs (if any) would be appropriate in an efficient, forward-looking network. Staff has failed to cast a critical eye on SBC's actual engineering practices or on the manner in which SBC has determined *how much* fixed and sunk costs (*i.e.*, excess capacity) should be incurred.<sup>40</sup> (See discussion in Section III.B.2.a.i above) With respect to Messrs. Starkey/Fischer's testimony on the "modular" network, their point, again, is that the efficient forward-looking network employing the most efficient telecommunications technology available will have much less need to incur significant fixed and sunk investment (that is not currently serving customer demand) than has historically been the case in SBC's actual network.

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<sup>40</sup> Perhaps this has occurred because Staff chose to assign a witness to this topic who had no experience working for telecommunications firms or for firms that provide engineering and construction services to the telecommunications industry (Tr. 976-78), even though there were other Staff witnesses available who have this relevant experience. (See, *e.g.*, Staff Ex. 2.0, pp. 1-2; Staff Ex. 10.0, p. 2)

Another Staff criticism is, in essence, that it would be really hard to size the network to be at the usable capacity fill factor levels. (Staff Initial Br., pp. 49-50) Staff's criticism ignores the fact that the TELRIC principle is to base UNE prices on the efficient network. "Usable capacity" fill represents the point of most efficient utilization of the network. Further, it properly incorporates the TELRIC requirement that the efficient forward-looking network be sized based on "a reasonable projection of the actual total usage". (*Local Competition Order*, ¶682) When network utilization reaches the usable capacity fill factor level, more capacity has to be added. Staff's arguments here, in contrast, seem to take into account the need for the network to be sized to meet a reasonable projection of future demand (on the capacity side), but completely ignore that future demand in the fill factor calculation. In doing so, Staff is actually inconsistent with Dr. Liu's theoretical "forward-looking actual fill" approach, which takes into account **both** future demand and the capacity needed to serve it. (See Staff Initial Br., pp. 55-58 ("Fills Should Be Based On The Demand Achieved Over Time")). The same is true of the discussion at pages 51-54 of Staff's Initial Brief, accompanied by Dr. Liu's charts, because it suggests that the projected growth in demand over time (for which the network is sized) depicted on her charts should be ignored in the fill factor calculation – again in complete contradiction of Dr. Liu's "forward-looking actual fill factor" approach as described at pages 55-58 of Staff's Initial Brief.

The inconsistency of Staff's criticisms of "usable capacity" fill factors (which are taken from Dr. Liu's February 20 rebuttal testimony) with Staff's explanation of Dr. Liu's own methodology highlights the fundamental flaw in Dr. Liu's criticisms: She inappropriately mixes static and dynamic concepts of network capacity and demand (a

mistake she does not make in her theoretical exposition of her own proposed method), when in fact one or the other should be used consistently. As Messrs. Starkey and Fischer explained, the FCC's rules require a proper TELRIC study to be constructed in the following manner:

- (1) identify a reasonable "projection of the total actual usage" at a point in time, necessary to accommodate the entirety of the ILEC's wholesale and retail services;
- (2) after identifying that level of demand, build a network sized to serve that demand using the most efficient, least-cost forward-looking network technology and practices currently available;
- (3) calculate the total costs associated with building the network in step (2); and then
- (4) divide those total costs by the amount of demand projected in step (1). (AT&T/Joint CLEC Ex. 1.3, p. 5)

In this process, both the demand and the size of the network are static in nature, *i.e.*, both have been established at the same point in time.<sup>41</sup> It is critical that both primary components of the analysis – demand and network size – be consistent, *i.e.*, both must be either static or dynamic, when developing the fill factor in accordance with TELRIC. (*Id.*) Staff's criticisms ignore this fundamental point.<sup>42</sup> Once this fact is recognized, it becomes apparent that usable capacity fill factors (or target fill factors) are appropriate fill factors in an efficient, forward-looking network for which all costs are variable. That

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<sup>41</sup> Note that the point in time does not need to be today – it can be a future point in time at which demand is greater than it is today. The network would be sized to meet that projected future (increased) demand.

<sup>42</sup> It would also be appropriate to use dynamic measures of both demand and capacity, *i.e.*, values as they change over time. In fact that is what Dr. Liu has depicted in the theoretical construct of her forward-looking actual fill factor approach. Unfortunately using dynamic measures is much more difficult than using static measures. (AT&T/Joint CLEC Ex. 1.3, pp. 6-7, 8-9) This perhaps explains why Dr. Liu concluded that the information needed to compute fill factor values using her method was unavailable.

is, if (1) both the size of the forward-looking network and the demand accommodated by that network are analyzed at a specific point in time and (2) the network is sized specifically to meet that level of demand, it is only logical that the efficient network would be sized so as to maximize its capabilities, *i.e.*, operation at the usable capacity level. (AT&T/Joint CLEC Ex. 1.3, p. 8)

Staff's criticisms of the use of target fill factors suffer from the same flaws as do Staff's criticisms of usable capacity fill factors. (Staff Initial Br., p. 54)

Finally, Staff disputes that the fill factor approach used for TELRIC studies should be consistent with the fill factor approach used for LRSIC studies. (Staff Initial Br., pp. 47-48) The reasons for using consistent methods and assumptions in both TELRIC and LRSIC studies have been thoroughly discussed in Section III.B.2.c of Joint CLECs' Initial Brief and Section III.B.2.a.iii of this brief, and will not be repeated here. Joint CLECs only specific response to Staff's argument on this point is that we feel like the victims of a shell game. In the recently completed Part 791 rulemaking, Docket 99-0535, in which the Commission's LRSIC rules were under review, CLECs raised the same issue about the need for consistency between the inputs used in LRSIC and TELRIC studies. Staff agreed that the inputs used in LRSIC studies and in TELRIC studies should be consistent.<sup>43</sup> However, Staff did not believe that the LRSIC rulemaking, Docket 99-0535, was the most appropriate venue in which to establish consistent inputs. Instead, Staff pointed the Commission to its next available opportunity to review SBC's TELRIC cost studies, and indicated that that proceeding (which has

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<sup>43</sup> See AT&T/Joint CLEC Ex. 1.0, pp. 194-95, citing Staff Exhibit 1.0, Direct Testimony of Patrick L. Phipps (ultimately adopted by Douglas H. Price) in Docket 99-0535, p. 17.

turned out to be this docket) would be the most appropriate place to insure consistency.<sup>44</sup> Now that we have arrived at the proceeding that Staff said would be the appropriate place to develop consistent inputs for use in SBC’s LRSIC and TELRIC studies, Staff should not be heard to say “not in *this* proceeding.”

**iii. Staff’s Proposed Fill Factor Approaches**

Staff describes Dr. Liu’s theoretical, “forward-looking actual fill factor” approach at pages 55-59 of its Initial Brief. While this discussion may be somewhat interesting from an academic perspective, it is of little practical value in the context of this case since the information is lacking to actually calculate fill factors using this approach. As noted in the immediately preceding subsection of this brief, Staff’s description of Dr. Liu’s method shows that here, at least, Dr. Liu recognized that both the capacity of the forward-looking TELRIC network and the demand on that network must be determined as of consistent points in time. (See, *e.g.*, Staff Initial Br., p. 56 (“the most appropriate . . . means to calculate TELRIC rates is to determine the fill that the hypothetical network would achieve on average over the future period used to determine the size [of] the hypothetical, forward-looking network.”))

Joint CLECs have thoroughly explained the flaws, lack of any empirical basis, and totally arbitrary nature of, the fill factor values Dr. Liu calculated using her “proxy” approach, at pages 84-86 of our Initial Brief. We reiterate that Dr. Liu’s “proxy” method bears no relationship to her theoretical construct of “forward-looking actual fill”. Instead, in her “proxy” method, Dr. Liu took SBC’s current actual network capacity (which purportedly has been sized by SBC to serve long-term “ultimate” demand), applied a set

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<sup>44</sup> See *Id.*

of completely arbitrary adjustment factors to it (purportedly to adjust for *ex post* inefficiencies in the existing network), and then applied current demand to the adjusted capacity to arrive at her proposed fill factor values. Thus, Dr. Liu here commits the error of mixing capacity designed for a future point or points in time with current demand.

The Fill Factors section of Staff's Initial Brief concludes with some four pages of discussion addressed to Messrs. Starkey/Fischer's more accurate implementation of Dr. Liu's proxy method. (Staff Initial Br., pp. 60-64) The ALJs and the Commission will note that there are absolutely no citations to the record in any of this discussion. This is not just inadvertence on Staff's part; rather, there **is no** record support for this discussion. It is improper "late-filed testimony" and must be ignored by the ALJs and the Commission.<sup>45</sup> Further, Staff's comments, like its criticisms of usable capacity fill factors, appear to be largely premised on the proposition that there are fixed and sunk costs in loop deployment, and thus they suffer from the same flaws described in the immediately preceding section of this brief.

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<sup>45</sup> Staff might contend that it was forced to respond in this manner, *i.e.*, by submitting additional testimony in its brief, because Messrs. Starkey/Fischer's more accurate implementation of Dr. Liu's proxy approach was submitted in their March 5, 2004 testimony, which was the last round of testimony in this case. However, that situation was entirely a self-inflicted wound on Staff's part. Had Dr. Liu's proposal been submitted in Staff's direct case – or, even if Dr. Liu's actual proposed fill factor values had been submitted no later than Staff's January 20, 2004 rebuttal testimony – then Messrs. Starkey and Fischer could have responded in their February 20, 2004 surrebuttal testimony and Dr. Liu would have had a chance to respond to their more accurate implementation of her method in her own March 5 testimony. It is only because Dr. Liu did not submit her "forward-looking actual fill factor" proposal until Staff's rebuttal testimony, and did not provide her "proxy" method or her actual proposed fill factor values until her surrebuttal testimony, that Staff finds itself in this predicament. Staff has been hoisted by its own petard and should not be allowed to fall back to ground gently.

## 2. Depreciation

Staff, the Attorney General and CUB, as well as the Joint CLECs, all recommend that the Commission continue to use the FCC-prescribed depreciation lives for SBC Illinois in calculating SBC's TELRIC rates, as the Commission did in the TELRIC I Order. These parties all urge the Commission to reject SBC's proposal to use the asset lives it uses for financial reporting purposes in its TELRIC studies. (See Staff Initial Br., pp. 64-68; AG Initial Br., pp. 14-18; CUB Initial Br., pp. 20-23) As CUB aptly puts it, SBC's case for adoption of its financial reporting lives is based on "highly speculative, unsubstantiated, and improbable technology predictions" to which the Commission should "afford no weight." (CUB Initial Br., p. 23)

SBC's Initial Brief provides no persuasive support for its proposal to switch from the FCC-prescribed depreciation lives previously adopted by this Commission for TELRIC purposes to its financial reporting lives which have received the scrutiny of neither regulatory agency. Joint CLECs pointed out in our Initial Brief (pp. 93, 101) that SBC had presented no evidence to actually explain how its financial reporting lives have been developed. SBC's Initial Brief does not cure this deficiency. This is contrary to common practice at this (and other) commissions in which the utility or carrier presents a study prepared by an external depreciation witness that actually demonstrates how its proposed depreciation rates were determined.

In contrast to fill factors, with respect to which SBC was able to identify at least a few state commissions that have adopted low fill factors in TELRIC cases (although the quality of SBC's data is questionable, as discussed in Section III.B.1 above), SBC offers precious few examples of other states that have used an ILEC's financial reporting lives for TELRIC purposes. In fact, the only state commission order that SBC cites is a recent

order of the Indiana Commission.<sup>46</sup> (SBC Initial Br., pp. 60-61) SBC is only able to cite one state commission order that has allowed use of financial reporting lives for TELRIC purposes even though the FCC, in its very first articulation of TELRIC in 1996, clearly stated that “an appropriate calculation of TELRIC will include a depreciation rate that reflects the true changes in economic value of an asset” (*Local Competition Order*, ¶703) – the same baseline standard that SBC states should apply here. (SBC Initial Br., p. 54)

SBC also cites an FCC Section 271 order (*Id.*, p. 56), but as discussed in the Fill Factors section of this brief, FCC Section 271 orders do not involve *de novo* reviews of the ILEC’s UNE pricing, are conducted under a severely-constrained 90-day time limit, and often involve “benchmarking” comparisons between the subject RBOC’s UNE rates and those of other RBOCs that have already received Section 271 authority, without a detailed evaluation of the TELRIC basis of the components of the subject RBOC’s UNE prices.

SBC also relies (as it does elsewhere in its Initial Brief) on the FCC’s TELRIC NPRM, ignoring the fact that the TELRIC NPRM only sets forth proposals for change in the FCC’s existing rules, and does not constitute a change in those rules. (See Tr. 903-04) More importantly, SBC’s citation to ¶96 of the TELRIC NPRM for the proposition that “the FCC recently reiterated that TELRIC permits the use of financial reporting lives for depreciation purposes” (SBC Initial Br., p. 56) is an exaggeration at best. In the section of the TELRIC NPRM pertaining to “asset lives” (¶¶94-101), the FCC simply

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<sup>46</sup> In contrast, the FCC reports in the TELRIC NPRM that at least 20 states have used the FCC-prescribed lives in calculating TELRIC-based UNE prices. (TELRIC NPRM, ¶96) AT&T/MCI witness Mr. Majoros identified 25 states that have adopted the FCC lives for TELRIC purposes, and cited the order in which each commission did so. (AT&T/MCI Joint Ex. 1, pp. 23-25)

requests comments in response to various questions it poses on the use of FCC-prescribed lives and financial reporting lives. Finally, throughout this section of its Initial Brief, SBC juxtaposes various quotations from and citations to the *Triennial Review Order* in a manner that might suggest to the uninformed that the FCC in that order approved the use of financial reporting lives for TELRIC purposes. It did not. Pages 99-100 of the Joint CLECs' Initial Brief provide a summary of the FCC's comments on the use of financial reporting lives in the *Triennial Review Order*. With respect to FCC actions, SBC of course completely avoids mention of the recent decision of the FCC Wireline Competition Bureau ("WCB") in the *Virginia Arbitration Order*, in which the FCC WCB rejected Verizon's proposed use of financial book lives, concluded that "FCC regulatory lives should be used for purposes of calculating UNE prices" (*Id.*, ¶¶112, 116), and explained:

We reject Verizon's argument that FCC regulatory lives are not sufficiently forward-looking. The Commission has used forward-looking asset lives for some time in its regulation of incumbent LEC depreciation practices, and the asset lives that we adopt here are the most recent ones prescribed by the Commission. (*Id.*, ¶115)

As with fill factors, however, the question of whether an ILEC's financial reporting lives can be used in setting TELRIC-based UNE rates is probably an irrelevant question, for even if one assumes that this is the case, SBC Illinois has utterly failed in this docket to demonstrate that its FCC-prescribed depreciation rates should be abandoned, and its financial reporting lives adopted, for TELRIC purposes. The Joint CLECs' Initial Brief, pages 90-113, contains a comprehensive demonstration, based on the record compiled in this case (rather than semantic arguments about what the FCC has said or where its thinking might be headed), that SBC's proposed depreciation lives have **not** been shown to be forward-looking, "economic", TELRIC-compliant or even realistic,

and that SBC Illinois' FCC prescription lives continue to be appropriate for TELRIC purposes.

SBC's Initial Brief contains such a meager attempt to demonstrate that its financial reporting lives are forward-looking, economic, realistic and TELRIC-compliant (barely three pages – pages 57-59), that Joint CLECs have nothing to respond to, beyond referring the Commission back to our Initial Brief. As we demonstrated in our Initial Brief, the Vanston/TFI studies relied on by SBC are unrealistic, predict an unsupportable shortening of the economic lives of SBC's assets due to a speculative and exaggerated upcoming wave of competitive success from all sorts of other forms and providers of telecommunications services, and represent just the latest of a series of such forecasts by Dr. Vanston and his firm that cry wolf but are never realized.

Joint CLECs do observe that in the latter rounds of testimony in this case, in which Dr. Vanston became increasingly strident in defending his forecasts, he resorted to contending that his prior forecasts had not been inaccurate because they included “Early” “Middle” and “Late” scenarios for the manifestation of the technological changes and competitive developments that he predicted would prematurely obsolete massive quantities of ILEC assets and thus compelled a dramatic reduction in depreciation lives, but that the critics of his forecasts only focused on the “Middle” scenarios, whereas the “Late” scenarios support his predictions. (See, *e.g.*, SBC Ex. 13.2, pp. 34-39) What sophistry! Attorney General witness Mr. Dunkel aptly exposed this device:

[T]he fact that Dr. Vanston made three different forecasts (“Early”, “Middle”, and “Late”) in the TFI study does not make my criticisms invalid. Making several different forecast about the same facilities is a way of covering all the bases. Dr. Vanston did not place emphasis on the “late scenario”. When his forecast that he emphasizes proved to be inaccurate, the “late scenario” allows him to claim that he had a forecast

that was not as wrong as the forecast that he had emphasized. (AG Ex. 1.2, pp. 14-15)

One litmus test of the Vanston/TFI forecasts is that SBC's actions show that SBC itself does not believe them. If SBC believed Dr. Vanston's forecasts about the impact of competition and technological change on the demand for SBC's wireline services, SBC would be drastically reducing its "2.25 lines per household" distribution planning criteria. It would also be ceasing to install any copper distribution facilities, and instead installing only fiber. Obviously, SBC Illinois is not doing these things. Moreover, if the Vanston/TFI forecasts are to be believed, then SBC's forward-looking network for TELRIC purposes should consist entirely of fiber facilities, with no copper. SBC Illinois' actions show that it does not find the Vanston/TFI forecasts sufficiently reliable or likely to base substantive decisions on them. This Commission should not either.<sup>47</sup>

SBC complains that the FCC-prescribed depreciation lives are "outdated" and "out of date and out of line with economic reality."<sup>48</sup> (SBC Initial Br., pp. 55, 59) The short but complete answer to this complaint is that SBC Illinois is entitled to, and has had ample opportunity to, seek a new set of depreciation lives from the FCC, but has failed to

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<sup>47</sup> In evaluating the need to depart from the FCC-prescribed depreciation lives and move to SBC's financial reporting lives for TELRIC purposes, the Commission should keep in mind that this decision does not impact SBC's recovery of its actual embedded investment. The depreciation component of the TELRIC methodology will provide for recovery through SBC's UNE rates of the full cost (at current prices) of all the facilities assumed to be installed in the new, forward-looking network – even though SBC Illinois' actual embedded plant is already substantially depreciated and SBC's original investment has been substantially recovered. (SBC's depreciation reserve percentage as of 2002 was 56.5%. (AT&T/MCI Joint Ex. 1, p. 13))

<sup>48</sup> In contrast to this characterization, the U.S. Supreme Court noted just two years ago that the FCC prescribed rates are constantly revised so that they reflect the current state of telecommunications technology. *Verizon Communications, Inc. v. FCC*, 535 U.S. 467, 520 (2002). Further, SBC has not contended that the FCC-prescribed depreciation lives are not forward-looking. (See Joint CLEC Initial Br., pp. 94-95)

do so. (AT&T/MCI Joint Ex. 1.1, p. 15) SBC's failure to seek represeted depreciation rates from the FCC speaks volumes. Certainly SBC would find it more efficient to obtain new, shorter depreciation lives from the FCC than to attempt to persuade numerous state commissions to adopt shorter depreciation lives in individual proceedings. Moreover, if (as SBC argues) it is recent pronouncements of the FCC (such as the *Triennial Review Order* and the TELRIC NPRM) that compel the conclusion that the current FCC lives are too short for TELRIC purposes and that financial reporting lives must be used to set TELRIC-compliant rates, then certainly the FCC would be the most receptive forum in which to seek that reduction in depreciation lives. In such a proceeding SBC could seek to persuade the FCC to set new depreciation rates based on the technology forecasts of the prolific Dr. Vanston. Yet SBC has **not** sought to obtain re-prescribed, shorter depreciation lives (equal to or comparable to its financial reporting lives) from the FCC. It is apparent that SBC has concluded that the FCC would reject such a request. This Commission should do so too.<sup>49</sup>

In summary, for the reasons shown in detail at pages 90-113 of Joint CLECs' Initial Brief, the Commission, as it did in the TELRIC I Order, should continue to use the FCC's prescription depreciation lives for SBC Illinois as the forward-looking economic lives for purposes of calculating SBC's TELRIC-based UNE rates. The Commission should reject SBC's proposal to substitute its financial reporting lives for this purpose.

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<sup>49</sup> For a longer (but still complete) answer to SBC's complaint, we refer to pages 94-98 and 108-112 of Joint CLECs' Initial Brief, where we comprehensively demonstrated, based on record evidence, that the FCC prescription depreciation lives for SBC Illinois are not "outdated" or too long, and that adoption of the shorter lives argued for by SBC and Dr. Vanston is unwarranted.

**3. Cost of Capital**

**a. Summary of Recommendation**

Joint CLECs reiterate their recommendation that the Commission should utilize an overall cost of capital of 7.54% for SBC Illinois for purposes of setting SBC’s UNE rates in this proceeding. For ease of reference, Joint CLECs repeat below the components of our proposed overall cost of capital (see AT&T/MCI Jt. Ex. 2, p. 45):

<b>Component</b>	<b>Cost Rate</b>	<b>Percent of Total</b>	<b>Weighted Cost</b>
Common equity	9.46%	66.12%	6.25%
Long Term Debt	5.60%	11.53%	0.65%
Short Term Debt	2.84%	22.35%	0.64%
Total		100%	<b>7.54%</b>

**b. Cost of Common Equity**

**i. Response to SBC**

SBC’s principal argument is that because (it contends) the FCC has recently “mandate[d]” that the cost of capital for TELRIC purposes “must fully reflect the risks inherent in a fully competitive market”, it is necessary that SBC receive a higher cost of capital in this case than was set in the TELRIC I Order.<sup>50</sup> (SBC Initial Br., pp. 62-63) SBC’s assertions are incorrect in numerous respects.

First, SBC’s representation of what the FCC said about cost of capital in the *Triennial Review Order* is misleading. The FCC did **not** state that the cost of capital must “reflect the risks inherent in a *fully* competitive market.” Here is what the FCC actually said in the *Triennial Review Order*:

First, we clarify that a TELRIC-based cost of capital should reflect the risks of a competitive market. The objective of TELRIC is to establish a price that replicates the price that would exist in a market in which there is facilities-based competition. In this type of competitive market, all

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<sup>50</sup>The overall cost of capital established in the TELRIC I Order was 9.52%.

facilities-based carriers would face the risk of losing customers to other facilities-based carriers, and that risk should be reflected in TELRIC prices. (*Triennial Review Order*, ¶680)

. . . [W]e now clarify that states should establish a cost of capital that reflects the competitive risks associated with participating in the type of market that TELRIC assumes.<sup>51</sup> (*Id.*, ¶681)

The market involved in this case is the market in which SBC Illinois leases UNEs to its competitors. While this market of course imposes greater risk on SBC than it faced when it was the monopoly provider of local telephone service, that risk is less than the risk inherent in other aspects of the telecommunications business. For example, if SBC loses a retail customer to a CLEC who serves the customer using UNE facilities leased from SBC, SBC's facilities are not stranded. SBC continues to receive revenues in respect of that customer from the CLEC that is leasing SBC's local loop (and any other UNE facilities that the CLEC is leasing from SBC in order to serve the retail customer), at prices set to enable it to recover its forward-looking costs. Contrast that situation with, for example, the long distance business (which SBC Illinois has recently elected to enter): If SBC loses a long distance customer to a competing inter-exchange carrier, it loses all long distance revenues it was receiving from that customer and the facilities it was using to serve that customer may be stranded. This illustrates why Staff cost of capital witness Michael McNally, in applying the directives of the *Triennial Review Order*, correctly concluded that the relevant level of risk in setting UNE loop rates is somewhere between the low degree of competition of rate-regulated, exclusive franchise utility services and

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<sup>51</sup>Note that in both of these statements, the FCC carefully chose to use the word "clarify". Contrary to SBC's contention, the FCC was *not* setting a new cost of capital standard, different than that which existed at the time of this Commission's TELRIC I Order.

the high degree of competition of unregulated industrial companies. (Staff Ex. 12.0, pp. 30, 33)

Further, at least with respect to the cost of common equity, which is the most expensive form of capital and the most significant component of the capital structure<sup>52</sup>, the appropriate level of risk is captured through the use of comparable companies to develop the cost of equity. While there were some differences among the comparable samples selected by each of the three cost of capital witnesses, all three witnesses included the three major RBOC ILECs (Bell South, Verizon and SBC) in their respective proxy groups.<sup>53</sup> These companies are generally in the same businesses, including the business of leasing UNEs pursuant to the mandate of the Telecommunications Act of 1996.<sup>54</sup> Therefore, the relevant risks are captured through the use of comparable companies to develop the cost of capital.

In arguing for a higher cost of capital than was adopted in the February 1998 TELRIC I Order, SBC Illinois states that AT&T/MCI witness Mr. Murray stated that “SBC faces very different financial and economic conditions today than those it faced in

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<sup>52</sup>All three cost of capital witnesses (McNally (Staff), Avera (SBC) and Murray (AT&T/MCI)) developed their proposed costs of capital using capital structures that included more than 50% equity and less than 50% debt.

<sup>53</sup>SBC witness Dr. Avera also included the fourth RBOC ILEC, Qwest, in his analysis, which was prepared in 1999. AT&T/MCI witness Ms. Murray and Staff witness McNally did not include Qwest in their analyses, both of which were prepared more recently and used much more recent data, because subsequent to 1999, Qwest ceased paying common dividends (and thus could not be used in a standard DCF analysis), and also disclosed certain accounting irregularities. (AT&T/MCI Jt. Ex. 2, p. 19)

<sup>54</sup>In fact, for the same reasons noted above, the overall risk of the holding companies that own the operating telephone companies that are obligated to provide UNEs is probably greater than the risk associated with providing UNEs standing alone. (See AT&T/MCI Jt. Ex. 2, pp. 16-18)

1998.”<sup>55</sup> (SBC Initial Br., p. 63) This is an incomplete and misleading extraction from Ms. Murray’s testimony. In that portion of her testimony Ms. Murray was identifying the myriad changes since 1998 that have reduced SBC Illinois’ cost of capital. Here is the complete answer that SBC failed to quote:

SBC Illinois faces different financial and economic conditions today than those it faced in 1998. For example, SBC Illinois is now a subsidiary of a far larger company, as a result of the merger of Ameritech, Inc., with SBC Communications, Inc., which had previously merged with Pacific Telesis and Southern New England Telephone. In seeking approval of these mergers, the applicants argued that the mergers would improve the combined company’s access to capital markets. Thus, by SBC’s own prior claims to regulators, the cost of capital for SBC Illinois should have declined, all other things being equal. (AT&T/MCI Jt. Ex. 2, p. 9; footnote omitted)<sup>56</sup>

On that same page of her testimony, Ms. Murray noted that “Virtually every quantitative indicator suggests that SBC Illinois’ cost of capital has decreased, not increased, since February 1998, which was the date of that award [the 9.52% overall cost of capital determination in the TELRIC I Order]”. (*Id.*) On the next page she pointed out that the interest rate on 10-year Treasury bonds fell by 161 basis points from February 1998 to April 2003 and that the interest rate on 3-month Treasuries fell by 412 basis points over the same time period. (*Id.*, pp. 10-11)

Moreover, later in her testimony, Ms. Murray reported that (1) consensus analysts earning growth rates for the comparable companies used in SBC witness’ Dr. Avera’s cost of equity analysis fell by an average of 495 basis points (according to I/B/E/S –

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<sup>55</sup>SBC cites this statement to page 53 of AT&T/MCI Jt. Ex. 2. Actually it appears at page 9 of that exhibit.

<sup>56</sup>Of course, there is no mention in SBC’s testimony or brief in this case of the representations it made to this Commission in seeking to have the SBC-Ameritech merger approved, that the merged company would have a lower cost of capital.

Thomson First Call) and 967 basis points (according to *Value Line*) from early 1999 to early 2003; (2) the historical equity risk premium (based on data from 1926 to date) that Dr. Avera used dropped by 50 basis points from early 1999 to early 2003; and (3) interest rates on 30-year utility bonds rated A+/A1 (SBC's rating) fell by about 90 basis points from early 1999 to early 2003. (*Id.*, 55-60)

SBC contends that its cost of capital is higher than at the time of the TELRIC I Order because there have been “dramatic decreases in its stock prices.” (SBC Initial Br., p. 63) SBC's assertion betrays a fundamental lack of understanding of basic cost of capital theory. A fall in the price of a stock does not necessarily mean an increase in the company's cost of equity capital. Considering the familiar DCF equation  $k = (D/P) + g$ , one can see that it is possible for (i) the price (P) of a stock to decline (which will increase D/P, or dividend yield), (ii) the investor-anticipated earnings/dividend growth rate (g) to also decline, and (iii) the cost of equity (k) to remain the same (or even decrease). In fact, that may be exactly what has happened to SBC, since, as noted above, the analysts' earnings/dividend growth rate forecasts (typically used as a proxy for investor expectations of growth) for SBC and its comparable companies also fell significantly from 1999 to 2003. If investor expectations as to the future growth of a company's earnings and dividends fall, investors probably will not be willing to pay as much for the stock, and the price will decline. But none of this necessarily means that the firm's cost of capital has risen.

Thus, when SBC asserts that “the *only* way the Commission could decrease the 9.52% cost of capital adopted in 1998 [in the TELRIC I Order] would be if it found that the risks faced by SBC Illinois in a market filled with ubiquitous facilities-based

competition would somehow be *less* than the risk SBC Illinois faced in 1998” (SBC Initial Br., p. 64), SBC is simply wrong. To the contrary, *even if* the Commission were to conclude that SBC Illinois faces a riskier and more competitive business environment in the leasing of UNEs than it did in 1998 (which Joint CLECs dispute), SBC’s cost of capital *could still be lower today* than it was in 1998, due to the much lower interest rates and overall costs of capital that prevail today. Ms. Murray’s and Mr. McNally’s analyses show that this in fact is the case.

Moreover, SBC has no cause to complain if the Commission is unable to award SBC Illinois a cost of capital that SBC believes reflects the risks it faces today. As SBC barely mentions in its Initial Brief, but as both Joint CLECs and Staff point out in their Initial Briefs, SBC’s cost of capital analysis, presented by Dr. Avera, was prepared in 1999, using data from late 1998 and early 1999. (See Joint CLEC Initial Br., p. 128; Staff Initial Br., p. 79) Not only is SBC’s 1999 analysis woefully out of date with respect to current capital market conditions, as described above, but it cannot possibly be representative of the risks faced by SBC today, five years later – be they greater or lesser than they were in 1998-1999.<sup>57</sup>

SBC states that “the FCC has designated 11.25% as the starting point for a cost of capital analysis”, and cites ¶702 of the *Local Competition Order*. (SBC Initial Br., p. 65) Here is what the FCC in fact said at ¶702 of the *Local Competition Order*: “We recognize that incumbent LECs are likely to face increased risks given the overall

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<sup>57</sup>As described at pages 129-130 of Joint CLECs’ Initial Brief, Ms. Murray performed an update of Dr. Avera’s 1999 analysis using 2003 data, and found that it reduced the cost of equity from 13.0% to 10.63% and the overall cost of capital from 12.19% to 9.53%. (See AT&T/MCI Jt. Ex. 2, pp. 60-61) This update used more current data than Dr. Avera had used but did not correct for other major methodological flaws in Dr. Avera’s analysis.

increase in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, *we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current marketplace cost of equity and debt.*” And that was in 1996, when the general level of interest rates and capital costs was much higher than it is in 2003-2004.<sup>58</sup> SBC also cites in its favor the cost of capital determination in the *Virginia Arbitration Order*. (SBC Initial Br., p. 74) However, the testimony in that case was filed in 2001 and the cost of capital analyses were based on data from 2000 (SBC Ex. 13.2, p. 28; AT&T/MCI Jt. Ex. 2.2, p. 20), so the record on which the determination was based is also outdated in relation to current interest rates and capital market conditions. The FCC WCB expressly noted that its cost of capital determination reflected the vintage of the data available and that the subsequent declines in interest rates would have yielded different results if the decision had been based on current data when the Order was released in 2003. (*Virginia Arbitration Order*, footnote 203)

In evaluating SBC’s cries for a higher cost of capital award, the Commission should also keep in mind that this is not a traditional utility rate case in which the cost of capital is being applied to a depreciated original cost rate base. Rather, in setting SBC’s UNE rates, the cost of capital determined by the Commission will be applied to the cost of a newly-constructed network, with all facilities and equipment priced at current prices. In other words, what SBC Illinois gets here is essentially a fair value rate base (unreduced by accumulated depreciation), thereby removing the typical utility risk associated with

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<sup>58</sup>In fact, the 11.25% benchmark rate of return was originally adopted by the FCC in 1990, and thus can hardly be representative of capital market conditions today. (AT&T/MCI Jt. Ex. 2.2, p. 17)

having long-lived plant whose current replacement value far exceeds the depreciated original cost used for ratemaking purposes. Imagine giving Commonwealth Edison a full fair value rate base (with no reduction for accumulated depreciation) and then applying a 12.19% rate of return (with a 13.0% cost of equity and an 86% equity component in the capital structure) to it, as SBC requests here! This component of the TELRIC methodology reduces, rather than increases, the risk faced by SBC Illinois as a provider of UNEs in a competitive market.

In addition to being woefully outdated, SBC's cost of equity analysis, prepared by Dr. Avera, suffered from a number of serious methodological flaws, as identified by both AT&T/MCI witness Ms. Murray and Staff witness Mr. McNally. The principal flaws in Dr. Avera's analysis were discussed at pages 131-135 of Joint CLECs' Initial Brief and will not be repeated here. We note that in its Initial Brief, after devoting multiple pages to its complaint that its allowed cost of capital needs to be higher than in the 1998 TELRIC I Order, SBC devotes just one 15-line paragraph (at pp. 73-74) to describing Dr. Avera's analysis. SBC fails to mention to the Commission that Dr. Avera's analysis was based on 1998-1999 data; fails to mention to the Commission that his high cost of equity number is the result of a questionable assumption that the equity risk premium increases as interest rates decline; and fails to respond to any of the other criticisms of Dr. Avera's analysis that were presented in Staff and CLEC testimony.

SBC's few criticisms of AT&T/MCI witness Ms. Murray's cost of equity analysis suffer from flaws similar to those in Dr. Avera's own analysis. (SBC Initial Br., pp. 75-77) SBC asserts (twice) that "Capital markets have become increasingly attuned to the risks associated with investing in the telecommunications industry" (*Id.*, pp. 75, 76-77)

and accuses Ms. Murray's analysis of failing to take this into account. However, Ms. Murray's cost of equity analysis was based on data as of early 2003 and so reflects the current views of investors concerning the telecommunications industry much more so than does Dr. Avera's outdated analysis.<sup>59</sup> Further, her use of comparable company data and published investor analysts' growth forecasts in developing her cost of equity estimate captures the current marketplace views of investors.

SBC criticizes Ms. Murray's analysis because (1) she used a three-stage growth DCF analysis and (2) she based the risk premium in her CAPM analysis on historic data. (SBC Initial Br., pp. 76-77) The first criticism is invalid; as explained at page 119 of Joint CLECs' Initial Brief, use of a three-stage growth DCF model is appropriate because of the disparity between the current forecasts of growth in earnings for SBC and the comparable companies and the forecasted growth rate for the economy as a whole. (See AT&T/MCI Jt. Ex. 2, pp. 24-25) Further, Ms. Murray showed that her use of a three-stage growth DCF model actually produced a higher cost of equity for SBC than if she had used a single-stage (constant growth) DCF model. (Joint CLEC Initial Br., p. 119; AT&T/MCI Jt. Ex. 2., pp. 24-25) The second criticism is also misplaced. Ms. Murray based her risk premium on both the widely-used Ibbotson & Associates historical series and on the average forward-looking risk premium from four prominent sources. (See Joint CLEC Initial Br., pp. 120-21) Moreover, the historical data actually produced the higher risk premium. (*Id.*)

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<sup>59</sup>As described at pages 125-27 of Joint CLECs' Initial Brief, after the "abatement" period of this case ended, Ms. Murray also performed an update of her cost of capital analysis, using data from the latter part of 2003. Her updated analysis found a cost of equity of 8.70% and an overall cost of capital of 7.04%. However, Joint CLECs are not reducing their cost of equity and cost of capital recommendations below the 9.46% and 7.54% values, respectively, presented by Ms. Murray in her direct testimony.

Finally, SBC's assertion that "the near-term growth projections that [Ms. Murray] used in [her] DCF analysis understate long-term expectations for the telecommunications industry, which is in the midst of a downward correction" (SBC Initial Br., p. 76), should be rejected by the Commission. In fact, the current anticipated earnings growth rates represent more realistic expectations of prospects for this industry, in contrast to the overheated growth expectations for this sector of the high-flying late 1990's, which Dr. Avera used in his analysis. Indeed, it is inconsistent for SBC to argue on the one hand that it faces increasingly severe competitive risks that must be taken into account in determining the cost of capital, while arguing on the other hand that current growth expectations are too low and that the industry growth rates seen in the late 1990's are more representative of long-term prospects and must be used in the cost of capital analysis.

**ii. Response to Staff**

As noted at pages 135-36 of Joint CLECs' Initial Brief, although Staff witness Mr. McNally's proposed cost of equity estimate is 298 basis points higher than Ms. Murray's estimate, Mr. McNally's weighted cost of equity is only 9 basis points higher than Ms. Murray's weighted cost of equity. (Ms. Murray also recommended higher costs of short-term and long-term debt than did Mr. McNally.) By far the biggest factor causing Staff's overall cost of capital to be 108 basis points higher than Ms. Murray's overall cost of capital is the lower proportion of short-term debt that Mr. McNally included in his proposed capital structure. (*Id.*)

Ms. Murray's principal criticisms of Staff witness Mr. McNally's cost of equity estimation technique were discussed at pages 136-137 of Joint CLECs' Initial Brief. In summary, those criticisms are (1) Mr. McNally used a single-stage (constant growth)

DCF model despite the disparity between the projected growth rates for SBC and the other telecommunications firms in his comparable sample and the economy as a whole, which is an unsustainable situation; and (2) his comparable companies included firms that are not comparable in risk to, but rather are riskier than, SBC Illinois. These and other methodological flaws led Mr. McNally to generate an overstated cost of equity estimate (although, as noted above, this is significantly mitigated by his use of a lower equity ratio in his proposed capital structure).

**c. Cost of Debt**

SBC proposes a cost of long-term debt of 7.18%. (SBC did not include any short-term debt in its proposed capital structure.) Since this figure is based on the average of the March 1999 yields on A and AA-rated bonds (SBC Initial Br., p. 72), it is simply too outdated to be accepted. Long-term bond yields were at significantly lower levels in 2003 than they were in 1999. (See Joint CLEC Initial Br., p. 130) As Staff succinctly states, “On its face, it is virtually impossible to assert seriously that using five-year-old rates will obtain a forward-looking cost of debt.”<sup>60</sup> (Staff Initial Br., p. 75) The long-term debt costs developed by both Joint CLEC witness Ms. Murray (5.60%) and Staff witness Mr. McNally (4.99%) are based on much more recent data and thus are far more appropriate for purposes of this case than is SBC’s outdated figure.

**d. Capital Structure**

SBC criticizes the inclusion by Joint CLECs and by Staff of short-term debt in the capital structure. SBC states that “Short-term debt is used to meet *temporary* capital

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<sup>60</sup>SBC notes that the FCC WCB adopted a 7.86% cost of debt for Verizon in the *Virginia Arbitration Order*. (SBC Initial Br., p. 73) However, as noted in the Cost of Equity discussion, above, that decision was based on 2000 data and thus the cost of debt adopted in that Order would not reflect current and projected capital market conditions today.

requirements or to finance capital improvements until it is feasible for a company to issue common stock or long-term debt.” (SBC Initial Br., p. 71) However, the record belies this assertion for SBC. First, over 25% of SBC’s total capital, and most of its debt, is short-term debt. (AT&T/MCI Jt. Ex. 2, p. 74) This high percentage of short-term debt in SBC’s actual capital structure should dispel any notion that issuance of short-term debt is just a “temporary” measure for SBC. Further, the capital structure adopted by the Commission for SBC in the TELRIC I Order over six years ago included 23.3% short-term debt, which is almost identical to the percentage recommended here by Ms. Murray (22.35%). (See TELRIC I Order, pp. 10-12) The fact that SBC (Ameritech) had such a significant portion of short-term debt in its capital structure in 1998 and continues to have a substantial short-term debt component in its capital structure today further demonstrates that short-term debt is not a “temporary” financing option for SBC. Moreover, given the recent and current extremely low interest rates on short-term debt, one would expect the owner of the efficient forward-looking network to take advantage by financing a reasonable portion of the capital investment with short-term debt. (AT&T/MCI Jt. Ex. 2, pp. 76-77) In fact, SBC itself has repeatedly taken advantage of the cheap short-term financing opportunities that have been available in recent years. (*Id.*, p. 74)

SBC also asserts that the capital structure should be based solely on current market values. (SBC Initial Br., p. 67) This criticism is directed more at Staff than at Joint CLECs; Ms. Murray based her capital structure on an average of book values and market values, and developed a proposed common equity ratio of 66.12% (versus 51.00% proposed by Staff and 86% proposed by SBC). (See Joint CLEC Initial Br., pp. 123-24, 134-35) Nevertheless, SBC’s proposed capital structure has an unreasonably high equity

component. As Mr. McNally and Staff succinctly put it, SBC's proposed capital structure is not efficient due to its high equity component; it is representative of an AAA-rated company, whereas a reasonable level of financial strength can be achieved at much lower cost (*i.e.*, with more debt and less equity in the capital structure). (Staff Initial Br., p. 103) Joint CLECs also note that given SBC's own observation that there have been "dramatic decreases" in its stock price (SBC Initial Br., p. 63), the use of market values from 1998-1999 to establish the capital structure would result in a greatly inflated equity component. (See AT&T/MCI Jt. Ex. 2, pp. 54, 61) Accordingly, the Commission should reject SBC's proposed capital structure.

**C. Other Loop Recurring Cost Modeling And Input Issues.**

**Summary of Recommendations**

Following is a summary of Joint CLECs' recommendations regarding changes in assumptions and inputs the Commission should order SBC to make before producing its final compliance results using its LoopCAT model. These recommendations are relevant, of course, only if the Commission elects to use the LoopCAT model to set rates in this case (rather than adopting Joint CLECs' alternative recommendation to reject the LoopCAT model entirely and continue to use the TELRIC-complaint loop costs adopted in the TELRIC I Order).

**Cable and DLC Installation Costs**

1. LoopCAT should be modified to eliminate the reliance on embedded and otherwise unsupported "linear loading" factors in establishing installation costs.
2. LoopCAT's cable installation costs should be populated with the forward-looking installation cost estimates by relying on SBC's own internal engineering job estimation tool (the JAMS system). In the alternative, the Commission should adopt Staff's recommendation to utilize the lowest

installation factors in the three years of data SBC used to derive its cable installation factors.

3. LoopCAT should be modified to reflect the Joint CLEC restatement of DS-1 and DS-3 costs, consistent with the TSLRIC/TELRIC costing methodologies.
4. The LoopCAT DLC installation cost should be modified to reflect the forward-looking DLC installation costs provided in SBC's Project Pronto business case, or in the alternative any of the unbiased data points in the record.

### **DLC Investment**

1. The Commission should reject any modification to the DLC sizes in LoopCAT that would serve to increase costs.
2. LoopCAT's DLC investment should be modified consistent with Attorney General witness Mr. Dunkel's removal of building costs for DLC electronic equipment not housed in a building.
3. The LoopCAT DLC investment cost should be modified to properly reflect the discounts available in SBC's vendor contracts (including discounts that SBC has given up in order to obtain benefits in other areas of its business).
4. LoopCAT should be modified to assume 100% IDLC loops.
5. LoopCAT DLC investment should be allocated among the total demand on DLCs, including DSL service.
6. LoopCAT should be modified to assume an allocation factor for DS-1 loops of 4 to 1, not 24 to 1.
7. LoopCAT should be modified to assume 4 DLC-RTs for each DLC-COT.

### **Premises Termination Costs**

1. LoopCAT should be modified to include the bottoms-up restated NID/Drop installation costs recommended by Messrs. Pitkin/Turner, or in the alternative, the Commission should direct SBC to consistently use linear loading factors to calculate NID/Drop installation costs.
2. LoopCAT should be modified to reflect the cost efficiencies associated with MDUs based on U.S. Census data on a deaveraged basis;

### **FDI Costs**

1. LoopCAT should be modified to account for the fact that a large percentage of loops do not have distribution terminals (FDIs).
2. LoopCAT should be modified to reflect the obvious fact that there are only two terminations at the FDI for every working loop (separate and distinct from any spare capacity related to fill factor application in LoopCAT).
3. LoopCAT should be restated so that SBC's premises termination aerial/buried mix reflects the same mix as aerial/buried distribution facilities.

### **Other Forward-Looking Network Assumptions**

1. LoopCAT should be modified to reflect other forward-looking assumptions, including distribution area sizing and cable and equipment sizing.
2. LoopCAT should be modified to exclude loops over 18,000 feet in copper length because those loops cannot provide quality voice services or DSL.
3. Loops with distribution lengths of 18,000 feet or more should be removed from LoopCAT.
4. LoopCAT should be restated using all the loops in SBC's LEIS system (with elimination of loops with distribution lengths of 18,000 feet or more).
5. LoopCAT loop data should be processed by wire center.
6. LoopCAT should use cable resistance assumptions consistent with SBC's engineering guidelines.
7. LoopCAT should use the aerial, buried, and underground cable mix by structure type and zone, as recommended by AT&T witnesses Pitkin and Turner.

#### **1. Cable Installation Factors: SBC Provided No Evidence To Support Its Linear Loading Factors**

SBC's brief only confirms that the Commission has no evidentiary basis to adopt SBC's use of linear loading factors to establish installation costs, absent modification. Any such decision could not be sustained on appeal. The Joint CLECs urge the

Commission to: (i) adopt AT&T witnesses Messrs. Pitkin/Turner's restatement of the installation costs in LoopCAT, using SBC's JAMS system, or (ii) in the alternative adopt Staff's recommendation to use the lowest cable installation factor in the three years of data SBC used to derive these factors. These are the minimum level of modifications necessary to ensure that LoopCAT provides forward-looking costs of installing cable and DLC equipment.

**a. SBC's Linear Loading Factors are Unsupported By the Evidence**

Both Staff and the CLECs agree that SBC's use of linear loading factors drastically overstates SBC's forward-looking installation costs. (Staff Initial Br. at 104-110). Not once in its brief does SBC cite any piece of evidence or testimony supporting the conclusion that there is any linear, proportional, or consistent relationship between the cost of material and the cost of installing it. None exists.

SBC's witnesses all admit that there is no linear relationship between the cost of material and its installation price. (AT&T Ex. 19; Tr. 496-497). Yet that is exactly the assumption LoopCAT makes. SBC's sole excuse for using linear loading factors is "on the whole and on the average, they provide the best tool for computing cost under TELRIC." (SBC Initial Br. at 82) However, SBC has provided no study to support its conclusion that "on average" its loading factors result in appropriate, forward-looking installation costs.

SBC, in fact, did not provide any evidence on that score. Remarkably, SBC did not provide testimony from its own engineers to support its assertion that LoopCAT's linear loading factors result in "average" installation costs that, in the aggregate, are reasonable and forward-looking. At hearing, Mr. Smallwood admitted that SBC never

asked its engineers to “sanity check” the LoopCAT factors to ensure their reasonableness. (Tr. 740-41). To the contrary, even when those engineers spoke up to voice objections about specific cost overstatements, Mr. Smallwood ignored their opinion, blindly assuming that these errors would be washed out in the “averaging” process. (Tr. 491). While SBC criticizes the engineering experience of the CLEC and Staff witnesses, what is clear is that SBC’s own installation costs are not based upon any SBC engineering expert opinion, but merely on the embedded relationship between material and installation costs on SBC’s book of accounts.

In essence, SBC is asking the Commission to use linear loading factors to derive installation costs: (i) absent any evidence that their use derives appropriate, TELRIC-based installation costs, even on average, (ii) absent any evidence that there is a consistent/linear relationship between material and installation costs, and (iii) absent any study or other evidence to rebut SBC’s own admission (and CLEC expert opinion) that there is not, in fact, a linear relationship between installation costs and material prices. The record on this issue could not be more one-sided. It is SBC’s legal burden alone to prove the reasonableness of its TELRIC costs. (*See Local Competition Order*, ¶ 680; C.F.R. §51.505(e) 47). SBC has not even attempted to meet its burden here.

In fact, the evidence demonstrates that “on average” SBC’s use of linear loading factors results in enormously inflated costs for the major equipment in a loop: NIDS/Drops, cable and DLC equipment (see discussion below). Essentially, SBC throws up its hands, arguing that determining installation costs from the “bottom-up” is too difficult because data does not exist to adopt such an approach, and that such an approach would not account for the variety of work activities and circumstances that occur in the

network. In other words, because it cannot think of a better idea, SBC is asking the Commission to turn its back on the record and adopt unsupported and erroneous linear loading factors.

This is hardly a compelling argument. Nor is it supported by the record. The record established that: (i) data does exist to conduct this bottom-up analysis, and (ii) such data reflects average installation costs for each specific type and size of equipment that -- by their very nature as “averages” -- are intended to account for variations in installation activities. In other words, the JAMS average installation costs may sometimes overstate and sometimes understate the activities for a particular job, but will be accurate on average.

SBC is simply trying to make the bottom-up approach sound much harder than it actually is. A bottom-up approach does not mean that average costs are inappropriate, as SBC’s argument implies. The entire purpose of a TELRIC cost study is to determine the “average” time and costs of material and installation for an extremely large new network. To do so, SBC uses cost studies that rely upon averages. For example, LoopCAT builds a single, composite loop for each Illinois rate zone, despite the fact that there are literally millions of loops in SBC Illinois’ network. SBC did not price out each and every loop in its network.

In determining bottom-up installation costs, AT&T witnesses Messrs. Pitkin/Turner took the same approach – they used average installation costs. Specifically, they took the LoopCAT “composite/average” loops, and then (using JAMS data) determined the installation costs of the material assumed in each of these loops. Thus, their approach to determine installation costs – *i.e.*, using averages – is entirely consistent

with the manner in which LoopCAT determines loop material costs. By using JAMS data in this fashion, Messrs. Pitkin and Turner derived average, and wholly appropriate, installation costs for the LoopCAT composite loops.

There is no reason to cost-out every possible variation in work activity in SBC's network to calculate bottom-up installation costs, as SBC's argument assumes. To the contrary, all that need be done is to determine the average installation costs of the material underlying the three LoopCAT composite loops. Using JAMS data, Messrs. Pitkin and Turner did just that. As SBC admitted, the SBC JAMS data relied upon by Messrs. Pitkin/Turner provide the *average costs* of installation for different types of equipment assumed in the LoopCAT composite loops. Thus, Messrs. Pitkin/Turner's use of JAMS gives the Commission exactly what a TELRIC study is intended to capture: the *average costs* of installation, based on *average* work times and *average* labor rates. These averages, by their very nature, take into account the variations that may occur in the network. In other words, by using the LoopCAT average/composite loops as the *inputs* into JAMS, Messrs. Pitkin/Turner assured that the JAMS *outputs* reflect average installation costs for these loops.

Other state commissions, as well as the FCC Wireline Competition Bureau, favor a bottom-up approach to calculating installation costs. The Florida and Georgia commissions recently rejected Bell South's reliance on linear loading factors and instead adopted the bottom-up inputs advocated by the CLECs. (See Joint CLEC Initial Brief, pp. 150-151).

Similarly, in its *Virginia Arbitration Order*, the FCC Wireline Competition Bureau seriously questioned the use of linear loading factors. There, Verizon relied on

such factors to calculate installation costs in its interoffice cost study. As part of their reply case, CLECs attempted to restate Verizon's cost studies that were built on linear loading factors. While the Bureau noted that it was bound by the rules of "baseball" arbitration to adopt one side's position, it went out of its way to question the use of EF&I factors in TELRIC studies. Notably, the Bureau shared the very concerns raised by the CLECs here: that EF&I factors "bear no relationship" to the forward-looking installation costs of equipment:

There is some doubt about the reliability of both Verizon's and AT&T/WorldCom's proposed EF&I factors. Our concerns stem from the fact that the EF&I factor for a specific piece of equipment is derived by applying to the equipment an unsupported *pro rata* share of the cost of installing all equipment associated with that account. As a result, the relationship between the actual installation costs associated with particular pieces of equipment and the installation estimates used to determine the EF&I factor is unclear. The actual costs may be less than or greater than the *pro rata* allocation. *Verizon's claim that the lack of accuracy of the individual in-place costs is not relevant because the factor is calculated on an aggregate basis may not resolve this issue because the pro rata allocation appears to bear no relationship to the EF&I costs associated with any particular type of equipment within an account. (Virginia Arbitration Order, ¶ 523 (emphasis added)).*

In other words, the mere fact that EF&I factors result in *averages* does not mean that *those averages* bear any relationship to the installation costs for any particular piece of equipment. Here, the Commission, unlike the FCC, has before it a bottom-up proposal that would allow it to reject EF&I factors in total. The Commission should follow the lead of the FCC and do just that.

SBC argues that the linear loading factors on the average provide the best tool for computing total average installation costs under TELRIC. However, this conclusion is only true if there is reliable evidence that material and installation costs are linearly related. Otherwise, as the FCC found, the "averages" calculated by linear loading factors

“bear no relationship” to installation costs. As discussed above, SBC presented no evidence on this score. The fact that a 200-watt light bulb costs twice as much as a 100-watt light bulb is no reason to assume that it would take twice as long (and be twice as costly) to install the 200-watt bulb. Yet LoopCAT makes just that assumption for all the equipment in SBC’s loop studies, and would apply the same loading factor to light bulbs as it would to other equipment (*e.g.*, lamps).

SBC attempts to dismiss Staff and AT&T criticisms that its linear loading factors are based upon embedded data. (SBC Initial Br. at 34) SBC first posits a rather cryptic argument that its linear loading factors are based on “historical data” not embedded data. (SBC Initial Br. at 84). We fail to understand the distinction SBC seeks to draw. If data is historic, it is also embedded, as defined by the FCC. (See 47 C.F.R. §51.505)

Second, SBC argues at length that its past experience is relevant to what might happen in the future. However, the point SBC misses is that its installation factors are derived from the relationship between material and total cost, as provided in SBC’s historic and embedded General Ledger data. That data includes a host of backward-looking equipment, such as DAMLs, old DLCs, and repeaters, equipment even SBC does not assume will exist in a forward-looking network. (Tr. 477-482). As Staff correctly perceived, the fatal flaw of SBC’s installation factors are that they capture “historical, inefficient cost relationships rather than efficient forward-looking cost relationships.” (Staff Initial Br. at 105).

Finally, SBC takes issue with Staff and AT&T testimony that points out that SBC’s historic costs fail to reflect the efficiencies of scale and scope inherent in the “scorched node” approach TELRIC mandates. SBC calls this assumption unrealistic.

(SBC Initial Br. at 84-85). However, as fully explained in Section III.A. above, that is exactly the assumption TELRIC mandates, and it is also why SBC assumes that its plant is depreciated as if it were put in place all at once today. SBC cannot benefit from that assumption, on the one hand, while it ignores that assumption in other portions of its study. As Staff put it: “Unless and until the FCC’s current rules and standards are modified, the current TELRIC standards and rules govern this proceeding. Thus, the costs to be modeled under TELRIC are the costs to build an efficient network today, not the additional costs that might be incurred if additional facilities must be added later.” (Staff Initial Br. at 109) (“Staff’s point is that TELRIC requires a determination of the costs ‘to build an efficient network today,’ not the costs to supplement later the network that would be built today.”)

The Commission simply cannot turn its back on the fact that SBC’s installation factors, based as they are on embedded data, result in an overstatement of forward-looking installation costs. The Commission should adopt either AT&T’s bottom-up restatement of SBC’s cable installation costs, or otherwise adopt Staff’s recommendation to adopt the lowest cable installation factor within the three years of data provided by SBC.

**b. Messrs. Pitkin/Turner’s Use of JAMS to Restate Installation Costs Is Appropriate and Supported By Record Evidence**

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SBC’s criticism of the CLEC use of JAMS data is similarly unsupported.

SBC first attempts to discount SBC’s internal reliance on JAMS data. These claims are contradicted by the plain terms of the SBC JAMS documentation produced during discovery. SBC’s own documentation affirms that JAMS is appropriate to use in estimating installation costs. That SBC documentation demonstrates that: \*\*\*BEGIN



hundreds of square feet of lawn and dealing with driveways and large rocks) Mr. White indicated that his “typical” cable placement job resulted in a **\*\*\*BEGIN CONFIDENTIAL xxxxxx END CONFIDENTIAL\*\*\*** JAMS installation estimate, while Messrs. Pitkin/Turner’s use of JAMS provided for a **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** estimate for placing the same 1,000 feet of cable.

First of all, this proves nothing except that, under certain circumstances, Messrs. Pitkin/Turner’s JAMS estimates may be high or low. Messrs. Pitkin/Turner asked for JAMS information from SBC “as an engineer would use” the system to determine “total costs”, in order to derive an average cost of a cable placement job. We concede that certain jobs, such as the one provided by Mr. White, may include activities that might make that job result in higher costs than assumed by Messrs. Pitkin/Turner’s use of JAMS. Assuredly, SBC and Mr. White were careful to pick an example that had the most possible work activities associated with it, yet even for that SBC-hand-picked job Messrs. Pitkin/Turner’s estimate accounts for 75% of the total costs.

On the other hand, we would expect other cable placing jobs to come out similarly below the Pitkin/Turner JAMS estimates. That is the point of using an average. What SBC failed to provide is any evidence that “on average” Messrs. Pitkin/Turner’s JAMS estimates for cable placing jobs materially understate the costs of cable placing jobs, despite the fact that the relevant data is well within SBC’s control. The fact that certain activities might take place on some jobs, and not on others, does not mean that the JAMS estimates do not provide exactly what the JAMS documentation says it should: a reliable estimate of the average cost of a project.

Moreover, Mr. White's testimony on this subject only confirms that LoopCAT's use of installation factors does not even come close to providing an average estimate for cable placement jobs, as Staff and AT&T have argued. AT&T Cross Exhibit 22P indicates that SBC's linear loading factors would result in an "average" installation cost of placing the same 1,000 feet of buried cable of **\*\*\*BEGIN CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**. (AT&T Cross Ex. 22P). Not even Mr. White's "typical" JAMS estimate for such a job of **\*\*\*BEGIN CONFIDENTIAL** xxxxxxxx **END CONFIDENTIAL\*\*\*** – full as it is with directional boring, large rocks, and reseeded work – comes close to the result derived by SBC's use of linear loading factors. In the very example used by Mr. White (RSW-R2), SBC's use of linear loading factors would result in a **massive 66% overstatement** in cable installation costs. Clearly, Messrs. Pitkin/Turner's estimates are much more in line with "reality" than are SBC's linear loading factors.

SBC also took issue with Messrs. Pitkin/Turner's slight modification of the JAMS data. Specifically, Messrs. Pitkin/Turner made two modifications to the JAM data: (1) they modified the labor rates to reflect the labor rates proposed by AT&T witness Mr. Flappan (SBC's criticisms of those AT&T proposed labor rates are addressed in Section IV.F of Joint CLECs' Initial Brief and in Section IV.F of this Brief), and (2) they modified the "setup" times in the work installation estimates to account for the efficiencies of scale and scope inherent in a TELRIC study. Messrs. Pitkin/Turner made no other changes to the JAM installation time estimates provided by SBC.

SBC argues that the AT&T "setup" time modifications are inappropriate. However, the debate concerning these modifications is not a simple "battle of the

experts.” Instead, this debate concerns the proper reading of the FCC’s TELRIC methodology. AT&T’s modifications to the setup times in JAMS are necessary for these estimates to be TELRIC-compliant. These setup times reflect the time it takes SBC employees to travel to and from a job site. Obviously, if the employee can do more jobs at a particular location, per-job travel time is greatly reduced. The TELRIC pricing methodology requires that we assume that the ILEC has deployed the least-cost most efficient network and equipment, assuming its existing wire centers and customer locations. The ILEC benefits from this assumption by being allowed to fully depreciate its plant and equipment as if it was placed *all at once* today. The tradeoff, of course, is that the ILEC must assume the efficiencies in placing this network in place *all at once* today. As Messrs. Pitkin/Turner explained, the JAMS estimates reflect smaller construction projects associated with maintaining and expanding a large network that is already in place. These small projects fail to encompass the efficiencies in travel and setup times associated with the initial build-out of a network. TELRIC mandates that we consider this type of build-out. Therefore, the AT&T modifications to the JAMS setup times are appropriate to develop TELRIC-based costs.

Nevertheless, in the event the Commission does not believe these modifications are appropriate, it need not reject the use of JAMS in its entirety. Instead, the Commission could order the use of JAMS data with the setup times reflected in the JAMS data provided by SBC. This data is in the record as part of Attachment BFP/SET-3. In doing so, the Commission would ensure that the LoopCAT studies are not polluted by unlawful and unsupported linear loading factors.

In conclusion, contrary to SBC's assertions, there is no evidence that Messrs. Pitkin/Turner's use of the JAMS installation estimates exclude costs, or that the JAMS estimates are otherwise unreliable for the purpose for which Messrs. Pitkin/Turner used them. However, if the Commission chooses not to rely on these estimates, at the very least, it should adopt Staff's recommended modifications to SBC's overstated cable installation factors.

c. **Linear Loading Factors Distort DLC Costs**

Beyond our objection to the generic use of linear loading factors, the Joint CLECs strenuously object to the use of linear loading factors to calculate the installation costs for DLC equipment.<sup>61</sup>

It is worth recapping how LoopCAT calculates DLC installation costs. The use of linear loading factors results in LoopCAT assuming that the total cost of a DLC system (including material and installation) is **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\***, of which a sizable **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** is attributable to installation labor. (AT&T Ex. 2.2, p. 7).

The Joint CLECs, on the other hand, relied upon Project Pronto data to restate these installation costs to include **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** in installation costs, with a total cost of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\***.

SBC has admitted that a DLC system costs the same amount to install, regardless of its price. In discovery, SBC admitted that the costs of installing a 672 DLC system are

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<sup>61</sup> Thus, even if the Commission were to adopt SBC's linear loading factors for other equipment types, it should, at the very least, order SBC to use the Joint CLEC estimates of DLC installation costs.

exactly the same as the costs of installing a more expensive 2016 DLC system. (AT&T Ex. 2.0, p. 47). Yet LoopCAT would assume that because the 2016 system is more expensive to buy, it is more expensive to install. This admission, by itself, necessarily requires the rejection of linear loading factors in determining DLC installation costs.

Moreover, numerous items of record evidence confirmed that SBC's use of linear loading factors massively overstates DLC installation costs. These same items affirm the reasonableness of the AT&T witnesses' cost estimates:

- First, SBC's engineering experts in Texas and California testified that it would not take even "multiple weeks" to put in a remote terminal. (AT&T Ex. 2.0, pp. 72-85). One SBC expert estimated that the total costs of the 2016 DLC RT, including installation, material, line cards, land and building, ranged between \$120,000-150,000. (AT&T Ex. 2.0, pp. 72-76). When subtracting out the cost of line cards from this estimate (resulting in **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** in total costs), it is clear that the use of linear loading factors derives a DLC installation cost **\*\*\*BEGIN CONFIDENTIAL xxxxxx \*\*\*END CONFIDENTIAL** times the estimates provided by SBC's own experts. (*Id.*) These estimates are very much in line with the Joint CLEC estimate of total costs -- **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\***.
- Second, the SBC JAMS estimates produce an estimate of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** in installation costs for a DLC RT, very much in line with the Project Pronto installation estimates of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx \*\*\*END CONFIDENTIAL** and cannot be reconciled with SBC's inclusion of some **\*\*\*BEGIN CONFIDENTIAL xxxxxxxxxxxx END CONFIDENTIAL\*\*\*** in installation costs in its study.
- Third, SBC's California witness, Ms. Bash, admitted that it would not take multiple weeks to install a DLC-RT. (AT&T Ex. 2.0, p. 77-78). This testimony cannot be squared with the results of SBC's application of linear loading factors.

SBC quibbles with some of these data points. SBC first argues that its revised cost of installing a DLC-RT falls within Mr. Trott's total DLC cost range of \$120-150,000. (SBC Initial Br. at 92,93, 99-100). That is false. As noted, SBC's total cost of putting in a DLC-RT, including all material and installation, is **\*\*\*BEGIN**

**CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**. (AT&T Ex. 2.2 p. 7) SBC's comparison is not an apples to apples comparison, as Mr. Trott's estimate included all material and installation costs, including line cards, while the **\*\*BEGIN CONFIDENTIAL** xxxxxxxx **\*\*\*END CONFIDENTIAL** figure cited by SBC does not include all installation costs (such as those captured by other factors such as land and building) or material costs (such as line cards) – and that is exactly what AT&T witnesses Mr. Pitkin and Mr. Turner told SBC when asked about these figures during the hearing. (Tr. 1643-46). SBC is playing fast and loose with the record in this case.<sup>62</sup>

Staff witness Mr. Lazare (as well as AG witness Mr. Dunkel) overlooked the fact that these updated SBC DLC costs still conflict with the DLC cost ranges they proposed in their testimony. However, both these witnesses were misled by SBC, as SBC's total DLC installation costs are significantly greater than both the costs to which Mr. Dunkel refers and to the factors identified by Mr. Lazare. (See discussion at pages 6-9 of AT&T Ex. 2.2). SBC is therefore wrong to claim that its DLC cost recommendations fall within the ranges recommended by these witnesses.

SBC further claims that AT&T misconstrued Ms. Bash's testimony from Texas, which was meant to indicate that a full crew of "3 or 4" technicians could put in a DLC-RT in a week. First of all, nowhere in that deposition did Ms. Bash indicate the use of multiple technicians. (AT&T Ex. 2.0, pp. 76-77 and Attach. BFP-SET-2.) In fact, she specifically referred to "technician days." *Id.* Moreover, SBC's "evidence" concerning

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<sup>62</sup> SBC also criticizes Messrs. Pitkin/Turner's attempt to back out the cost of line cards from Mr. Trott's estimates of total DLC costs. However, that is entirely appropriate, since Messrs. Pitkin/Turner were comparing Mr. Trott's estimate to SBC's recommendation in this proceeding that did not include line cards. Moreover, Mr. Trott himself admitted that his estimate included line cards.

what Ms. Bash meant came from Mr. White, who admits that his information is based on hearsay statements Ms. Bash allegedly made to him. (Tr. 525-527). That is hardly the type of record evidence that the Commission should rely on in making its determination.

Moreover, whether Ms. Bash meant to assume three technicians or two (as assumed by Messrs. Pitkin/Turner) is really irrelevant. The fact remains that SBC's DLC installation costs are far in excess of the costs that would result from the time 2, 3 or 4 technicians could spend in a week or even two weeks to put in a DLC system. Indeed, assuming even a \$100 per hour labor rate, SBC's DLC cost assumptions would still require over a month of work by a 3 or 4 man crew to put in a DLC. Clearly, Ms. Bash's testimony affirms that such an assumption is wholly unreasonable.

SBC again claims that Messrs. Pitkin/Turner "ignored" certain costs that are not shown in the Project Pronto business case, such as minor material and "other installation costs." (See SBC Ex. 4.1, p. 74). Of course, SBC witness Mr. Smallwood, who made this claim, did not identify or substantiate these allegedly missing costs. And when asked at hearing whether he ever asked those SBC personnel who put the Project Pronto study together whether these such costs were missing, Mr. Smallwood said he did not, despite the fact that one of those persons is his boss. (Tr. 771-773). Based on this testimony, there is no credible evidence that any costs are missing from the Project Pronto business case.

Finally, SBC attempted to explain its offering of significantly smaller DLC linear loading factors in Wisconsin by claiming that its Wisconsin witness was new and misinformed (SBC Initial Br. at 96-97) This explanation is implausible and pure hearsay. SBC did not make that witness available at hearing in Illinois. Clearly, SBC's

cost group is much larger than one person. It is highly unlikely that this significant modification could have been made in Wisconsin absent approval at the appropriate corporate level. SBC did not attempt to fix this “problem” in Wisconsin, and only claimed this Wisconsin factor to be an error when it arrived in Illinois with an inconsistent position. The Commission should reject this after-the-fact explanation.

While SBC continues to take pot shots at the numerous data points used by Messrs. Pitkin and Turner, it is notable that each SBC witness who provided independent estimates of average DLC installation costs has confirmed the reasonableness of the total DLC costs reflected in the Joint CLECs’ restatement (Mr. Trott in Texas, Ms. Bash in California). One would think that based on the highly litigious nature of this particular issue, SBC would have its engineering witness, Mr. White, provide the Commission a competing analysis. Of course, SBC and Mr. White did not, despite every opportunity to do so. Instead, SBC casts stones at the numerous CLEC-provided data points, all of which affirm the unreasonableness of the use of linear loading factors in establishing DLC installation costs. The Commission should not be fooled by SBC’s silence. SBC knows exactly what the CLECs contend: that its use of linear loading factors in establishing DLC installation costs massively inflates those costs. Although it is SBC’s burden alone to substantiate its forward-looking costs, it has not met that burden here.

With that said, in determining DLC installation costs, the Commission should not feel bound to adopt either SBC’s loading factor approach, or the Joint CLEC reliance on the Project Pronto business case. The Commission should feel free to adopt any of the following data points as the forward-looking installation costs of a DLC system: (i) the installation costs provided in the Project Pronto business case, (ii) the JAMS installation

estimates of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\***, (iii) use of the SBC Wisconsin DLC installation factor, or (iv) an installation value that would result in total costs (i.e., material and installation) for a 2016 DLC system (including line cards) of between \$120,00 and \$150,000, as estimated by SBC's Mr. Trott in Texas. The Commission absolutely should not accept SBC's position that DLC installation costs multiple times greater than every one of these independent estimates. What the Commission **cannot do**, however, is turn a complete blind eye to this detailed record evidence that establishes that the use of linear loading factors drastically overstates DLC installation costs.

**2. Copper/Fiber crossover point**

The Joint CLECs did not provide any recommendations concerning this issue.

**3. Other DLC investment cost issues**

**a. Remote terminal cabinet sizes**

The Joint CLECs reiterate that SBC's application of Staff's recommendation -- to include smaller DLC sizes in LoopCAT -- increase costs rather than decrease costs, as Staff witness Mr. Koch had anticipated. Staff's Initial Brief does not address this fact. SBC, Staff, and the CLECs agree that this modification is inappropriate, to the extent it increases costs. (Tr. 1918-1919; SBC Ex. 4.1 at 76; AT&T Ex. 2.2, p. 2) Thus, the Commission should not adopt SBC's application of this Staff recommendation.

**b. Alcatel discounts**

SBC concedes that it is appropriate to model in LoopCAT the **\*\*\*BEGIN CONFIDENTIAL xx END CONFIDENTIAL\*\*\*** volume discount provided for in the August 2003 price list to SBC's Alcatel Litespan Purchasing Agreement (*see* SBC Initial Br. at 110). As a result, the parties' only disagreement on the subject of the proper

inclusion of Alcatel DLC discounts in LoopCAT centers upon whether it is appropriate to apply the two additional and guaranteed **\*\*\*BEGIN CONFIDENTIAL xxx END CONFIDENTIAL\*\*\*** discounts provided for in Amendment 3 to that agreement. (See SBC Ex. 15.0, Schedule DGP-R15, p. 3, ¶ F). SBC urges the Commission to ignore both of these discounts. (See SBC Initial Br. at 110-11). The Joint CLECs have urged the Commission to require SBC to modify LoopCAT to apply both future discounts, which fall within LoopCAT's forward-looking 2002-2005 period. (See Joint CLEC Initial Br. at 167-191).

Brushing aside SBC witness Mr. Donald Palmer's forthright testimony on cross-examination, SBC continues to assert (based on Mr. Palmer's *prefiled* testimony, rather than his subsequent admissions on cross-examination) that after the execution of Amendment 3 to the Alcatel Litespan Purchasing Agreement, negotiations between SBC and Alcatel regarding a variety of issues "effectively resulted in the mutual cancellation of the discount." (See SBC Initial Br. at 111). However, as noted in the Joint CLECs' Initial Brief, Mr. Palmer admitted on cross-examination that this agreement, including the above-cited Amendment 3, was neither modified nor terminated prior to the first additional discount date.<sup>63</sup>

Furthermore, SBC's Brief *concedes* what the Joint CLECs have argued – that regardless of whether the discounts reflected in Amendment 3 were ultimately waived in favor of some other equivalent benefit, SBC will eventually ink a subsequent amendment conferring new and commensurate benefits on SBC. (See SBC Initial Br. at 111; Tr. 1350-1352 (confirming SBC will be made whole upon renegotiation)). Indeed, on cross-

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<sup>63</sup> Tr. 1346-1347. The second date has not yet been reached.



thing as the Alcatel DLC equipment modeled in LoopCAT. Contrary to what SBC would have the Commission believe – that the anticipated results of the Alcatel negotiations would be a “wash” for purposes of LoopCAT’s cost modeling – SBC apparently traded away its guaranteed equipment discount for anticipated savings in these other areas. This is not least-cost, nor most-efficient.

SBC has conceded that the benefits available in these other areas of its business dealings with Alcatel are equivalent to the discounts that SBC declined to enforce. SBC has waived these highly significant discounts (thereby increasing CLECs’ UNE costs), while reaping equivalent financial benefits in other areas. The Commission must require SBC to revise LoopCAT to assume the receipt of these two additional discounts in order to represent fairly the results of a proper application of the FCC’s TELRIC methodology, which requires assumption of a least-cost, efficient network. As the CLECs have explained previously, this is the best means by which to include the cost savings associated with the forthcoming new Alcatel amendment in SBC’s forward-looking loop cost study.

**c. Mix of Universal Digital Loop Carrier (“UDLC”) and Integrated Digital Loop Carrier (“IDLC”) facilities**

The Joint CLECs have little more to add on this subject, as the testimony and FCC legal precedent (summarized in our Initial Brief) all establish that IDLC can be unbundled and that UDLC should not be assumed in a forward-looking network. (*Virginia Arbitration Order* at ¶ 312, 315, 322; *Indiana Order*<sup>64</sup>, p. 47; AT&T Ex. 2.0, pp. 140-147). SBC continues to propose use of \*\*\***BEGIN CONFIDENTIAL** xxx **END**

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<sup>64</sup> Indiana Utility Regulatory Commission, Order in Cause No. 42393 (issued Jan. 5, 2004) (“Indiana Order”).



SBC's response to these arguments is that it does not know of a way to account for electronic equipment not housed in a building. Consistent to form, Mr. Smallwood and SBC propose that the Commission approve a study that purposefully overstates loop costs. (SBC Initial Br. at 119). Fortunately, AG witness Mr. Dunkel easily identified the electronic equipment not housed in a building and provided a restatement of SBC's loop costs. Indeed, Mr. Dunkel's restatement is the only one in this record and is therefore uncontested.

As Messrs. Pitkin/Turner explained, application of Mr. Dunkel's recommendation is essential if the Commission is to approve DLC costs in line with the AG, Staff, and Joint CLEC recommendations. (AT&T Ex. 2.0, pp. 7-9). Otherwise, the Commission will be adopting DLC costs far in excess of those recommended by Staff witness Mr. Lazare, Attorney General witness Mr. Dunkel, and the numerous other unbiased data points described in Section III.C.1.c above.

**f. Allocation of Shared DLC Components**

Both Staff and the Joint CLECs support the allocation of 25% of the DLC costs to DSL services. (Staff Initial Br. at 123-125). SBC opposes this allocation, mainly citing to the testimony of Mr. White, who indicated that voice services were the "main driver" of DLC investment. (SBC Initial Br. at 124). First of all, Mr. White's testimony, even if true, does not change the fact that SBC is putting in DLCs in order to serve DSL services. The Commission knows full well that SBC's Project Pronto initiative was publicly billed as SBC's attempt to serve a greater number of customers with DSL services, as it shortens the length of copper distribution, making DSL services more widely available. SBC is presently using DLCs to provide DSL, and on a forward-looking basis it must be

assumed that it will continue to do so. All the DLCs assumed by SBC in its study are DSL-capable.

Moreover, whether DSL is a “main” or secondary driver of the DLC deployment is irrelevant – the FCC’s cost rules require that “the costs of shared facilities shall be recovered in a manner that efficiently apportions costs among users.” (47 C.F.R. § 51.507(c)) While SBC might quibble with the Joint CLEC and Staff proposed allocation of 25% of DLC costs to DSL, it cannot deny that it uses and will continue to use DLCs to provide DSL services. Thus, SBC – once again providing no plausible alternative – requests the Commission approve a cost study that improperly burdens its competitors with the costs associated with DSL services. Indeed, by allocating only 25% of the costs to DSL services, the Joint CLECs and Staff are still proposing that voice services pay the lion’s share of DLC costs.

Moreover, there is every reason to adopt the 25% allocation proposed by Joint CLECs and Staff. That allocation is based upon the exact same analysis SBC itself used in TELRIC cost studies filed throughout the SBC region, including here in Illinois in Docket No. 00-0393. (AT&T Ex. 1, p. 73) SBC cannot recover the costs of DSL services in two places. The Commission should reject SBC’s convenient flip-flop on this issue, just as the Indiana Commission did in its recent TELRIC order. (Indiana Order, p. 47)

**g. Remote terminal investment cost allocation**

As stated in our Initial Brief (pp. 176-177), if the Commission adopts 100% IDLC, it should also order an allocation factor of 4 for DS-1 loops, not 24 as SBC proposes. (AT&T Ex. 2.1, pp. 69-74).

4. **Premises termination costs**
  - a. **NID and Drop Wire Installation costs (including travel times)**
  - b. **Adjustment to remove double-counting**

The Joint CLECs reiterate that if the Commission adopts SBC's use of linear loading factors, it must reject SBC's attempt to restate NID/Drop installation costs independently, because SBC's proposal would cause NID/Drop installation costs to be massively overstated. (AT&T Ex. 2.1, p. 49) If SBC is right that "on the whole and on the average, [installation factors] provide the best tool for computing costs under TELRIC," then SBC must consistently use those factors to ensure that the "average" is proper. (SBC Initial Br. at 82). SBC essentially argues that for some equipment, the installation factors might result in overstated costs, but for others they result in understated costs - and, therefore, on average the installation costs are appropriate. While we disagree with SBC's sophomoric argument (and it has offered no proof it is correct), this argument is premised on the fact that SBC consistently uses installation factors for all equipment in LoopCAT. SBC cannot "carve out" certain equipment (NIDS/Drops) from application of a loading factor because the loading factor, in this instance, favors the CLECs. Otherwise, SBC will have tampered with the alleged "averages" that it claims makes its use of installation factors appropriate.

SBC further argues that by applying the cable installation factor to NIDS/Drops it would be applying a fill factor applicable to loops to NIDS/Drops. (SBC Initial Br. at 130-31). However, as Mr. Pitkin explained, that is exactly how linear loading factors work. (Tr. 1662-64) SBC uses one cable installation factor and applies it to a multitude

of loop equipment with differing fill factors: distribution cable, feeder cable, FDIIs, etc. SBC's argument is without merit.

In summary, the Commission should require SBC to consistently use its installation factor approach for NIDS/Drops, or otherwise use Messrs. Pitkin/Turner's bottoms-up restatement of SBC's NID/Drop installation costs.

**c. Mix of aerial and buried premises termination equipment**

The Joint CLECs have nothing further to add on this issue. We reiterate our recommendation that LoopCAT be restated so that SBC's premises termination aerial/buried mix reflects the same mix as aerial/buried distribution cable facilities, as recommended by AT&T witnesses Messrs Pitkin and Turner. (Joint CLEC Initial Br. at 181; AT&T Ex. 2.1, pp. 77).

**d. Multiple Dwelling Units**

The Joint CLECs reiterate our recommendation that US Census data be applied to LoopCAT on a deaveraged basis in order to account for the fact that there are more MDUs in urban areas. (Joint CLEC Initial Br. at 182-83)

**5. FDI Costs**

SBC barely addresses the Joint CLEC recommendation that LoopCAT must be revised to account for loops without FDIIs. SBC has provided no plausible alternative to Messrs. Pitkin/Turner's recommendation to rely on LEIS data to calculate the frequency of FDIIs in the forward-looking network. (*See also* Indiana Order, p. 43 (adopting same AT&T recommendation)).

Second, SBC continues to criticize Messrs. Pitkin/Turner's recommendation concerning the number of loops requiring FDIIs. Again, SBC's criticism is based on Mr.

White's misapplication of LoopCAT, as it assumes this is a fill factor issue. It is not. Messrs. Pitkin/Turner's recommendation in this regard has to do with terminations per working loop, not terminations per loop (which is a fill factor issue). (AT&T Ex. 2.1, pp. 76-80) LoopCAT should be modified to correctly assume two termination per working loop – one on the feeder and one on the distribution side. Spare capacity is already accounted for in LoopCAT via application of the fill factor. (AT&T Ex. 2.1, pp. 76-80) SBC has no defense for its assumption of **\*\*\*BEGIN CONFIDENTIAL\*\*\*** xxxx **END CONFIDENTIAL** terminations per working loop.

## **6. Distribution Area modeling**

It is not a matter of debate that LoopCAT uses embedded distribution areas and related FDI sizes, as well as embedded cable sizing. The Joint CLECs attempted to fix this by proposing (i) larger distribution areas (“DAs”) that can take advantage of larger hardware sizes and greater efficiencies, and (ii) modifying LoopCAT to account for the fact that larger cables are more efficient and less costly than the small cable sizes SBC has deployed in its historic network. SBC protests, surmising that: “AT&T’s claims...boil down to the issue of whether SBC Illinois should be allowed to refer to its existing network...” (SBC Initial Br. at 136)

In this regard at least, SBC is right -- that is exactly the issue at hand. First, with respect to distribution areas, TELRIC demands that SBC design the forward-looking network, including the loop DAs with forward-looking technology to achieve the lowest cost network. (See 47 C.F.R. § 51.505 (b)(1)). The design configurations proposed by witnesses Pitkin/Turner can serve much wider areas than the dated technology in SBC’s existing network. In contrast, LoopCAT is nothing more than an engineering study of

SBC's current network. For that reason alone, the Joint CLEC-proposed DA modifications must be made to make LoopCAT more TELRIC compliant.

Indeed, the FCC WCB has construed the TELRIC methodology exactly as Joint CLECs have here. In its *Virginia Arbitration Order*, the FCC WCB rejected Verizon's loop study, finding it inappropriately devoid of any forward-looking modifications to SBC's embedded DA and loop network:

With respect to loops, Verizon's cost study does not meet the [TELRIC] model criteria as well as the [CLEC proposed] MSM loop module does. In contrast to the MSM, the Verizon recurring loop cost study is not an economic cost model; it is an engineering cost study based on the Verizon network that exists, or existed in the past, in Virginia, presented in electronic database or spread sheet formats. For example, Verizon uses a survey from 1993 to 1995 to estimate an average loop length for specific distribution areas (DAs) or groups of DAs. For other cost study assumptions, such as structure sharing, fill factors, and plant routes, Verizon also uses figures based solely on its actual experiences and network design. Because of Verizon's extensive use of historical network design and data, its loop cost studies are not as consistent . . . with the Commission's TELRIC rules, which require "use of the most efficient telecommunications technology currently available and the lowest cost network configurations," limited only by existing wire center locations. (*Virginia Arbitration Order at ¶ 52 (citing to 47 C.F.R. § 51.505(b)(1))*).

LoopCAT suffers from the exact same infirmities as Verizon's loop model, because it too relies solely on actual loop length and DA size data extracted from SBC's historic network.

By locking in the inefficiencies of its embedded network, and its smaller distribution areas, SBC has failed to account for the efficiencies of scale and economies that are achievable on a forward-looking basis, as required under TELRIC. SBC argues against Messrs. Pitkin/Turner's assumption that a DA can have more than 200-600 lines, as being inconsistent with "efficient" network design. (SBC Initial Br. at 136). What SBC really means is that such an assumption is inconsistent with its embedded network

design and its extremely low proposed fill factors. Indeed, the FCC WCB rejected the same argument in its *Virginia Arbitration Order*, concluding that:

We agree with AT&T/WorldCom and find that the [CLEC loop model] does not improperly size DAs. AT&T/WorldCom persuasively demonstrate that DAs need not always contain between 200 and 600 working lines. Rather, these are general deployment goals. (*Virginia Arbitration Order*, ¶ 237).

This Commission should find the same, and order SBC to utilize the larger DA sizes as proposed by Joint CLECs.

The Commission should also ensure that LoopCAT reflects the larger cable sizes that would be used in a network deployed today. The Joint CLECs proposed that the cable sizes in LoopCAT be shifted up to reflect larger average cable sizes assuming that 10% of each cable size shifted to the next larger size. SBC objects to this modification, claiming it is based on random assumptions. (SBC Initial Br. at 144). That is not true.

What SBC fails to disclose is that all of its cable sizes are based upon its embedded base of cable. For the same reasons noted above, SBC's reliance on embedded data does not square with the TELRIC methodology. If SBC were to deploy its network today, it would not place the same mix of cable as in its embedded network. Those cables were deployed in piece parts, with some no doubt placed in the 1930s. Assuming SBC can re-deploy its cable today with full knowledge of its customer locations, as demanded by TELRIC, it would certainly put in larger cable sizes that are more efficient and less expensive. That is not a random assumption, but one based on basic TELRIC logic. The Commission should incorporate the AT&T proposed adjustments to LoopCAT to account for larger cable sizes.

**7. Loop length, cable size and cable gauge modeling**

**a. Distribution lengths over 18,000 feet**

SBC continues to ignore the fact that copper loops with over 18,000 feet of distribution cannot provide DSL. SBC would never engineer a loop with over 18,000 feet of distribution at this time for the simple reason that it would not be forward-looking. SBC never addresses this simple fact and, therefore, for this reason alone, the Commission should direct SBC to remove the more than 100,000 all copper loops over 18,000 feet from SBC's loop sample.

**b. Data used to develop loop lengths**

The Joint CLECs have nothing to add on these issues beyond the points made in our Initial Brief (pp. 189-198). In regard to Cable Sizing (Section III.C.7.f) the Joint CLECs have addressed this issue in our discussion above relating to Distribution Area sizing. (Section III.C.6)

**c. Distribution cable resistance limits**

**d. Allocation of copper cable inventory between feeder and distribution plant**

**e. Copper cable mix**

**f. Cable sizing**

The Joint CLECs have nothing to add on these issues (c, d, e and f) beyond the points made in our Initial Brief (pp. 189-198). In regard to Cable Sizing (Section III.C.7.f) the Joint CLECs have addressed this issue in our discussion above relating to Distribution Area sizing. (Section III.C.6)

**8. Planning Period**

The CLECs have nothing to add on this issue.

**9. Previous Methodologies**

Joint CLECs addressed this topic in Section III.A.1 of our Initial Brief and in Section III.A.1 of this Reply Brief.

**10. Agreed upon issues**

The Joint CLECs have nothing further to say on the agreed upon issues.

**IV. NON-RECURRING COST STUDIES AND RATE DESIGNS.**

**Summary of Recommendations**

Following is a summary of Joint CLECs' recommendations concerning SBC's nonrecurring cost studies and charges, as detailed in Section IV of our Initial Brief and of this Reply Brief.

The Joint CLECs recommend that SBC's nonrecurring cost studies and proposed rates be rejected. Instead, the Joint CLECs recommend that the Commission adopt one of three options: (1) adopt in total the comprehensive nonrecurring cost study adjustments and proposed rates of AT&T witness Mr. Turner; (2) adopt in total the comprehensive nonrecurring cost study adjustments and proposed rates of Joint CLEC witnesses Dr. Ankum and Mr. Morrison; or (3) for each input into SBC's nonrecurring cost studies, specify the appropriate tasks, activity times, travel times, probabilities of occurrence, fallout and rate design for each of the nonrecurring cost studies and, give SBC, the Joint CLECs and the opportunity to rerun the cost studies using the specified inputs. Adopting the recommendations of Mr. Turner or Dr. Ankum/Mr. Morrison would be the most administratively efficient and either set of recommendations would result in nonrecurring rates that are forward-looking and better reflect the principles embedded in the FCC's TELRIC methodology and rules than do SBC's proposals.

As a general matter, either or both of AT&T witness Mr. Turner or Joint CLEC witnesses Dr. Ankum and Mr. Morrison consistently recommend that the Commission reaffirm its finding that all nonrecurring cost studies employ a 2% fallout rate on the complete end-to-end connect/disconnect process to reflect forward-looking, primarily automated processes; remove costs from the studies, such as computer processing costs, that are not directly related to the UNE service ordering or service provisioning; and eliminate activities and/or reduce work times for activities where SBC's studies include activities that are unnecessary or identify activity times that are inflated and unsupported; reject SBC's proposal to impose line connection charges that recover connect and disconnect costs in a single, up-front charge and adopt instead a bifurcated rate that recovers the costs at the time that they are incurred; and adjust the inflation and labor rates contained in the nonrecurring cost studies as proposed by AT&T witness Mr. Flappan.

Based on the above recommendations, the Joint CLECs recommend that the Commission adopt in total the proposed adjustments of either AT&T witness Mr. Turner or Joint CLEC witnesses Dr. Ankum and Mr. Morrison. For the purposes of this summary, the following selected nonrecurring rate proposals highlight selected rates that Joint CLECs recommend the Commission adopt:

If it chooses to adopt Mr. Turner's adjustments, the Commission should adopt (1) a UNE-P migration electronic service order charge of \$0.43 and a UNE-P migration disconnect charge of \$0.15; (2) a new UNE-P electronic service order charge of \$0.37 and a new UNE-P electronic disconnect service order charge of \$0.15; (3) a new UNE-P line connection charge for an analog loop of \$6.32 and a disconnect charge for a new

UNE-P analog loop of \$3.03; (4) a stand alone line connection charge for an analog loop of \$9.84 and a disconnect charge for a stand alone analog loop of \$5.27; (5) a stand alone analog loop service order charge of \$0.19 and a disconnect charge of \$0.19; (6) service order subsequent charge for port feature add/change request of \$0.22; and (7) port features add/change provisioning charge of \$0.10 per order. Each of these proposed rates can be found in Schedules SET-3 and SET-4 (Revised) to the direct testimony of AT&T witness Mr. Turner, AT&T Ex. 3.0.

If it chooses to adopt Joint CLEC witnesses Dr. Ankum and Mr. Morrison's adjustments, the Commission should adopt (1) a UNE-P migration electronic order charge of \$0.50; (2) a new UNE-P electronic service order charge of \$1.15; (3) a new UNE-P line connection charge for an analog loop of \$10.56, and disconnect charge for new UNE-P analog loop of \$3.23; (4) a stand-alone line connection charge for an analog loop of \$14.08, and disconnect charge for stand-alone analog loop of \$4.31; (5) a stand-alone analog loop service order charge of \$2.38; (6) a service order charge for port feature add/change request of \$0.54; (7) a port features add/change provisioning charge of \$0.17 per order; and (8) a migration of existing special access circuit to EEL charge of \$0.29. Each of these proposed rates can be found in Attachment 3 to the direct testimony of Dr. Ankum and Mr. Morrison. (Joint CLEC Ex. 1.0, Attachment 3)

**A. General Issues**

**1. TELRIC Standards/Principles**

Joint CLECs wholeheartedly agree with the Staff's assessment of SBC's proposed nonrecurring charges: "Many of the non-recurring rates proposed by SBC are overstated. Many are also inadequately supported." (Staff Initial Br., p. 134) As Staff also pointed out, the fundamental premise of SBC's entire body of nonrecurring support is flawed

because, contrary to the clear directive of the FCC and this Commission's TELRIC I and TELRIC II Orders, SBC has failed to incorporate forward-looking and efficient technologies that are available to it. Rather, as Staff's Initial Brief aptly observes, the SBC subject matter experts ("SME") providing input into the nonrecurring cost studies were directed to ignore any technologies SBC does not currently employ or that SBC has not approved for deployment in its network. (Staff Initial Br., p. 141) As Staff observes, while under certain circumstances, the Commission should afford considerable weight to the inputs supplied by SMEs, this proceeding does not present such circumstances because "[I]t is clear that SBC did not give these subject matter experts a free hand in supplying inputs, but rather confined them to describing existing or anticipated SBC processes and technology." (Staff Initial Br., p. 146) Thus, even SBC does not dispute that the entirety of its nonrecurring charge support is based almost exclusively on SBC's actual, embedded network and practices. Not surprisingly, SBC's resulting nonrecurring charges are grossly overstated and fail to comply with TELRIC principles.

Like Staff, the Joint CLECs are similarly disturbed that SBC's own nonrecurring cost witnesses – Dr. Currie and Ms. Vivian Gomez-McKeon – knew very little about the interplay between the activities comprising the nonrecurring charges and how those activities translate into the rate elements and rates resulting from SBC's cost studies. (Staff Initial Br., pp. 144-145) As the Joint CLECs pointed out in their Initial Brief, while Ms. Gomez-McKeon testified that it takes, in total, **\*\*\*BEGIN CONFIDENTIAL** x **END CONFIDENTIAL\*\*\*** minutes to perform a two wire analog cross connect at an IDF and an MDF, SBC's cost study assumes that it takes **\*\*\*BEGIN CONFIDENTIAL**



nonrecurring charges applicable to establishing residential and business service as follows:

Service Charges are applicable for the following work functions required to establish, add to, move or change telephone service:

Service Ordering Charge - Receiving, recording and processing information necessary to execute a customer's request for service.

Line Connection (Central Office) Charge – Performing all or part of the operations associated with the connection of a central office line. These may include, but are not limited to establishing or changing central office connections.<sup>65</sup>

SBC's tariff establishes a rate of \$20.50 and \$19.10 for line connection and service ordering charges, respectively, for a residential customer.<sup>66</sup> SBC's tariff establishes a rate of \$17.50 and \$34.85 for line connection and service ordering charges, respectively, for a business customer.<sup>67</sup> These compare to SBC's proposed nonrecurring charges to CLECs of \$106.86 for line connection for a standalone analog loop and \$32.91 for a loop service order (SBC Ex. 3.1, Schedule MDS-R3), which would apply to CLECs serving retail customers using their own switches and unbundled loops leased from SBC, and \$57.33 and \$11.27 for line connection and service ordering for new UNE-P (SBC Ex. 3.1, Schedule MDS-R4), which would apply to CLECs serving retail customers by leasing from SBC all of the same network elements that SBC uses to provide service to its retail customers.

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<sup>65</sup> MCI Cross Ex. 30 at 1-2 (Ameritech Tariff ILL.C.C. No. 20, Part 3, Section 1, 4<sup>th</sup> Revised Sheet No. 1 and 5<sup>th</sup> Revised Sheet No. 2).

<sup>66</sup> *Id.* at 7 and 11 (Ameritech Tariff Ill.C.C. No. 20, Part 3, Section 1, 9<sup>th</sup> Revised Sheet No. 6 and 4<sup>th</sup> Revised Sheet No. 10).

<sup>67</sup> *Id.* at 7 and 11 (Ameritech Tariff Ill.C.C. No. 20, Part 3, Section 1, 9<sup>th</sup> Revised Sheet No. 6 and 4<sup>th</sup> Revised Sheet No. 10).

There is no reason that SBC's nonrecurring charges for line connection activities should be higher for CLECs than what SBC charges its residential and business customers. SBC has not provided any explanation for why the wholesale charges it proposes are so much higher than its retail charges for the same activity. For example, SBC witness Ms. Gomez-McKeon conceded on cross examination that the activities related to line connection are substantially the same whether SBC is provisioning an unbundled loop or new UNE-P to CLECs or whether SBC is provisioning a line to its retail customer. Ms. Gomez-McKeon testified:

Q. It's true, isn't it, that a lot of the activities that you talked about in your testimony, line connection activities, would need to be undertaken not only on the wholesale side but also on the retail side? Is that a fair statement?

A. That is correct.

\* \* \*

Q. Do your subject matter experts perform those exact same activities that you discuss in your testimony for unbundled network elements or competitive local exchange carriers that they do for provisioning -- for SBC provisioning retail services to SBC's retail customers?

A. Could you clarify the word perform for me? What do you mean by perform?

Q. Well, for example, you talk about field technicians that need to go out into the field to do cross connects whether it's at the feeder distribution interface or the service area interface; am I correct?

A. So to clarify your question, you're asking me were the SMEs that perform that or the work functions listed performed by the same for wholesale and retail?

Q. Well, let's start with the work function descriptions. Those work function descriptions are necessary for whether you're provisioning wholesale services or whether SBC is provisioning service to an end-user customer, correct?

A. Yes, that is correct.

Q. And that's true with respect to all the activities that you talk about in your testimony?

A. In my direct testimony?

Q. Well, anywhere in your testimony.

A. In my direct testimony there are some CLECs that provide additional tools for testing the provisioning of unbundled loops where we would not have that available on the retail side.

Q. Would you say for the majority of the activities that you described with respect to plain old telephone service that those activities are undertaken both for wholesale as well as retail?

A. Yes, they are. (Tr. 1398-1400)

Much like the line connection activities, service ordering activities are designed to address and accomplish exactly the same thing, whether the order is from an SBC retail customer or from a CLEC seeking to provision its retail customer -- receiving, recording and processing information necessary to execute a customer's or telecommunications carrier's request for service. In fact, the language describing the service ordering activity in SBC's wholesale tariff is virtually identical to the language in its retail service in describing the service ordering activities.<sup>68</sup>

Given the fact that virtually all of the same activities are necessary for provisioning unbundled loops or retail loops, there is no logical reason why line connection rates for wholesale customers should be significantly higher than line connection rates for retail customers. Similarly, identical activities for service ordering are required whether they are done for retail or wholesale, and they share the same

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<sup>68</sup> Compare ILL.C.C. Tariff No. 20, Part 19, Section 15, 5<sup>th</sup> Revised Sheet No. 8, which is the wholesale tariff sheet filed by SBC on December 24, 2002 that is the subject of the Commission's investigation in this case, with the language cited above from SBC's retail tariff.

objective, which is ultimately to establish the retail customer's service, whether that customer is SBC's or the CLEC's. Thus, there is no reason why service order rates should be so much higher for SBC's wholesale customers than they are for SBC's retail customers.<sup>69</sup>

Accordingly, in evaluating the reasonableness of the increases that SBC proposes in its line connection charges and service ordering charges, and the cost support for those charges, the Commission should compare these proposed wholesale charges to SBC's charges to its retail customers for comparable service and activities. SBC's basic retail business line connection charge is \$17.50 and its basic retail residential service ordering charge is \$19.10. The Commission should insist on strong, TELRIC-compliant cost support for SBC's proposed wholesale line connection and service ordering charges before approving wholesale charges that exceed their retail analogues, as SBC is proposing in this case.

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<sup>69</sup>Indeed, the substantial differences in rates for comparable services would be unreasonably discriminatory in violation of Section 13-505.2 of the PUA. Section 13-505.2 states:

Nondiscrimination in the provision of noncompetitive services. A telecommunications carrier that offers both noncompetitive and competitive services shall offer the noncompetitive services under the same rates, terms, and conditions without unreasonable discrimination to all persons, including all telecommunications carriers and competitors. A telecommunications carrier that offers a noncompetitive service together with any optional feature or functionality shall offer the noncompetitive service together with each optional feature or functionality under the same rates, terms, and conditions without unreasonable discrimination to all persons, including all telecommunications carriers and competitors. (220 ILCS 5/13-505.2)

This discrimination is compounded by the fact that SBC regularly waives service order and line connection charges for its retail business customers. (MCI Cross Ex. 3, pp. 1-4)

## 2. Cost Causation and Characterization of Costs

SBC takes issue with the Joint CLECs' position on the costing principles that should guide the appropriate classification of costs between recurring and non-recurring costs. (SBC Initial Br., pp. 155-156) SBC asserts that "[t]he CLECs make a mess of these clear principles, accusing that SBC Illinois of "co-mingling . . . recurring and non-recurring costs." In response to the Joint CLECs' arguments, SBC asserts that "the FCC's rules do not allocate costs on the basis of who might benefit over time." (SBC Initial Br., p. 155) SBC is wrong. Specifically, SBC ignores the FCC WCB's discussion on the issue, which was cited in the testimony of Joint CLEC witnesses Ankum/Morrison. (Joint CLEC Ex. 1.1, p. 6) As discussed in that testimony, the FCC WCB provided the following principles:<sup>70</sup>

The costs at issue are labor costs associated with the activities necessary to provide UNEs to a competitive LEC. In many cases, these activities will produce benefits for any carrier using the facility in the future, and not just the initial competitive LEC for which the work is performed (e.g., cross-connects made to complete a connection are likely to remain in place even if the end-user customer no longer takes service from the competitive LEC).

The testimony then quoted the FCC WCB as follows:

Costs of non-recurring activities that benefit only the competitive LEC, or are not reflected in Verizon's ACF calculation (e.g., certain types of loop conditioning), should be recovered through NRCs. (Emphasis added.)

This language is a straightforward application of the FCC's TELRIC principles; it is also consistent with a common sense of fairness. For example, if SBC places a cross-connect out in the field to activate a basic UNE loop for a CLEC, and that cross-connect has an economic life of, say twenty years, but the CLEC is expected to use the loop for

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<sup>70</sup> *Virginia Arbitration Order* at ¶¶ 156 and 584.

only two of those twenty years, then how can it be fair to have the CLEC pay for 100% of the cost of placing that cross-connect, as proposed in SBC's studies? The FCC's principles, as cited above, recognize that subsequent CLECs – and SBC's own customers – will benefit from this cross-connect, and thus, under the FCC's principles, the costs should be recovered proportionally from all users by means of recurring charges. The aforementioned principles are not only fair; they are also consistent with the economic principles espoused by the FCC's WCB and embodied in the FCC's TELRIC methodology and rules. SBC's objection to these straightforward and fair costing principles should be rejected.

Much of the contention concerning the non-recurring service provisioning charges is resolved by an appropriate application of this principle. (Joint CLEC Ex. 1.1, p. 6) The vast majority of the costs concern the establishment of cross-connects, the testing those cross-connects, and travel to the place where the cross-connects are placed. Thus, if the Commission recognizes that the cost of placing these cross-connects (and the attendant activities, such as testing and travel) are more appropriately recovered through recurring charges than through non-recurring charges, then many of the contentious issues about SME-based activity time estimates (such as travel times, test times, and cross-connect times) automatically disappear. As the FCC WCB noted (and as quoted in Joint CLEC Ex. 1.1, p. 35):

We find that AT&T/WorldCom's assumption of 100 percent DIP and DOP is reasonable. Not only is this a surer method of avoiding double recovery, but it also seems to conform to the retail practice of recovering these costs through recurring charges.

The FCC's finding dispenses with the entire cumbersome debate about all the aforementioned SME estimates and the biases inherent therein: it simply recognizes that

these costs classified by SBC as non-recurring costs should be classified as recurring costs.

In view of the above, among other reasons, the Commission should reject (1) SBC's recommendations for how to assign costs, and (2) SBC's approach to nonrecurring charges. That is, because SBC's approach is based on the wrong costing principles, all of SBC's nonrecurring cost studies should be rejected as unsound. The importance of this recommendation cannot be overstated.

### **3. Treatment of Technology**

For SBC to imply that the CLECs somehow propose the use of technologies that are not "currently available" is grossly misleading. (SBC Initial Br., p. 157) The problem, of course, is that SBC's cost studies do not assume the use of the most efficient, forward looking technologies and best practices "currently available"; rather, SBC's cost studies assume that its actual practices are the most efficient and forward looking, to the complete exclusion of other "currently available" technologies, processes and practices.

All of AT&T witness Mr. Turner's recommendations are based on currently available technology. In fact, many of the recommendations he makes are based on the processes and practices he has observed SBC using in its other states, or other ILECs using. Others of Mr. Turner's recommendations simply reduce the times and probabilities of occurrences of SBC's existing processes. Still others are based on SBC's own testimony (*i.e.*, use of a direct telephone call rather than a multi-step process involving the maneuvering of a menu, a live service representative and then a warm transfer to another representative for ACD activity; reducing activity times in those instances where SBC assumes different times for the same tasks in its cost studies).

SBC also misstates AT&T witness Mr. Turner's testimony regarding SBC's general failure to integrate its OSS and, in particular, its LASR and EXACT systems. SBC erroneously contends that Mr. Turner failed to identify any software or hardware to integrate those systems. As Mr. Turner testified, documentation of the same note in multiple SBC systems is not an efficient, forward looking process and, because it is fairly common to electronically interface systems, many vendors, including Arthur Andersen, could accomplish the electronic interface of LASR and EXACT. (Tr. 1542-1544)

In addition, SBC takes issue with the Joint CLECs' recommendations that the non-recurring cost studies be based on forward-looking technologies. According to SBC, its “. . .nonrecurring costs are based primarily on the telecommunications technologies that SBC Illinois is currently deploying. But, contrary to the suggestions of some CLECs, that is not at all inconsistent with the TELRIC methodology.” (SBC Initial Br., p. 157). SBC's statement is startling and should be yet another reason for rejecting the company's cost studies as being inconsistent with TELRIC principles.

First, in no instance does this Commission – or any commission the Joint CLECs are aware of – accept the embedded technology deployed in the ILEC's network as presumptively forward-looking. There is no reason to make an exception for nonrecurring charges. That is, the state of SBC's OSS should not presumptively be taken as consistent with TELRIC. Indeed, under cross-examination it was demonstrated that SBC's cost studies were in fact backward looking and based on stale data that do not even reflect the current state of SBC's OSS. (Tr. 1217)

Second, SBC is distorting the arguments that the Joint CLECs advance. The Joint CLECs do not recommend that cost studies be based on “pie in the sky” technologies.

Rather, the Joint CLECs' recommendation is that cost studies reflect the flow through rates that are possible *given the current state of technology* – whether or not these technologies have already been ubiquitously deployed by SBC. In this sense, the recommendation of the Joint CLECs is no different than recognizing, for example, that fiber based feeder in longer loops is more economically efficient than copper based feeder and, for that reason, that recurring loop cost studies should assume the existence of the former and not the latter, whether or not SBC actually deploys those fiber based feeders in its loops. This is a well accepted approach to costing loop facilities, accepted and practiced by SBC itself (though certain disagreements on how to implement this approach do generally emerge), and there is no reason to deviate from that approach where it concerns non-recurring cost studies.

The issue of what the appropriate state of technology is has a direct bearing on the question of what flow through rates should be assumed in the studies (as those flow through rates are a function of the OSS). The appropriate level of flow through – and the underlying assumptions as to the capabilities of the OSS technology – are discussed later in this brief. For the purposes of this discussion, however, it suffices to say that the FCC's Wireline Competition Bureau, this Commission and many other state commissions, have adopted flow through rates of 98 percent or higher (2 percent fall out). (Joint CLEC Ex 1.0 at 73, Joint CLEC Ex. 1.1 at 19) This fact alone should be proof that SBC's OSS – to the extent that it has higher rates of fall out – is not consistent with the use of forward-looking state-of-the-art technologies as mandated by the FCC and many state commissions.

Last, but not least, it is important for this Commission to note the FCC WCB's rationale in its *Virginia Arbitration Order* for assuming a forward-looking OSS that is more advanced than the one actually deployed by the ILEC:

By limiting recovery for performing manual processes, but allowing recovery of costs associated with automating those processes, we provide Verizon the incentive to adopt automated systems for the activities necessary to turn up service to a competitive LEC. (*Virginia Arbitration Order*, ¶546)

Thus, the FCC WCB found that TELRIC requires that cost studies for nonrecurring charges assumes forward-looking technologies – whether or not the ILEC actually deploys those technologies. Based in part on this assumption, the FCC WCB adopted a fall-out rate of 2 percent.<sup>71</sup> (Joint CLEC Ex. 1.1, p. 19)

#### **4. Use of Subject Matter Experts**

SBC, at page 161 of its Initial Brief, incorrectly characterizes Mr. Turner's testimony and, therefore, his testimony regarding fallout. The sole job of the Local Service Center ("LSC") is to handle the orders that fall out. Mr. Turner did not agree that the LSC workload would increase with increasing CLEC competition; in fact, there is no reason to believe that fallout will increase as competition increases. To the contrary, it should continue to decline. What Mr. Turner indicated was that the greater the fallout, the greater the workload of the LSC. As such, the LSC certainly has no inherent incentive to reduce the level of fallout.

SBC wrongly contends that it presented estimates from numerous experts "who perform the relevant tasks daily, and have performed the relevant tasks on thousands of occasions." (SBC Initial Br., p. 161) Certainly Dr. Currie has not performed these tasks

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<sup>71</sup> That NRC studies should assume low fall out of no greater than **2 percent** was confirmed by the FCC in its *Virginia Arbitration Order*. See ¶592.

and, as Staff's Initial Brief aptly summarizes, neither has Ms. Gomez-McKeon, despite the fact that she is the alleged "provisioning" expert. (Staff Initial Br., pp. 139-147) In fact, at most, she observed them and, even then, did not observe them all. (Tr. 1459-1460)

Remarkably, SBC attempts to discredit the credentials of AT&T witness Mr. Turner because he happens to be a consultant and, therefore, paid for his time. Certainly neither SBC's consultants nor its employees do not work for free. (In fact, CLECs pay for a portion of those costs via SBC's shared and common cost factor.) In any event, Mr. Turner is highly qualified, as SBC well knows from its experience with him not just in this region but in many other states in which SBC is the ILEC. Mr. Turner is an engineer. Mr. Turner has managed large teams of central office technicians and clerical workforce responsible for working maintenance tasks. (AT&T Ex. 3.1, p. 24) Mr. Turner has performed many of the relevant engineering and provisioning tasks himself. Mr. Turner was a part of the team that formulated AT&T/MCI's nonrecurring cost model. Mr. Turner owned a small CLEC and has hands on experience – from the CLEC side – with SBC's day-to-day processes. (AT&T Ex. 3.1, p. 27) Mr. Turner also has regulatory experience in 30 jurisdictions, including the FCC, and has extensively reviewed cost studies in all of them. He is intimately familiar with the recurring and nonrecurring cost studies of several ILECs and RBOCs, and is certainly familiar with the cost studies of SBC in Arkansas, California, Indiana, Michigan, Ohio, Wisconsin, Texas, Missouri and Oklahoma. (AT&T Ex. 3.0, p. 2) In fact, Mr. Turner has extensive experience working in service order environments and more than seven years experience preparing and evaluating TELRIC studies. (AT&T Ex. 3.1, p. 29) In short, Mr. Turner is

well-qualified to provide the testimony he submitted on SBC's non-recurring cost studies and charges.

SBC also questions the qualifications of the Joint CLECs' experts, Dr. Ankum and Mr. Morrison. Specifically, SBC dismisses them as "an economist (Joint CLEC Ex. 1.0 (Ankum-Morrison Direct) at 1-2) and a consultant who once did provisioning work in the late 1960s and 1970s and perhaps related tasks in the early 1980s (*id.* at 3-4), but who apparently has never worked a service order or provisioned a *UNE*." (SBC Initial Br., pp. 161-162) SBC misrepresents Dr. Ankum's and Mr. Morrison's expertise. Specifically, as detailed in Joint CLEC Ex. 1.0, Mr. Morrison has extensive experience with all the activities (cross-connect, testing, travel, dispatch, etc.) that are pertinent to the nonrecurring cost studies. In fact, Mr. Morrison has over 30 years experience with precisely the types of activities that form the foundation of the vast majority of SBC's alleged nonrecurring costs. Dr. Ankum's expertise as an economist and as cost analyst complements Mr. Morrison's technical expertise and ensures that the Joint CLECs' proposed nonrecurring charges are based on verifiable labor time estimates (provided under oath) and are consistent with the FCC's TELRIC methodology.

In addition, SBC argues that the Joint CLECs criticism of SBC's method of relying on SMEs is unfounded. (SBC Initial Br., pp. 159-163) SBC protestations should be rejected for a number of reasons. First, SBC trivializes the valid complaint by the Joint CLECs that the SME estimates are unsupported. (Joint CLEC Ex. 1.1 at 27) Given the general lack of support for the SME estimates, neither the Commission nor anybody else is able to verify SBC's claims that the use of SMEs is appropriate – there are simply no supporting documents that verify SBC's claim.

Second, the lack of support for the SME estimates is not a trivial issue. With respect to travel time estimates, for example, the Commission should wonder how SBC's estimates were derived given that travel times obviously vary greatly across Illinois depending on location, time of day, and other factors. Indeed, one would have to apply some reasonably sophisticated statistical methods to be able to calculate an average travel time that would be representative of all travel SBC technicians perform in Illinois. To assume that technicians can simply "divine" a representative estimate is silly; the problem is complex and deserving of an appropriate quantitative analysis. Yet, SBC failed to provide support for its travel times. The only support concerned the minor travel to the unmanned central offices, which concern no more than a tiny amount of the loop installations. Conversely, for the vast majority of the travel to the field there is no support at all other than the SME estimate. (SBC Ex. 5.1, pp. 37-38)

SBC's claim that its technicians are SMEs and therefore qualified to provide labor time estimates, such as those for travel, is inherently flawed and should be flatly rejected. The question of representative time estimates is, for the most part, a statistical one. For example, all of us drive cars, possibly on a daily basis. This does not mean that we are qualified to estimate how long it takes citizens all over Illinois to drive from their homes to the local grocery store. Having a driver's license is not sufficient qualification for this question. In fact, to answer this question, one would have to be a statistician. Likewise, one would have to be a statistician to estimate average travel times to FDIs and SAIs – not an SBC technician.

The Joint CLECs have presented a large number of other concerns about SBC's SME based estimates. (See, *e.g.*, Joint CLEC Ex. 5.1, p. 28) SBC cavalierly dismisses

these objections as well. For example, SBC dismisses the Joint CLECs' claim that SBC's SMEs are potentially biased. SBC objects by stating that the concern is “. . .nonsense. Overstating activity times or occurrence probabilities to increase competitors' costs would be a serious violation of SBC policy.” (SBC Initial Br., p. 160) The Commission should note that SBC's cavalier dismissal of this concern is not shared by the FCC and a good number of state commissions. (Joint CLEC Ex.1.0, p. 41) In fact, the FCC WCB in its *Virginia Arbitration Order*, dedicated a good number of pages expanding on the problem that SME estimates are inherently biased. (Joint CLEC Ex. 1.1, p. 28) The concerns expressed by the Joint CLECs but dismissed by SBC were shared by the FCC WCB in the *Virginia Arbitration Order*. (*Id.*)

In sum, SBC attempts to deflect the criticism of its own litigation strategy not to have its SMEs testify by noting that AT&T's and the Joint CLECs' witnesses are paid advocates and just as likely to be biased. SBC misses the point. First, the AT&T and Joint CLEC witnesses provided live testimony, under oath, and were subjected to cross-examination. The same cannot be said of the SBC SMEs. Further, the AT&T and Joint CLEC witnesses had documented their analyses and submitted them to the parties and the Commission, and their estimates can be probed for validity, whereas SBC has provided no support (documentary or otherwise) for its SME estimates. Lastly, SBC – and not the CLECs -- has the burden of proof in these proceedings. SBC's criticisms are unfounded and should be rejected.

**B. Service Order Nonrecurring Cost Studies**

**1. Identification of Tasks**

SBC contends that Joint CLECs' recommendations regarding “Support Activities” are not based on currently available OSS. (SBC Initial Br., p. 166) That is

not true. As Joint CLECs pointed out in our Initial Brief, several of the Support Activities (*i.e.*, 3 E Error Activity, ESOI Activity) are necessary due to the fact that there are discrepancies and inefficiencies in SBC's OSS that do not allow orders to flow through those systems. It is undisputed that SBC's OSS are capable of flowing the orders through since many of them do, in fact, flow through. Those that fallout due to database "discrepancy" (as Mr. Christensen calls it, Tr. 1224-1225) certainly cannot be blamed on "speculation" and "future OSS" since SBC's databases can (and do) allow for flow through absent the discrepancies.

SBC's arguments regarding Support Activities are misplaced. SBC lists these Support Activities, contends that they all capture different scenarios and, therefore, are appropriately included in its nonrecurring studies in addition to the extraordinary fallout rate SBC already assumes in its cost studies. Yet, as Mr. Turner pointed out, the 2% fallout rate is intended to account for many of the same activities that would occur with forward-looking, efficient OSS. SBC's arguments miss the point. In an efficient, forward looking environment, there would be no "glitches" to cause an ESOI error or system interface "discrepancies" such that SBC's systems fail to send the CLEC a bill. Thus, those Support Activities are inappropriately included in SBC's TELRIC studies. Nonetheless, Mr. Turner's proposal coordinates these Support Activities into his overall 2% fallout rate, as explained at pages 245-246 of the Joint CLEC Initial Brief.

SBC also wrongly contends that even if these support activities were consolidated into one generic "reject error" category, the probability of occurrence for the consolidated activity should be the sum of the probabilities. (SBC Initial Br., p. 168) SBC's own witness, Mr. Christensen, when asked to sum the probability percentages appearing in

AT&T Cross Ex. 41P for the Support Activities, indicated that it is not appropriate to sum up the percentages of the probabilities. (Tr. 1242; AT&T Cross Ex. 41P)

SBC presents as one of the explanations for why its currently proposed nonrecurring charges are higher than those previously approved by the Commission the claim that SBC has more accurately identified the various tasks. Specifically, SBC notes:

One reason that SBC Illinois' proposed service order NRCs differ from those previously approved by the Commission in Docket No. 98-0396 is that SBC Illinois' current cost studies more accurately identify and measure the tasks necessary to process UNE orders. For instance, for CLEC orders for existing UNE-P, the Commission previously approved only costs relating to *electronic* orders, while the new cost studies also examine the work required to process orders for existing UNE-P that CLECs submit manually (*e.g.*, by fax). (SBC Initial Br., p. 165)

This argument makes no sense. The electronic ordering process should be unaffected by any analysis of and additional rates for manually submitted orders. That is, the fact that SBC now “also examines the work required to process orders for existing UNE-P that CLECs submit manually,” in no way explains why the costs for *electronic* submissions have gone up under the new studies.

SBC also seeks to convince the Commission that its previous findings for electronically submitted existing UNE-P orders are no longer accurate. Specifically, SBC claims that “[w]ith respect to CLEC orders for existing UNE-P, the NRC approved in Docket No. 98-0396 was based on the assumption that processing an electronically submitted order for existing UNE-P involves nothing more than doing “record work only. See *id.* at 18-19. However, the record in this proceeding demonstrates that that assumption is wrong, for at least two reasons.” (*Id.*) Contrary to what SBC claims, the record does not support this conclusion.

SBC asserts that “to process a UNE-P request, on the other hand, SBC Illinois’ network systems must be updated, and thus the CLEC is required to provide significantly more information. This additional information and extra steps required to update the network systems entail additional work by the LSC, and thus the “record work only” NRC does not reflect the costs of processing an order for existing UNE-P.” (SBC Initial Br., p. 166) In support of this claim, SBC cites to Dr. Currie’s testimony. However, SBC’s Initial Brief does not mention any activity other than those related to updates of electronic databases. In the end, therefore, SBC’s claim that the Commission “got it wrong” with respect to the existing UNE-P orders, amounts to no more than an argument about what flow through can be achieved with properly designed electronic OSS. This issue is discussed in more detail later in this brief.

SBC identifies six activities: Reject Activity; Automatic Call Distribution (“ACD”) calls; Errored Service Order Image (“ESOI”); Pending Past Due (“PPD”); 3E Errors; and Supplemented Orders. (SBC Initial Br. at 167) The SBC witnesses were probed on the reasons for why errors might occur in the service ordering processes that interrupt the electronic flow through and cause the costly manual intervention, driving up the costs in SBC’s NRCs. Under cross-examination, SBC witness Mr. Christensen admitted that the cause for the errors and the fall out is often found in SBC’s own databases. (Tr. 1223-1226; Tr. 1281-1283) Remarkably, SBC’s studies take no account of all those instances in which SBC is at fault and causes the errors and the fall out. That is, SBC totally ignores the cost causation principle in assigning costs. SBC simply decided that the costs of all fall out – irrespective of which entity is at fault – should be recovered from CLECs. Thus, even if the Commission were to reverse itself on the issue

of fall out (it has previously adopted a 2 percent fall out rate), the Commission would still have to reject SBC's studies as being inconsistent with the cost causation principle that is integral to the TELRIC methodology.

Of course, the Commission has already found that the cost associated with fall-out due to errors in SBC's legacy databases should not be recovered from CLECs, when it found that SBC's nonrecurring cost studies should make “. . .adjustment for [SBC] cleaning up and then maintaining its databases to eliminate fallout caused by database contamination.” (Joint CLEC Ex. 1.0, p. 13 (citing the TELRIC II Order<sup>72</sup>, pp. 39-42)) The FCC WCB likewise found that the costs that stem from errors in the ILEC's legacy databases should not be recovered from CLECs through non-recurring charges:

Database maintenance is a recurring cost that should be recovered in recurring charges through ACFs, and not through a NRC. Allowing Verizon to impose NRCs on competitive LECs to correct database errors provides no incentive to Verizon to avoid such errors. (*Virginia Arbitration Order*, 592; footnote omitted)

Thus, any costs caused by fall out related to errors in SBC's own databases should not be recovered from CLECs through non-recurring charges.

SBC also claims that the “Validation and verification activities are common-sense business practices to make sure that orders are processed as accurately as possible.” (*See* SBC Ex. 9.1 (Gomez-McKeon Rebuttal) at 6). The Joint CLECs have shown that these activities should be set at zero (which is equivalent to eliminating them). If the OSS is designed appropriately, the service orders containing errors should be rejected by the

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<sup>72</sup> *Illinois Commerce Commission, On Its Own Motion, Investigation into the Compliance of Illinois Bell Telephone Company with the order in Docket 96-0486/0569 Consolidated regarding the filing of tariffs and the accompanying cost studies for interconnection, unbundled network elements and local transport and termination and regarding end to end bundling issues*, Docket 98-0396, Order (issued Oct. 16, 2001) (“*TELRIC II Order*”).

OSS and returned to the CLECs for correction, rather than pushing those orders through to downstream systems with an assurance of fallout. (Joint CLEC Ex. 1.0, pp. 80-83) Further, if this is done appropriately, then by definition all other errors are then due to errors (mismatches) in SBC's own databases. In any event, the costs of SBC errors – and, of course, the validation and verification charges are costs associated with the detection of errors – should never be recovered from CLECs.

For all of the foregoing reasons, SBC's criticisms of the Joint CLECs' positions on identification of activities are unfounded and should be rejected.

## **2. Activity Times**

SBC defends the times for its Reject Activity Support Activity by contending that this is more than a simple one step process. (SBC Initial Br., pp. 170-171) That is precisely the point. SBC's process is not forward looking. As SBC witness Mr. Christensen testified, this activity requires typing the same notes regarding the same reject reason three times in three separate places. (SBC Ex. 10.0, p. 7; Tr. 1220-1221) As AT&T witness Mr. Turner testified, in an efficient process and systems environment, SBC's service order personnel in the LSC should only have to enter the reject code and notes once – *not three times!* (AT&T Ex. 3.1, p. 24) The TELRIC methodology does not compensate SBC for its redundant, inefficient processes, and neither should the Commission.

SBC's multi-step process for "Receipt of Service Order Activity" is similarly inefficient. (SBC Initial Br., p. 172) It requires at least three steps, requiring the SBC service representative to actually pull information from one screen and essentially "cut and paste" it into another before the service order is received. As Mr. Turner testified, "I have worked in many different customer service environments where service

representatives must access work orders electronically. I have never seen a process as inefficient as that described by Mr. Christensen.” (AT&T Ex. 3.1, p. 28) Costs for this inefficient, embedded process have no place in a forward-looking nonrecurring cost study.

With respect to the ACD Coverage Support Activity, SBC opposes Mr. Turner’s proposal to reduce SBC’s proposal of **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\*** minutes to answer the phone and **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\*** minutes to log a record of the call (all times are exclusive of actual conversation time with the CLEC). (SBC Initial Br., p. 173) According to SBC, its representative would be “hard pressed” to record the call as the conversation is occurring. Anyone who has taken notes at a meeting, during a conference call or during a hearing knows it happens all the time. To the contrary, the notes are more likely to be accurate if taken at the time the conversation is occurring.

The only “support” SBC can muster for its **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\*** minute interval to answer the phone is the scenario where a CLEC calls regarding an EEL order. In that instance, the CLEC is required to wade through a menu of options, it reaches a live representative, and that representative then “warm transfers” the call to the original service representative who took the order. (SBC Ex. 10.1, p. 8) As Joint CLECs pointed out in their Initial Brief, SBC’s supposedly “forward looking” nonrecurring cost studies failed to utilize the much more efficient, streamlined process of dialing the original service representative’s number directly, thereby avoiding the ACD process altogether. When asked, Mr. Christensen indicated that while this latter scenario was assumed in its nonrecurring cost studies to a very

limited extent, the “bulk” of the costs reflect this inefficient, multi-step “warm transfer” option. (Tr. 1234) There is no reason to base the time for answering the call on this inefficient process. (AT&T Ex. 3.1, p. 27) In any event, as AT&T witness Mr. Turner testified, in his personal experience working on service orders with SBC personnel for his own CLEC, even this transfer process takes no longer than a minute. (AT&T Ex. 3.1, p. 27)

### **3. Occurrence Probabilities**

The need to perform a “stare and compare” between an original service order and a Supplemental Order only occurs when the CLEC does not indicate the nature of the change in the Remarks section. (SBC Initial Br., p. 172; SBC Ex. 10.1, pp. 7-8) Mr. Turner has reduced this probability of occurrence for Supplemental Order Support Activity to one percent.

SBC’s multi-step process for typing the same notes three times (SBC Initial Br., pp. 176-177) is addressed above in Section IV.B.2 on Activity Times.

### **4. Service Order Computer Processing Costs**

SBC attempts to defend its inclusion of the computer processing costs in its Service Ordering NRCs. (SBC Initial Br., 180-181) The Joint CLECs have already discussed this issue in their Initial Brief and shown that SBC’s inclusion of the computer processing costs is inconsistent with the Commission’s prior findings. The crux of SBC’s argument is the following:

That is, some of SBC Illinois’ computer systems spend a significant or majority of their processing times handling service orders. SBC Ill. Ex. 5.0 (Currie Direct) at 28. Moreover, in the long run, these computer processing costs vary with the volume of service orders, and are thus volume-sensitive costs. *Id.* at 27-28. Thus, because these costs are caused by service orders, under the FCC’s TELRIC pricing rules they should be

assigned to SBC Illinois' nonrecurring service order costs. (SBC Initial Br., p. 181)

This argument is factually and theoretically wrong and is also inconsistent with economic theory and the FCC WCB's directives on how to categorize costs. Moreover, SBC witness Richard Florence made virtually this same claim in Docket 98-0396 (the TELRIC II case) by stating that some computer processing costs are direct costs of service ordering. (MCI Cross Ex. 36, pp. 16-17) That argument was appropriately rejected by the Commission in its TELRIC II Order. Now, through Dr. Currie, SBC launches a collateral attack on the Commission's finding, raising the same argument apparently on the theory that if you say it enough times the Commission will capitulate. The Commission should not surrender because it was correct before and SBC has presented no persuasive argument that would warrant a change in the Commission's conclusion.

SBC's argument is factually wrong because computer costs do not vary on a per service order basis. No computer costs ever vary on a per key-stroke basis. That costs do not vary on a per key-stroke basis is easily verified by anybody that owns a computer: once the computer is purchased, the costs do not vary with usage. In a sense, SBC admits as much by injecting the qualifier "in the long run," presumably because the claim that computer costs vary on a per service order basis is so contrary to common experience and common sense. That computer processing costs do not vary on a per service order basis was discussed by Dr. Ankum and Mr. Morrison. (Joint CLEC Ex. 1.1, p. 19)

SBC's argument is also theoretically incorrect. As discussed by Joint CLECs witnesses Ankum and Morrison, and as already discussed elsewhere in this brief, the *Virginia Arbitration Order* correctly specifies that costs should be recovered through

non-recurring charges when only the ordering CLEC benefits and no other entity does. (Joint CLEC Ex. 1.1, pp. 5-6) When this clear and common sense principle is applied to the computer processing costs, it is obvious that those costs should not be recovered on a per service order basis as non-recurring charges. Specifically, responding to SBC's faulty reasoning, Dr. Ankum and Mr. Morrison stated:

The critical issue on whether or not costs should be recovered through recurring or non-recurring charges hinges on whether the costs are associated with activities that benefit only the CLEC placing the service order or also other entities (CLECs and/or SBC itself). (This issue has been discussed at length earlier in this testimony.) Clearly, computer processing costs are not incurred on a per service order basis; rather they are costs associated with equipment that benefits all entities that place service orders. (Joint CLECs, Ex. 1.1, pp. 19, 20)

They then go on to note that the Commission's previous findings on this issue are a consistent and correct application of the FCC WCB's cost principle (as previously discussed.) (Joint CLEC Ex. 1.1, p. 21)

In short, the Commission should reject SBC's inclusion of the computer processing costs in its service ordering nonrecurring charges.

## **5. Fallout rates**

As an initial matter, it is clear that with existing technology SBC can achieve fallout rates of 98% or higher. Indeed, that is exactly the level of fallout rate that this Commission and the FCC relied on in determining that SBC had adequately opened its local market to competition in Illinois sufficient to justify a finding that SBC had satisfied the market opening requirements of Section 271 of the Telecommunications Act at a level that warranted allowing SBC to provide in-region, interLATA services in Illinois. SBC was able to achieve this level of flow through for the types of orders that are most prevalent, *i.e.*, those that CLECs rely upon the most to be able to provide service local

service on a mass market basis to customers in Illinois. It is for those orders that CLECs and the Commission requested SBC to “design to flow through,” since such orders are most critical to the CLECs that provide local service. It is uncontested that UNE-P is the service delivery method used to provide mass market service to small business and residential customers in Illinois (779,000 customers as of May 2003),<sup>73</sup> so the priority over the past couple of years was to ensure that UNE-P orders were “designed to flow through” and in fact did flow through. In making its recommendation to the FCC that SBC should be granted authority to provide in-region, interLATA service, the Commission noted and relied upon SBC’s ability to achieve a 98% flow through:

954. PM 13 measures flow-through as a percentage of orders that are designed or “eligible” to flow through. SBC Illinois explains that not all orders are designed to flow-through; by design, some orders (such as complex orders) are designed to require manual intervention. Thus, PM 13 shows whether the orders that are designed to flow through are, in fact, flowing through as intended. The FCC refers to this measure as “achieved” flow-through, and it has said that this is the “primary” measure of flow-through that it considers. New Jersey 271 Order, ¶ 32 (“We generally find the achieved flow-through measure is the most indicative of the BOC's ability to electronically process orders.”).

955. SBC Illinois’ commercial performance results show that it flowed through 95.56% of orders designed to flow through, and SBC Illinois informs that the rate is superior to that provided by other BOCs whose section 271 applications have been approved. While acknowledging that the rates were slightly below the parity standard, SBC Illinois states that the differences were not material, and attributable to the fact that the current parity standard requires comparison of dissimilar processes. SBC Illinois explains that wholesale orders are processed through interfaces prior to reaching the common point where service orders are generated for both types of orders (wholesale and retail).

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<sup>73</sup> *Joint Applications of SBC Communications, Inc., Illinois Bell Telephone Company, et al. for Authorization to Provide In-Region, InterLATA Services in Illinois Indiana, Ohio and Wisconsin*, WC Docket No. 03-167, Memorandum Opinion and Order, released Oct. 15, 2003 (“FCC Illinois 271 Order”), p. 2 (the FCC’s Illinois 271 Order noted that as of May 2003, SBC estimates CLECs were serving approximately 319,000 UNE loops and 779,000 UNE-platform lines in Illinois).

956. BearingPoint found that SBC Illinois' flow-through documentation is clear, accurate and complete. and its testing showed that orders designed to flow through did flow through, at rates of 99.5 percent (for UNE-P orders), 97.9 percent (for unbundled loop orders), 99.1 percent (for local number portability ("LNP") orders), and 95 percent (for resale orders). SBC Illinois' flow-through results satisfied all five of the test criteria. Further, BearingPoint found that SBC Illinois' process for manual input of orders that do not flow through are well defined and comparable to retail. SBC Illinois' manual order processes satisfied all seven test criteria.

957. A second performance measure, PM 13.1, measures flow-through as a percentage of *all* orders, even those that are not designed to flow through. SBC Illinois states that its results on this measure were high (consistently above eighty percent for the highest volume category, UNE-P, and consistently above 76% across all categories combined). SBC Illinois adds that it met the requirements of the 24 Month Performance Plan negotiated with the CLECs. Specifically, SBC Illinois states that it implemented nine enhancements during 2002, and plans at least eight more enhancements in the coming year.<sup>74</sup>

As is clear from the foregoing passages from the ICC 271 Order, SBC achieved a 99.5% flow through rate for UNE-P, a 97.9% flow through for unbundled loop orders and a 99.1% flow through rate for local number portability orders – those orders most critical to local competition. This Commission relied upon those determinations in finding SBC's local market open to competition. To allow SBC to utilize a much lower flow through rate for purposes of its cost studies would in effect allow SBC to engage in a "bait and switch" scheme whereby it will have gained access to the long distance market on the premise of 98% plus flow through but be allowed to severely inflate its nonrecurring charges by claiming much lower flow through rates in its nonrecurring charge TELRIC studies. This the Commission should not countenance.

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<sup>74</sup> *Investigation Concerning Illinois Bell Telephone Company's Compliance with Section 271 of the Telecommunications Act of 1996*, Docket 01-0662, Phase 2 Order on Investigation, May 13, 2003 ("ICC 271 Order"), ¶¶ 954-957.

Moreover, it is worth noting that should the service delivery method for small business and residential mass market customers change, as it would if ILECs are no longer required to provide CLECs with unbundled local switching and UNE-P, then other service orders -- such as orders for hot cuts, frame due time, batch hot cuts and EELs -- will become more critical and frequently used by CLECs. Should there be such a migration to an environment in which CLECs are able or are forced to change service delivery methods, then orders which SBC today claims are “complex” or infrequently used and therefore not designed to flow through will by necessity need to be designed to flow through, requiring greater levels of automation, since CLECs will be more dependent upon those order types and will use them more frequently so that they can provide local service. The FCC’s *Triennial Review Order* contemplates that if states make a finding that CLECs are “not impaired” without access to unbundled local switching of the ILEC, then such access and, in turn, access to UNE-P, will be phased out over a 27-month period. (*Triennial Review Order*, ¶532) Thus, it is plainly foreseeable that high volumes of orders for hot cuts, frame due time, batch cuts and EELs may be occurring in the near term and certainly within the three year planning horizon of SBC’s cost studies. The flow through for such orders, then, regardless of SBC’s claims that today they may be “complex” or infrequent, must be commensurate with the flow through rates that SBC has proven it can achieve with technology available today for the service orders needed for UNE-P, unbundled loops and LNP. To do anything less would violate the principles of TELRIC and the demonstrated expectations of this Commission and the FCC about flow through rates that are necessary to sustain a competitive market.

As discussed in our Initial Brief and above, Joint CLECs agree with Staff that the Commission should order a 98% flow through rate to determine nonrecurring service order costs. (Staff Initial Br., p. 148) As Staff correctly pointed out, the Commission, in its TELRIC II Order, has already made it very clear that SBC cannot base its nonrecurring costs on existing network architecture and processes, taking into account only those improvements it plans to make over a three year planning horizon. The Commission has already rejected that approach. (Staff Initial Br., p. 150) Rather, the Commission directed that SBC must employ fully automated, forward looking, most efficient technologies and must provide adequate supporting documentation in support of all its nonrecurring charges. (TELRIC I Order, p. 89; TELRIC II Order, p. 39) In blatant defiance of this clear directive, SBC in this cite presented flow through rates even lower than the ones the Commission already rejected (Staff Initial Br., pp. 151-152) and, worse, draws upon three months of data from July-September 2002 to support its case. As Dr. Currie himself stated, three months of data is insufficient to establish a trend (Tr. 1175-1176), and is certainly insufficient to predict one. While Staff did not address Support Activities, the 98% fallout rate should be the total fallout rate, including Support Activities.

The fact that SBC would refer to its general fallout percentage for UNE-P as “reasonable” and “somewhat higher” than the rate adopted in Docket 98-0396 defies reality, common sense, its own data and prior Commission orders ordering a fallout rate of two percent. (SBC Initial Br., pp. 178, 182)<sup>75</sup> Over six times higher is not “somewhat

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<sup>75</sup> To the extent SBC’s statement that “actual” fallout data was not available for use in Docket No. 98-0396 (the TELRIC II case) implies that the Commission somehow



2003, SBC's actual flow through data for UNE Loops was **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\***, thereby confirming the reasonableness of 2% fallout. (AT&T Ex. 3.1P, pp. 37, 43) SBC's UNE-P flow through was **\*\*\* BEGIN CONFIDENTIAL xxxxxx END CONFIDENTIAL\*\*\*** percent. (AT&T Ex. 3.1P, pp. 38-39, 43) The state commissions of Michigan, Missouri, Ohio and Wisconsin are in accord. (AT&T Ex. 3.1, p. 36).

In addition, SBC's representations about its EASE system and its contention that the ordering of UNEs is somehow fundamentally different and more complex than for ordering or resale services are simply not true. When an SBC provisions a network access line to its end user, that end user receives a loop, a switch port and common transport. When a CLEC orders UNE-P, it receives a loop, a switch port and common transport. As Mr. Turner noted, the EASE system is used to provide a service order interface for resale service orders, including loop-port combinations. (AT&T Ex. 3.1, p. 35) The capability of the EASE system to provide 98 percent flow through is indicative, then, of the performance SBC should be able to achieve (in fact, has achieved) on a forward-looking basis in its wholesale system interfaces for UNEs. In sum, EASE provisions precisely the same elements (and combinations) that would be required when ordering a UNE-Platform. (*Id.*) These facts have been corroborated by SBC witness Mr.

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2002 through December 2003. (Tr. 1174-1175) Because Dr. Currie tried to plot a straight line, the two trends cancelled each other out for the most part, resulting in the low R-squared. (Tr. 1183-1184) When Dr. Currie was asked to perform an R-squared value for the time period from October 2002-December 2003, his R-squared value was much higher, resulting in a value to which even Dr. Currie attributes some significance. (Tr. 1173-1181) This corroborates Mr. McClerren's testimony that fallout rates have declined and that a 2% fallout rate is reasonable.

John Mitchell, who testified that SBC's own performance data indicate that its resale flow through rate is approximately two percent. (*Id.*)

SBC's contention that Mr. Turner's 10% fallout rate for complex UNE orders is particularly unreasonable is belied by SBC's own cost study, which assumes a \*\*\* **BEGIN CONFIDENTIAL xxx END CONFIDENTIAL\*\*\*** fallout rate for DS1 and DS3 loops, both complex UNEs. (AT&T Cross Ex. 45P)<sup>77</sup> SBC acknowledges that this is the same rate adopted by the Indiana Commission. (SBC Initial Br., p. 188 n.64) Interestingly, Mr. McNeil, the SBC witness who testified that, to his understanding, 100% of all DS1 and DS3 loop orders fall out (Tr. 1303-1304), was completely unfamiliar with what, if any, flow through for those products was included in SBC's cost studies. (Tr. 1307-1308) SBC has failed to provide the critical nexus between its OSS personnel and its cost studies and has failed miserably to meet its burden of proof. In fact, the number of "disconnects" between the testimony of SBC's operational experts and its cost study assumptions is startling.

SBC also incorrectly asserts that the fallout rates the Indiana Commission adopted are "substantially higher" than those proposed by AT&T. (SBC Initial Br., p. 189) To set

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<sup>77</sup> To the extent that it is inferred that there is an inconsistency between the recommendation of Mr. Turner and Joint CLEC witnesses Ankum/Morrison on fallout for complex orders, that is not accurate. During cross examination Mr. Turner noted that the reason for the higher fall out he recommends has to do with the low volume of orders for these types of facilities. (Tr. 1529-33) However, as noted above, if as a result of the *Triennial Review Order* (or other subsequent actions by the FCC) UNE-P goes away and more UNE-L is used, the DS1 and DS3 Orders (as part of EELs) will become run of the mill and large volumes will be fed through SBC's OSS. Thus, the Ankum/Morrison recommendation is based on a more forward-looking view that UNE-L will reach higher volumes which then warrant a more sophisticated OSS. By contrast, to assume that volumes do not warrant designing an advanced OSS that can achieve a higher level of flow through is to create a self fulfilling prophecy: a primitive OSS will lead to high fall out, which will lead to high prices, which will lead to low service order volumes, which in turn "justify" the lack of OSS.



**END CONFIDENTIAL\*\*\*** It is SBC, then, not AT&T, that presents proposals way out of line with the Support Activities adopted by the Indiana Commission.

SBC's fallout rates should be rejected and the 98% flow through rates and 2% end-to-end fallout rates proposed by AT&T witness Mr. Turner, Joint CLEC witnesses Dr. Ankum and Mr. Morrison and Staff should be adopted.

**6. Other Issues (Including Rate Design)**

- a. Separation of Connect and Disconnect Costs**
- b. Rate Design Issues Related to SBC's Enhanced Extended Loop (EEL) Service Order Cost Study**
- c. Rate Design Issues Specific to SBC's Existing UNE-P Service Order Cost Study**

The Joint CLECs have no further comments on issues 6.a, b or c.

**C. Provisioning (Loops and EELs) Nonrecurring Cost Studies**

**1. Identification of tasks**

The Joint CLECs wholeheartedly agree with Staff that SBC has provided no support, and certainly no credible support, for the numerous and expensive testing activities SBC assumes all loops – both stand alone and EEL loops – will need to undergo as part of the design process. (Staff Initial Br., pp. 156-157) As Staff pointed out, and as the Joint CLECs discussed in detail in their Initial Brief, Mr. Chris Cass, the SBC direct case witness who was replaced by SBC prior to hearing, provided direct testimony (SBC Ex. 6.0) that is contrary to SBC's current proposal that all stand-alone POTS loops must be designed. (Staff Initial Br., p. 157) As Mr. Cass' testimony stated, stand-alone POTS loops are "simpler to provision than the designed analog and digital loops identified in the EEL cost study." (SBC Ex. 6.0, p. 26) As the Joint CLECs pointed out, however, it is the transport portion of the EEL combination – not the loop portion – that must be

designed. That is where the testing and design costs belong, and SBC has included them there. It is both redundant and unnecessary to include them in the nonrecurring costs to provision an EEL loop. As the Joint CLECs pointed out, the fact that SBC intends to impose design costs on stand-alone and EEL loops that are already working loops demonstrates the absurdity of SBC's position. (Joint CLEC Initial Br., pp. 253-256) As Staff noted, even when asked for more information to support SBC's position, SBC either would not or could not comply. (Staff Initial Br., p. 157) In sum, the Joint CLECs agree with Staff that in the absence of credible evidence to support the work performed by the SSC and the CPC/HPC (the groups that perform the design work) in provisioning UNE loops, "the Commission should not permit SBC to assess charges for either standalone loops or for EEL loops." (*Id.*)

SBC, in its Initial Brief, attempts to defend its design process by stating that it is necessary to ensure that the assigned facility satisfies the requirements of the ordered product. (SBC Initial Br., p. 192) This cannot be the case, however, because SBC requires that even working POTS loops being migrated from an SBC switch to a CLEC loop must be designed. (Tr. 1476) There is no question, however, that those loops already "satisfy the requirements of the ordered product." SBC's late-contrived explanation is not supported by any record evidence, is belied by the facts, and must be rejected.

SBC also indicates that it must verify the CFA information and must establish the circuit into the TIRKS system. (SBC Initial Br., p. 192) Essentially, this is an inventory function (*i.e.*, inventorying the cross connect). As AT&T witness Mr. Turner testified, there is a need to inventory the cross connect. (Tr. 1583) That need exists, however, *for*

*both SBC's retail services and its wholesale services.* While that inventorying function must be done for SBC's retail POTS loops and its UNE-P loops, those loops are not designed loops under SBC's proposal. Again, SBC's illogical and unsupported design proposal for POTS loops and EEL loops must be rejected.

Finally, SBC's citation to the Indiana Order is purposefully misleading. While it is true that the Indiana Commission did adopt SBC's designed loop proposal for the somewhat more complicated circuit layout of EEL loops, that ruling does not apply to stand alone POTS loops *because SBC did not propose that POTS loops must be designed loops in Indiana.*

As the Joint CLECs discussed at length in their Initial Brief (pp. 261-63), the use of IDFs by SBC in its nonrecurring cost studies is not forward looking and those costs must be rejected.<sup>78</sup> As AT&T witness Mr. Turner testified, one typically finds IDFs in older central offices that were sized for larger analog equipment. Because the equipment was so much larger, the offices were built with multiple floors. IDFs are a holdover from an age when multi-floor central offices were common; this is not the case presently with modern digital equipment. Forward looking engineering assumptions do not include IDF arrangements and these costs should be rejected. (AT&T Ex. 3.1, p. 45)

SBC takes issue with the Joint CLECs' critique of SBC's Validation and Verification Activities. SBC notes:

The Joint CLECs propose to indiscriminately eliminate a number of activities based on their alleged short-hand descriptions – *e.g.*, any activity described as a “validation” or “verification” activity. Joint CLEC Ex. 1.0 (Ankum-Morrison Direct) at 80-90. The Joint CLECs speculate that “these activities are excessive and are the result of (a) SBC's poorly designed LSR process, (b) lack of systems integration, and (c) errors in

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<sup>78</sup> In Joint CLECs' Initial Brief, this topic was discussed under “Activity Times.”

SBC's legacy systems." *Id.* at 143-147. But that speculation is utterly without merit. (SBC Initial Br. at 191)

This issue is once again related to two other, previously discussed issues: (1) the state of SBC's OSS, and (2) whether or not CLECs should be held accountable for errors caused by SBC.

With respect to the first issue, the Joint CLECs have already demonstrated that the state of SBC's OSS is not consistent with TELRIC. The Joint CLECs have also demonstrated that fallout caused by SBC's OSS results in more extensive scrutiny by technicians for downstream activities. That is, given that technicians experience the reality of SBC's operations – with the errors in its legacy systems, OSS that fails to filter out incorrect LSRs, etc. – and the frequent errors and inconsistencies in their work orders, they become conditioned to engage frequently in validation and verification activities. (Joint CLEC Ex. 1.0, pp. 85-89) As such, the SME estimates for these activity times will reflect SBC's actual operations and not the forward-looking OSS required under TELRIC. As the Joint CLECs have shown, it is not sufficient to simply adjust the fall-out rates of the OSS; the downstream activity time estimates – because they are SME based and reflect an OSS that is not TELRIC – must be adjusted as well. (Joint CLEC Ex. 1.0, pp. 85-89) SBC has made no adjustments to the SME estimates to ensure that they would be consistent with TELRIC.

Second, to the extent that technicians are checking for errors and inconsistencies that stem from SBC's own legacy systems -- and there are many such instances (Tr.1281-1283) -- economic theory and TELRIC dictates that SBC and not the CLECs pay for these validation and verification activities. By contrast, to have CLECs pay for these activities is to create a perverse incentive structure under which SBC would have no



etc., is a daunting statistical task. It was also discussed that while SBC's technicians may be SMEs with respect to establishing cross-connects, testing, etc., there is nothing in the record to show that those SMEs are qualified in any meaningful way to provide an opinion on the complex statistical issue of what may constitute a representative average travel time estimate. In fact, the opposite is true: during cross-examination of SBC's witness Ms. Gomez-McKeon, it was established that there is no statistical foundation whatsoever for SBC's travel time estimates to ensure that the estimates are representative of the average in Illinois. (Tr. 1412) In view of this, it is amazing to see that SBC uses the purported lack of support for the Joint CLECs proposed modifications as a defense of its own unsupported estimates.

Joint CLECs agree with Staff that there is no justifiable reason for the travel times of the CP&M and the DOG to differ. To say that the geographic territories differ, as SBC does, does not address the problem. SBC has provided no support to prove that different geographic areas are more efficient; to the contrary, Staff is correct that SBC has done nothing more that demonstrate that the DOG is less efficient than the CP&M. (Staff Initial Br., pp. 161-162)

Joint CLECs also agree with Staff that SBC's nonrecurring cost studies double recover the costs for cross connects, including the cross connects required when the CLEC requires multiplexing. (Staff Initial Br., pp. 162-163) As Staff pointed out, SBC witness Ms. Gomez-McKeon was wholly unable to match SBC's provisioning activities to its proposed nonrecurring charges. (Staff Initial Br., p. 163) In particular, she was unable to attest to the fact that the work listed by SBC in support of its multiplexing

charge is in fact the work SBC actually performs in circumstances when it assesses certain multiplexing charges. (Staff Initial Br., p. 163)

SBC contends that it does not double count cross connect activities because, for example, in provisioning an EEL, an SBC technician must perform a cross connect at each end of the dedicated transport element and separately perform the loop cross connects. AT&T does not disagree that these are the only two cross connects. The problem is that *these are not the only cross connect costs included in SBC's cost studies*. As both AT&T witness Mr. Turner and Staff point out, SBC's proposed nonrecurring charges double recover costs for work activities.

For example, when the CLEC purchases an analog-to-DS1 EEL configuration (*i.e.*, analog loops and DS1 transport), there are two cross connects – one connecting the transport at the DSX1 cross connect panel and the loop cross connect. (See AT&T Cross Ex. 46P) The cost for the DSX1 cross connect is included in the nonrecurring charge for the DS1 transport itself. (Tr. 1464) As Ms. Gomez-McKeon also acknowledged, the cost of the loop cross connect is included in the line connection charge. (Tr. 1470) SBC, however, also includes additional cross connect costs when the CLEC purchases multiplexing to dechannelize the DS1 to the analog, or DS0 level. Yet there is no additional cross connect activity at the multiplexer. As even SBC acknowledges, there are only two cross connects. (Tr. 1465-1470; 1505-1506) The cross connect costs included in the line connection charge and in the DS1 transport facility charge already cover all costs of both cross connects.

As Staff also pointed out, SBC's cost studies double recover costs because they assume that all work activities will be done in all cases. That is, work activities will be

done once in conjunction with transport, once in conjunction with multiplexing, etc. As AT&T witness Mr. Turner pointed out, multiplexing is very rarely, if ever, purchased by itself because it is useless by itself. (AT&T Ex. 3.1, p. 83) It is almost always purchased with dedicated transport. Thus, it is rare (if ever) that a technician will travel to an unmanned office to provision the multiplexing and travel again for the transport. Nonetheless, SBC's cost studies assume that very scenario.

Mr. Turner provided additional examples of this double recovery. For example, Mr. Turner testified that if a CLEC is purchasing a DS1 loop/DS1 transport EEL, the line connection charge for the DS1 loop already includes the cost to cross connect that loop. The cost for the DS1 transport, however, also includes cross connect costs. When the DS1 loop is cross connected to the DS1 transport, there is only one cross connect, yet SBC's cost study includes the cross connect costs in both the line connection charge *and* the transport charge. (AT&T Ex. 3.2, p. 75)

As further example, when the DS1 transport is being dechannelized to voice (or DS0) loops, the CLEC uses Central Office Multiplexing – DS1 to Voice. In this scenario, even Ms. Gomez-McKeon agrees that there are two cross connects – the DS1 transport to the DSX1 panel and the cross connect of the DS0 loop. (AT&T Cross Ex. 46, p. 2; Tr. 1470) The cross connect of the loop is recovered in the line connection charge. According to SBC's cost study, the Central Office Multiplexing – DS1 to Voice already includes the cross connect costs for cross connecting the DS1 transport to the DSX1 cross connect panel. But these cross connect costs are also included in the cost of the DS1 transport. Thus, while there is only one cross connect of the DS1 transport to the DSX1 cross connect panel, SBC's cost study proposes to charge for them twice – once in

the transport charges and again in the element. (AT&T Ex. 3.1, p. 75) It is for this reason that AT&T witness Mr. Turner recommends that “[t]he only appropriate, TELRIC-compliant approach is to eliminate the cross-connects from the Interoffice Dedicated Transport elements altogether so as to avoid double counting the FOG costs when elements are cross-connected to one another” (*Id.* at 75-76); and why Staff recommends that the Commission order that SBC to refrain from assessing multiplexing charges in combination with orders for dedicated transport. (Staff Initial Br., p. 164) Joint CLECs agree.

SBC, at page 194 of its Initial Brief, contends that in “the majority of cases, the technician is dispatched to an unmanned central office for a single service order or trouble ticket.” There are two flaws in SBC’s analysis. First, as AT&T witness Mr. Turner testified, in his experience working with central office technicians, including those assigned to unmanned offices, the technicians virtually always work on multiple activities when dispatched to one of their central offices. (AT&T Ex. 3.1, p. 74) In addition, while Mr. Turner and Ms. Gomez-McKeon disagree as to how often multiple tasks are accomplished, SBC witness Ms. Gomez-McKeon agrees that it does occur, yet has no idea whether SBC’s cost studies allow for this scenario. The same is true for the travel times to the SAI and FDI. (SBC Ex. 9.2, pp. 6-7; Tr. 1490) (*See* SBC Initial Br., p. 195)

At page 199 of its Initial Brief, SBC contends that it did not use pre-connectorized jumpers to establish cross connects for central office multiplexing DS1 to voice grade loops because they are “the exception rather than the rule.” This statement clearly evidences the fact that rather than relying on forward looking TELRIC principles, SBC

ignored them in favor of the technology and practices that *actually exist* in its network. The relevant inquiry, however, is what is the most forward looking and efficient technology to employ. Clearly, that is the pre-connectorized jumper. In addition, despite the fact that SBC acknowledges that pre-connectorized jumpers are used at least some of the time, it fails to employ this more efficient technology and process into its cost studies. (AT&T Ex. 3.1, p. 79)

SBC contends that its provisioning-related testing activities are not mere continuity tests. (SBC Initial Br., p. 200) This is clearly a question of semantics. The process SBC describes (and indicates is not a continuity test) is, as is clear from Mr. Turner's rebuttal testimony at pages 57-58 (AT&T Ex. 3.1), the same process that Mr. Turner refers to as a continuity test. As Mr. Turner testified, he has observed this test performed and has spoken with technicians who have performed this test and "it is universally described as around a two minute activity." (*Id.*) Undoubtedly, the fact that SBC apparently included some IDF costs in its testing (SBC Initial Br., p. 200) accounts for some of the inflated costs.

As SBC acknowledges, "retrieving the next order from PAWS" involves as little as entering a series of keystrokes or clicking on an icon. (SBC Initial Br., p. 200) Anyone with electronic mail capability is familiar with the time it takes to click on an icon; the Joint CLECs leave it at that and encourage the Commission to adopt Mr. Turner's proposal.

As for the "log-in and completeness check" activity, AT&T witness Mr. Turner's recommendation to reduce SBC's estimated times is based on the reduced times SBC filed in Missouri for the same activity. Certainly, at minimum, TELRIC requires SBC to

incorporate its “best practices” from its other states. There is no reason this function should take almost twice as long in Illinois.

SBC also argues that AT&T’s close out time for additional loops should be rejected. (SBC Initial Br., p. 202) As Mr. Turner testified, however, when a CLEC orders multiple loops on a single order, the work that the DOG will perform on the subsequent loops is virtually identical to the work on the initial loop. Thus, while Mr. Turner retained the **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\*** minutes that SBC Illinois included for the initial loop, he included a time of 0.5 minutes for any additional loops on the same order given the fact that the need for additional review is minimal, at best. An example best proves this point. If there are 10 stand-alone loops on the order, SBC witness Ms. Gomez-McKeon anticipated that the CP&M-DOG technician would spend **\*\*\*BEGIN CONFIDENTIAL xx END CONFIDENTIAL\*\*\*** minutes just reviewing the order, with **\*\*\*BEGIN CONFIDENTIAL xxx END CONFIDENTIAL\*\*\*** minutes of that time used just to review the additional loops, all of which contain equipment and assignment information that is similar to that of the initial loop. This result defies common sense and Mr. Turner’s extensive experience. Using Mr. Turner’s recommendation, the Order Analysis for this same 10 loop order would take **\*\*\*BEGIN CONFIDENTIAL xxxxx END CONFIDENTIAL\*\*\*** minutes. This proposal is much more reasonable given the slight, if any, differences that may exist for subsequent loops on the same order. (AT&T Ex. 3.1, pp. 50-51)

SBC also disagrees with the Joint CLECs adjustments to the cross-connect times. However, SBC does not fairly represent the position of the Joint CLECs. SBC states:

The Joint CLECs’ proposal to randomly reduce several activity times for placing cross-connects based on the assumed use of “one-sided cosmic

frames” (see Joint CLEC Ex. 1.0 (Ankum-Morrison Direct) at 117-25) was addressed above. In short, the Joint CLECs fail to show that such frames constitute the most efficient (or even efficient) currently available technology, in light of the high costs and operational limitations of such frames. *See* SBC Ill. Ex. 16.0 (Deere Rebuttal) at 7-8. (SBC Initial Br., p. 198)

The discussion of the forward-looking frame technology is only a partial basis for the Joint CLECs proposed modifications of the cross-connect times. The Joint CLECs’ main reason concerns the experience of the Joint CLECs’ own experts in establishing cross-connects. Unlike SBC’s SMEs, the Joint CLEC witnesses were available for cross-examination and the validity of their estimates could have been probed under cross-examination. Also, unlike SBC, which provide no support for its SME estimates, the Joint CLECs experts discussed and supported their estimates in their prepared testimony. (Joint CLEC Ex. 1.0, pp. 116-124)

With respect to testing activities, SBC also disagrees with the Joint CLECs’ proposed modification of the testing times. SBC’s main argument appears to be that the “CLECs’ assertions are based on an oversimplification of the necessary testing activities.” (SBC Initial Br., p. 199) The Joint CLECs again believe that SBC is not addressing the concerns raised by Dr. Ankum and Mr. Morrison. SBC fails to address the lack of support for its test times. (Joint CLEC Ex. 1.0, p. 127) This failure to support the test times is not rectified simply by criticizing the Joint CLECs.

SBC also fails to respond to the criticism that certain test activities do not account for the fact that certain tests do not require continuous attendance by the technicians. SBC notes: “Similarly, SBC Illinois’ testing time for DS1 CKL testing by the SSC reasonably reflects the multiple tasks involved, and should not be reduced as the CLECs

propose. AT&T Ex. 3.0 (Turner Direct) at 48; Joint CLEC Ex. 1.0 (Ankum-Morrison Direct) at 134-38.” (SBC Initial Br., p. 200) This response is inadequate.

Last, but not least, SBC fails to address the fundamental question: what costs should be recouped through recurring charges and what costs should be recouped through non-recurring charges. To the extent that SBC’s SMEs have provided time estimates for end-to-end testing of the circuits, it is simply not appropriate to include the full costs of these testing activities in the non-recurring charges. When the facilities are tested end-to-end – and the costs include problem resolution, then all entities that will ever use those facilities will benefit from these testing activities (and problem resolutions when the tests fail).

Under the costing principles mandated in the *Virginia Arbitration Order*, as discussed in Joint CLECs’ Initial Brief and elsewhere in this brief, when other entities benefit from certain activities, the costs of those activities should be recovered through recurring charges and not through non-recurring charges. With respect to SBC’s test time estimates, this means that adjustments need to be made. SBC’s SMEs are unaware of this methodological issue. They have not been properly instructed in the TELRIC methodology. As a result, their labor time estimates, in this instance for testing, are not appropriate.

For all of the foregoing reasons, SBC’s criticisms of Joint CLECs positions on activity times are unpersuasive and should be afforded no weight.

### **3. Occurrence Probabilities**

Regarding DIP and DOP percentages, at page 204 of its Initial Brief SBC contends that because existing UNE-P migrations are covered by different elements, the DIP and DOP issues “are for new connects.” While the Joint CLECs and Staff do not

disagree, the major point of contention is that many of these new connects are migrations of already working loops – which have a 100% DOP – and SBC has failed to account for those working loops in its proposed DIP and DOP percentages. The Joint CLECs agree with Staff that when calculating line connection charges for stand alone POTS loops, SBC fails to account for the fact that some stand alone POTS loops will be loops that are being migrated from the SBC switch to the CLEC switch. These loops are already working loops; therefore, the DOP for those loops is 100%. SBC’s nonrecurring cost studies, however, erroneously assume that all stand alone loops are new UNE POTS loops in calculating the DOP percentage. This leads to the obvious result – as Staff correctly describes – of SBC assuming that it must dispatch a technician to perform line connection activities even when there is a fully established and available loop facility from the end user premise to the central office. (Staff Initial Br., p. 167) One thing is clear, however. Ms. Gomez-McKeon – SBC’s DOP witness --- was unable to explain how the DOP percentages are applied in SBC’s nonrecurring cost studies. (Staff Initial Br., p. 169; Tr. 1488) SBC has failed to demonstrate the reasonableness of its proposals, as it must.

For SBC to contend that AT&T proposes “sky high” DIP and DOP ratios of about 95% (SBC Initial Br., p. 204) is disingenuous given the fact that the FCC, in the *Virginia Arbitration Order*, adopted DIP and DOP ratios of 100%, as discussed in the Joint CLECs’ Initial Brief (p. 275).

As Staff points out, SBC’s DOP proposal (to the extent Staff was able to decipher it) “indicates an extremely large disparity between the work CP&M does to provision stand alone UNE-POTS loops and the work CP&M does to provision UNE-P POTS

loops.” (Staff Initial Br., p. 170) It is for this very reason that AT&T raised the rate design issue in its Initial Brief, advocating that SBC has improperly melded the line connection charges for stand alone POTS loops and new UNE-P loops. As Mr. Turner testified, “[t]he nonrecurring cost for new loops UNE-P, which do not require a manual cross-connect except in those situations where dedicated inside plant does not exist, is significantly different than the cost for standalone new loops or standalone migration loops, which always require manual cross-connects to extend the loop to the collocation arrangement.” (AT&T Ex. 3.2P, p. 8) Cost causation principles require that SBC should differentiate the line connection costs for these two classes of loops.

Finally, as to the issue of the percentage of DS1 and DS3 loops that are migrated from SBC service to CLEC service, as Joint CLECs’ Initial Brief points out, SBC witness Ms. Gomez-McKeon’s surrebuttal testimony recognizes the error in SBC’s cost studies, which assume a migration rate of 0%. (SBC Ex. 9.2, pp. 4-5) Mr. Turner is, therefore, correct that SBC’s cost studies must take these migrations into account.

#### **4. Fallout Rates**

See the discussion of fallout rates in Section IV.B.5 of Joint CLECs’ Initial Brief and Section IV.B.5 of this brief.

#### **5. Disaggregation of Connect and Disconnect Charges**

The Joint CLECs fully agree that the connect and disconnect charges should be segregated. AT&T witness Mr. Turner pointed out that SBC’s assumption that all UNEs will be disconnected in two years is arbitrary. As Staff accurately noted, SBC’s assumption fails to account for the fact that the life of the transport portion of an EEL is likely to be much longer than the life of any of the individual loops it serves. Nonetheless, SBC assumes two years for both. (Staff Initial Br., p. 177) Moreover,

SBC's two year assumption is directly contrary to its own imputation studies, which assume a life longevity of more than \*\*\* **BEGIN CONFIDENTIAL** xxxx **END CONFIDENTIAL**\*\*\* years. (Tr. 189-190; MCI Cross Ex. 1, Tab 5.5) This is consistent with Staff's interim proposal until the first quarter of 2005, when SBC's billing systems can accommodate this disaggregation. For the numerous reasons stated in the Joint CLECs' Initial Brief (pp. 283-285), SBC should be required to disaggregate its connect and disconnect costs immediately, but certainly no later than 1<sup>st</sup> quarter 2005.

**6. Other Issues (Including Rate Design)**

While AT&T will not repeat its arguments here, for the reasons set forth in Joint CLECs' Initial Brief and based on the disparity between DIP and DOP for new UNE-P combinations and stand alone loops as discussed in the Probability of Occurrence section above, AT&T recommends that SBC be required to segregate its nonrecurring loop and new UNE-P line connection charges.

As to the issue of segregating first and additional loop provisioning costs, SBC contends that its systems are unable to accommodate that scenario. (SBC Initial Br., p. 210) That is not true. In fact, in many of its states, SBC does just that. (AT&T Ex. 3.2, p. 9) Again, certainly TELRIC requires, at very minimum, that SBC be required to incorporate the best practices and systems within its own region.

**D. Switch Port And Features Nonrecurring Cost Studies**

**1. Identification of Tasks**

Joint CLECs have no further comments on the issues relating to identification of tasks beyond what we have stated in Sections IV.B.1 and IV.C.1 above.

## 2. Activity Times

SBC's argument regarding switch provisioning times is circular and confusing. SBC contends that the "currently available" switches have different provisioning times and that it is, therefore, acceptable to use those disparate times in its cost studies. (SBC Initial Br., p. 213) The fact that the "big three" switch vendors may currently have different provisioning times is irrelevant to a TELRIC analysis. As AT&T witness Mr. Turner testified – and as the Indiana Commission agreed – those disparate times could not exist in a forward looking environment if the switch vendors are to remain competitive. In addition, SBC cannot be contending that Mr. Turner's proposal is not based on "currently available" technology. To the contrary, he reduces the provisioning times to the lowest of the existing provisioning times. While SBC's position is confusing, Mr. Turner's position is not, and it should be adopted.

SBC's nonrecurring cost studies also grossly inflate the times (and, thus, the costs) for numerous log in and retrieve order times. In fact, SBC witness Mr. Cunningham confirmed Mr. Turner's point. As SBC's Initial Brief states (at page 214), Mr. Cunningham noted that the systems will log the users off automatically after several minutes of inactivity. However, Mr. Cunningham also noted that the RCMAC (the switch translation provision center) is the "proverbial nerve center of activity," providing translations work for long distance carriers, enterprise customers, or simple NPA/NXX maintenance within a given region. (SBC Ex. 18.0, p. 5) With this level of activity, and based on Mr. Turner's experience with an RCMAC equivalent, inactivity that leads to being logged off will not occur readily during the normal course of business. (AT&T Ex. 3.1, pp. 40-41) As such, SBC Illinois' assumption that every single order will separately require the technician to log in is simply unrealistic. Moreover, Mr. Cunningham has not

indicated that SBC personnel must log in every single time. Rather, he suggests that only prolonged inactivity – an unlikely occurrence – would necessitate the task of re-logging in. (*Id.*) Mr. Turner’s proposed activity times should therefore be adopted.

### **3. Occurrence Probabilities**

SBC’s cost study assumption that the provisioning of all Centrex features is manual (and, therefore, a 100% fallout rate is appropriate) is directly at odds with the testimony of its own witness, Mr. Cunningham. (SBC Initial Br., p. 216) Specifically, Mr. Cunningham testified that “Line assigned features, whether they be against Centrex or POTS lines, do often utilize a flow through process.” (SBC Ex. 18.0, p. 2) This corroborates the point raised by the Joint CLECs in their Initial Brief that there is a fundamental mismatch between the cost study filed by SBC for Centrex Feature Activation and the types of features to which SBC intends to apply this feature charge. SBC assumed that 100 percent of Centrex System feature activations fall out for manual processing, regardless of the feature being activated.<sup>79</sup> This assumption directly contradicts Mr. Cunningham’s testimony that Centrex features “often utilize a flow through process.”

In addition, Mr. Turner’s experience reviewing Centrex feature activation in other jurisdictions, including other SBC states, has been that the ILEC normally distinguishes between features that are simple features that can be provisioned electronically and complex features that have to be provisioned manually. SBC has failed to recognize this distinction. Mr. Turner’s proposal should be adopted. (AT&T Ex. 3.1, pp. 39-40)

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<sup>79</sup> See SBC Illinois Cost Study – “CenSysFeatures\_N\_WhslUNE\_IL\_02-05\_10-31-02\_TFA#IL-XX-XXX” Workbook, “TAB 8.3.1” Worksheet, Column H which shows the Fallout as “N/A” and the Probability of Occurrence for all tasks at 100%. Similar information can be found on all tabs from TAB 8.3.1 through TAB 8.3.8.

**4. Fallout Rates**

See the discussion of fall out rate issues in Section IV.B.5 above.

**E. Miscellaneous**

**1. Special Access to UNE Conversion Nonrecurring Cost Study**

SBC has already partly abandoned its cost study reflecting the nonrecurring costs to convert existing special access arrangements to a combination of UNEs. That cost study contained two primary components: (1) the cost of a “Demarcation Retag Charge,” which reflects the cost of tagging each converted line and (2) a “Design and Coordination Charge,” which reflects the administrative costs of effectuating a conversion. (SBC Ex. 6.0, pp. 28-33) SBC agrees in its Initial Brief that it will not include the former costs in its cost study. (SBC Initial Br., p. 217) SBC continues, however, to defend its equally invalid design coordination charge. As discussed in the Initial Briefs of the Commission Staff and Joint CLECs, that charge should also be rejected.

SBC defends its design and coordination charge by addressing the arguments made by AT&T witness Turner (AT&T Ex. 3.0, pp. 77, 82-83). Mr. Turner demonstrated that most of the design and coordination costs were caused by SBC’s inefficient systems, which require absurdly expensive manual intervention. SBC admits that its costs are caused by extensive manual processes, but argues that those manual processes are necessary because “SBC Illinois is unaware of any system available today that would cost effectively perform these functions automatically.” (SBC Initial Br., p. 217) The fact that the incumbent LEC’s inefficiency also happens to injure competitors is obviously of no import to SBC.

SBC sidestepped issues related to its current systems by focusing its Initial Brief only on AT&T witness Mr. Turner. SBC's Initial Brief completely ignores Staff witness Dr. Zolnierek, who demonstrated that the issue is not whether SBC should have manual or electronic systems. Rather, the issue is that SBC's design and coordination charges are self-imposed costs caused by SBC's choice of how to effectuate a conversion of special access circuits to EELs. SBC should not be reimbursed for selecting a wasteful, time-consuming procedure that is guaranteed to cause unnecessary costs.

SBC causes its own problems by insisting on categorizing a special access to UNE conversion as a two-step process, requiring disconnection of a line and reconnection of a line. A special access to UNE conversion, however, is merely a billing record change. Nothing is actually physically disconnected or reconnected. Therefore, SBC has apparently installed elaborate gerrymandered procedures requiring manual intervention to ensure that SBC personnel do not actually disconnect a line or reconnect facilities. In the words of Staff witness Dr. Zolnierek, "the so-called Design & Coordination related activities were activities performed by the physical provisioning group to ensure that these groups do not, in fact, do any work." (Staff Ex. 7.0, p. 27)

The costs SBC proposes to ensure that its personnel do not do any work are astonishing. The Staff's Initial Brief highlights that in some instances those "costs" amount to **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\***, even without considering service order related charges. Remember, these are the costs SBC claims it must recover from the simple billing record change, which encompasses the electronic task of converting from billing a line as special access to billing it as EELs.

No physical changes are made on the line. (Staff Initial Br., p. 181 (citing Staff Ex. 27.0, p. 7) The Commission should not allow SBC to impose these unsupported costs.

SBC may argue that the design and coordination activities represent important, necessary functions. Staff has shown, however, that SBC made no effort to support such a finding. As stated in Staff's Initial Brief:

Thus, Ms. Gomez-McKeon's lack of knowledge of SBC's systems and processes absolutely prevented Staff from determining whether SBC's provisioning groups perform any necessary functions at all when provisioning (or more appropriately not provisioning) special access to UNE conversions. (Staff Initial Br., p. 183)

SBC has the burden of proof in this proceeding. Given the fact that it is completely unable to support the extraordinary charges it wishes to impose for special access to EELs conversions, those charges should not be approved by this Commission.

In addition, processes SBC identifies for Special Access to UNE conversions are unnecessary because these circuits are being converted from special access to UNEs and, by definition, are already working circuits. The CLEC has ordered the migration of a working special access circuit to now be provisioned using UNEs. While Mr. Christensen contended that "the fact that the circuits are already working does not have an impact on the tasks performed by the LSC" (SBC Ex. 10.1, p. 13), it must have an impact. If the circuits are already working, it is wholly illogical that the first task that SBC Illinois must perform is to log into the "CABS system to verify that the circuit is a working circuit." This is entirely unnecessary, of course, as are the other checking and validation steps that SBC Illinois incorporates into its process. In short, the two minute time that AT&T witness Mr. Turner recommends (two hours across all of the circuits in a single project) is a reasonable time estimate for an efficient, forward-looking process. (AT&T Ex. 3.1, p. 32)

## **2. ULS Billing Establishment**

The Joint CLECs have no further comments on this issue.

### **F. Labor Rates**

#### **Summary of Recommendations on Labor Rates**

For the reasons stated in Section III.F of the Joint CLECs' Initial Brief and in this Section III.F below, the Commission should require SBC to make the following adjustments to its base wage and salary figures that are used in its TELRIC studies:

1. Divide by the .67 overall benefit factor to arrive at a labor rate including benefits;
2. Apply the 95% adjustment factor to management and non-management rates to account for 5% non-productive time;
3. Apply a factor of .9050 to account for the fact that managers work more than a 40-hour week;
4. Apply the support asset factors developed by Mr. Starkey and Mr. Fischer, instead of the support asset factors developed by SBC;
5. Apply the clerical and supervisory support adjustment described by Mr. Flappan (AT&T Ex. 4.0, pp. 31-32);
6. Apply SBC's Support and Supervision – Other adjustment; and
7. Eliminate any wage increase and inflation factors (or, alternatively, apply the productivity adjustments recommended by the Joint CLECs and an inflation factor of 2 – 4%).

#### **1. Overview**

The disputes over labor rates on this record turn, in the main, on the key issue of whether these rates should be compliant with basic TELRIC principles, *i.e.*, whether they should reflect the forward-looking efficient cost of labor in an open competitive market. Using data for one company (SBC) and one year, SBC identified the basic hourly wage or salary for each type of employee, adjusted that data (albeit imperfectly, as discussed below) to develop a rate per productive hour of work, and then applied “loading factors”

to account for social security, Medicare, benefits and “other.” But in the end SBC still relied entirely on its own actual data, for a single year, in developing its proposed labor rates.

AT&T witness Mr. Flappan proposed that SBC’s labor rates should be “normalized” or benchmarked against objective, external data to ensure that the labor rates used for costing purposes<sup>80</sup> reflected the efficient, forward-looking cost principles on which TELRIC rests. Mr. Flappan started with the base wage and salary figures used by SBC. He applied a benefit factor derived from Bureau of Labor Statistics data to arrive at a labor rate including benefits, and proceeded to make a series of adjustments designed to correct areas in which SBC’s proposed loaded labor rates are out of line with market data or are otherwise excessive. (AT&T Initial Br., pp. 309 – 336.) Mr. Flappan’s resulting recommended rates reflect current market conditions, based upon data from a broad universe of companies under competitive conditions, and are therefore consistent with sound TELRIC principles and methodology.

SBC takes issue with this basic approach. It objects to AT&T’s basic method of looking at competitive industry benchmarks and applying a methodology analogous to the “scorched node” concept used in determining network costs. It contends:

[I]f SBC Illinois is a union company (as it is) and its union contracts are expected to continue over the foreseeable future (as they are), then the level of wages and benefits which SBC Illinois is contractually obligated to provide to its nonmanagement personnel should be the basis for determining nonmanagement labor costs. Similarly, if SBC Illinois’ current mix of management employees, with varying salary and benefit costs, will continue over the foreseeable future, then that level of salaries

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<sup>80</sup> Labor rates have a significant impact on UNE rates. Non-recurring costs, for example, are the product of the labor rate and the time required to perform a function. Equipment investment includes the capitalized cost of installation, including labor.

and benefits is the right basis for determining management labor costs.  
(SBC Initial Br. at 220)

SBC's "embeddedness" is much in evidence in its critique. SBC's arguments would be appropriate for a traditional Article IX rate case, where it would be entitled to recover from ratepayers its actual, prudently incurred costs. But this is not a traditional rate case, and the issue is not what labor costs SBC has actually incurred, but rather what an efficient competitor in the industry would incur on a forward-looking basis. SBC's management is free to run its business as it sees fit, and no one is contending that it must somehow abrogate its union contracts or alter its actual mix of management and nonmanagement employees, but it is not "entitled" to recover its embedded labor costs from its wholesale customers. The manner in which this overall point of contention is resolved will determine the resolution of many of the more specific issues addressed below.

## **2. Management Hours**

SBC acknowledges that Joint CLECs did not propose any adjustments to SBC's base wages and salaries,<sup>81</sup> but it takes issue with Mr. Flappan's adjustment to the assumed 40-hour work week for management employees. Mr. Flappan made that adjustment to account for the fact that management employees typically work more than 40 hours per week. SBC does not dispute the fact that managers work more than 40 hours per week, but it contends that SBC's calculations already assume that those

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<sup>81</sup> SBC cannot resist pointing out that its wage rates for two of the most widely used rates in its TELRIC studies are less than rates AT&T pays its union employees under a similar contract. That "fact" is not only profoundly irrelevant, it is wrong: SBC is using contract language, out of context, and without regard to whether the actual job responsibilities and requirements are the same. (AT&T Ex. 4.1, pp. 2-3)

employees work more than 44 hours per week, such that AT&T's proposed adjustment would double-count those hours. (SBC Initial Br. at 220)

There is no double-counting in Mr. Flappan's analysis. As SBC witness Mr. Barch elsewhere acknowledged, SBC uses a denominator of 2080 hours (40 hours times 52 weeks) as the initial step in calculating an hourly wage figure. SBC contends that this figure is conservative because it assumes that its managers work every work day of the entire year (*i.e.*, it does not account for vacations, holidays and personal days), and contends that when those factors are taken into account, SBC's method implicitly assumes over 44 hours per week for the weeks managers actually work. What Mr. Barch leaves out, however, is that the first adjustment SBC makes after developing the basic average wage (by dividing salary dollars by the 2080 hours) is to make an adjustment for "paid absences." The "paid absences" include vacation, holidays and paid sick days – the very factors cited by Mr. Barch. Thus, it is SBC that would be double counting for paid absence costs – once through the paid absence factor and again by their inclusion in the basic wage calculation.

Moreover, in using 2080 hours in the calculation of management average wage per hour, SBC failed to recognize that managers in fact normally work more than 40 hours per week. Mr. Flappan's adjustment accounts for this fact. Based on BLS data showing that management employees in a broad range of relevant job categories worked an average of 44.2 hours per week in 2001, Mr. Flappan concluded that SBC's wage rates were overstated by 10.5%, and he applied a factor of .9050 ( $40 / 44.2$ ) to account for this overstatement.

### 3. Break Time

SBC faults Mr. Flappan's elimination of its "break time" adjustment, saying "AT&T's assertion that nonmanagement employees should not be offered two 15-minute paid breaks per 8-hour day has no basis in reasonable labor policy or fact." (SBC Initial Br., at 221) Of course, Joint CLECs take no such position. SBC is free to negotiate with its unions whatever break policy it wishes. The point is that this is another example of SBC being wedded to "embedded" thinking. Instead of embedding existing break policies into forward-looking labor rates, Mr. Flappan applied a "95% productive time" adjustment to reflect the fact that all employees will essentially be idle 5% of the time (for all the reasons that employees are idle during the work day), and he applied this factor to all employees – management and non-management alike – resulting in an overall adjustment for non-productive time that is actually greater than SBC uses in its studies.<sup>82</sup> Mr. Flappan's method reflects how an efficient company would operate on a forward-looking basis; it is consistent with TELRIC, not embedded, thinking, and has been conservatively applied to all SBC employees.

### 4. Inflation, Wage Increases, and Productivity Factor

SBC attempts to sow confusion over these issues. Mr. Flappan excluded SBC's proposed inflation factor (and a wage adjustment factor) in calculating forward-looking labor rates for the simple reason that SBC failed to take into account the offsetting gains in productivity over time.<sup>83</sup> As he testified, productivity gains since 1996 have outpaced

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<sup>82</sup> This adjustment supports reducing SBC's asserted task times to the actual efficient times that would result from time and motion or other studies, eliminating the "slack" that SBC has built into its claimed task times.

<sup>83</sup> SBC asserts that its cost studies "already account for productivity gains," but notably it is silent on how that might be so.

wage increases in the telecommunications sector by an average of 3.8% per year. (AT&T Ex. 4.0, pp. 21 – 22.) To blindly increase wage expense for inflation without taking into account productivity gains would ignore the fact that *real* labor costs have been declining in recent years because of these strong productivity gains. At the same time, Mr. Flappan testified that in the event the Commission adopts the productivity adjustments recommended by Joint CLECs, then an inflation adjustment factor of between 2% and 4% would be appropriate. (AT&T Ex. 4.1, p. 5.) The bottom line is that either both inflation and productivity adjustments should be made, or neither.

## 5. Benefits Loadings

As SBC notes, the costs of employee benefits (*e.g.*, for health care, pension and savings plans) are a matter of significant dispute with respect to labor rates. SBC contends that studies conducted by Hewitt Associates in 2001 and more recently show SBC's costs to be "well within the range of benefits offered by other major corporations." (SBC Initial Br. at 222.) With respect to its nonmanagement benefit levels, SBC observes that they are the product of "years of collective bargaining," and cites to the testimony of Mr. Kastner of IBEW. (*Id.*)

It is ironic that SBC would cite the Hewitt studies. Mr. Flappan explained, first of all, that the Hewitt study looks at benefit *design*, not benefit costs, and thus it is of marginal relevance in the TELRIC context. Moreover, using the 19 companies in the study (companies selected by SBC and not independently selected by Hewitt to represent market conditions), SBC Ameritech ranked **\*\*\*BEGIN CONFIDENTIAL xxxxxx END CONFIDENTIAL\*\*\*** in both the ALL Health Care and the All Benefits categories, for Employer Paid Value. Thus, were the Hewitt Study results actually representations of cost, they would support the conclusion that SBC Illinois' benefit loading is in fact

inordinately high and must be adjusted. (AT&T Initial Br. at 320.) Moreover, the more recent Hewitt study similarly shows that SBC's proposed labor rates do not reflect anything approaching efficient costs. SBC's benefit costs, if they are forward looking, should not exceed those it is currently realizing for its "New Hires" managers (defined in the Hewitt study as those hired after August of 1997); instead, its labor rates reflect a health care loading that is 265% of its health care costs for that group. SBC's health care costs for non-management workers exceed those for the Midwest Bargaining Group by 45% to 57%. (AT&T Initial Br. at 331.) The same holds true when pension costs are included: SBC's claimed benefit costs are 50% higher than its benefit costs for management hires after August 1997, and they are 44% higher than costs at the 20 companies SBC selected as benchmarks. SBC's claimed costs, in short, are far in excess of forward-looking efficient benefits costs.

With respect to the union issue, Mr. Flappan's analysis is based on looking at what an entrant to the industry would face, by way of work force composition and labor rates. Accordingly, his reference group of companies from BLS consists of a wide range of companies in competitive (but representative) industries for purposes of benchmarking an efficient level of benefits. AT&T's recommendations in this regard are not intended as a critique of SBC's work force in any respect, nor do they imply that it should become a non-union company; they simply apply competitive entities as a benchmark. SBC's claimed rates would saddle competitors with its embedded labor cost structure, not a forward-looking one as demanded by TELRIC.

## **6. Other Expenses**

SBC's "Other Expenses" category is simply unsubstantiated. It is a catch-all category that includes items with no description, much less justification. For example,

one entry is simply labeled “Other,” another is “Other Expense – Subject to Gross Up Allowance,” another is simply “Other Business Costs.” In fact, SBC’s witness Mr. Barch indicated that, even after Mr. Flappan questioned him, he did not bother to go back and look at what specific expenses are included in these accounts. (Tr. 341) Nor was he able to explain how the business travel and meal reimbursement expenses included here differed from those included in the existing accounts for air travel, lodging, meals, etc. Tr. 340-347; AT&T Cross Ex. 11P. SBC’s “showing,” in short, falls far short of meeting its burden of proving that these “Other Expenses” – whatever they are – are appropriately included in its labor rates, and they should be excluded from a proper TELRIC study.

## **V. SHARED AND COMMON FACTORS**

### **Summary of Recommendations**

Following is a summary of Joint CLECs’ proposed adjustments to SBC’s proposed Shared and Common Cost Factors and Annual Charge Factors, as detailed in Sections V and VI of our Initial Brief and of this Reply Brief:

***Overall recommendations for calculating the common cost factor, the shared cost factor and the Annual Charge Factors:*** SBC should be required to remove all non-regulated data and TBO expense from its shared and common cost calculations and from its Annual Charge Factor calculations. SBC should be prohibited from applying an inflation factor but, to the extent the Commission allows SBC to do so, it should apply the inflation factor of 3.936% based on the PPI in lieu of SBC’s CPI-W-based inflation factor. If an inflation factor is applied, the Commission should require SBC to apply an offsetting productivity adjustment of 8.804%. This results in a net productivity increase of 4.868%.

*Common costs* -- SBC should also be required to make the following additional adjustments to its common cost numerator: (1) begin with the 2001 year end ARMIS balances in Accounts 6711, 6712, 6721, 6722, 6723, 6724, 6725, 6726, 6727 and 6728; (2) adjust the 2001 year end ARMIS balance in Account 6711 to correct for SBC's accounting error (*see* Adjustment 7 on AT&T Cross Ex. 15P); (3) remove all support asset costs from SBC's labor rates, nonrecurring charges and ACFs and add all support asset costs to the common cost numerator; to accomplish this, SBC should add the **\*\*\*BEGIN CONFIDENTIAL xxxxxxxx END CONFIDENTIAL\*\*\*** it excluded from Account 6724 (*see* Adjustment 2 on AT&T Cross Ex. 15P) back into Account 6724; (4) remove OSS testing expense, Tier 1 remedy payments and Digital Divide payments from Account 6728, as recommended by Staff (*see* Adjustments 4, 5 and 6 on AT&T Cross Ex. 15P); (5) remove all but **\*\*\*BEGIN CONFIDENTIAL xxxxxxxxxxxxxxx<sup>84</sup> END CONFIDENTIAL\*\*\*** of SBC's pension settlement credit from Account 6728, which represents SBC's average net pension settlement gain from 1987-2001 or, if the Commission elects to use SBC's average net pension settlement gain inclusive of 2002 and 2003, remove all but **\*\*\*BEGIN CONFIDENTIAL xxxxxxxxxxxxxxxx END CONFIDENTIAL\*\*\*** (see SBC Ex. 17.1, Revised Schedule TD-R2); (6) reduce the remaining amounts in all accounts by the Commission-approved wholesale discount of **\*\*\*BEGIN CONFIDENTIAL xxxxxx END CONFIDENTIAL\*\*\*** to remove retail-related expenses; (7) reduce its common cost numerator by **\*\*\*BEGIN**

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<sup>84</sup> This amount results from taking the Joing CLECs' original recommendation of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxxxxxxxxxx END CONFIDENTIAL\*\*\*** and subtracting the curtailment losses SBC witness Mr. Dominak testified SBC accrued during those years, resulting in an average net pension settlement gain of **\*\*\*BEGIN CONFIDENTIAL xxxxxxxxxxxx END CONFIDENTIAL\*\*\*** from 1987. (See SBC Ex. 17.1, Revised Schedule TD-R1).

**CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**\*\*\* to account for merger savings; and (8) adjust the ad valorem tax factor to restate the book investment to current cost in the denominator of the ad valorem tax factor.

In calculating its common cost denominator, SBC should be required to use the year end 2001 ARMIS booked amounts for its Total Plant in Service and Total Operating Expenses, reversing its so-called “forward looking adjustments.” These book balances must then be brought to current replacement cost using SBC’s Current Cost-to-Book Cost, or CC/BC, ratios.

*Shared costs* -- In calculating the “wholesale uncollectible” component of its shared cost numerator, SBC should be required to substitute the amount it has included with the average amount of revenue write-offs SBC actually recorded from 1998-2003, thereby reflecting the bad debt losses SBC actually incurred over that six year period. That amount is \*\*\***BEGIN CONFIDENTIAL** xxxxxxxxxxxxxxxxxxxx **END CONFIDENTIAL**\*\*\*. In calculating the “wholesale marketing” expense component of its shared cost numerator, SBC should be required to remove all advertising expenses from Account 6613. SBC should then allocate \*\*\***BEGIN CONFIDENTIAL** xxxxxx **END CONFIDENTIAL**\*\*\* of the remaining expenses from Accounts 6611 and 6612 to the “wholesale marketing” expense component of the shared cost numerator, or a total \*\*\***BEGIN CONFIDENTIAL** xxxxxxxxxxxx<sup>85</sup> **END CONFIDENTIAL**\*\*\* using SBC’s

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<sup>85</sup> The Joing CLECs initially recommended wholesale marketing expense of \*\*\***BEGIN CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**\*\*\*. When, in its surebuttal testimony, SBC corrected its admitted accounting error in Account 6711, the amount in Account 6612 (Sales) – one of the accounts used to calculate the wholesale marketing expense – increased as a result of correcting the accounting error, thereby resulting in an increase in Joint CLECs’ proposed wholesale marketing expense to use in the shared cost numerator.

revised marketing costs net of advertising expenses as reflected in SBC Ex. 7.2, Schedule DJB-S01. This amount represents the UNE-specific marketing costs of SBC which results from multiplying the total company marketing expense by the percentage of UNE revenues to total company revenues. Because the uncollectible component of the numerator represents an average of SBC's actual uncollectible revenue and the marketing component is made UNE-specific using a revenue-based mechanism, SBC's UNE revenues for test year 2001 should be used as the shared cost denominator.

*ACFs* -- In calculating its expense factors, SBC should be required to eliminate/deactivate its maintenance expense factor and other expense factor utilization adjustments in calculating the maintenance and other expense components of its ACFs. SBC's maintenance expense component should also be adjusted to increase the Service Order Activity Adjustment from **\*\*\*BEGIN CONFIDENTIAL** xxxxxxxxxxxxxxxxxxxx **END CONFIDENTIAL\*\*\*** In calculating its ad valorem tax factor, SBC should restate its book investment to current cost in the denominator.

In calculating its capital cost factors, SBC should be required to use the cost of capital recommendations of AT&T/MCI witness Ms. Murray and the economic lives and future net salvage values recommended by AT&T/MCI witness Mr. Majoros.

In calculating its investment factors, SBC should be ordered to remove all building and land investment leased to collocating carriers and non-affiliated carriers and to revise its EF&I with Land, Building and Power factors consistent with the capital cost and expense factor adjustments recommended above. SBC should also be ordered to remove any specifically-identified MDF investment to avoid double counting.<sup>86</sup>

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<sup>86</sup> SBC has agreed to make this change.

In calculating its support asset factors, SBC should be required to correct the data entry errors identified by the Joint CLECs<sup>87</sup> and apply the cost of capital recommendations of AT&T/MCI witness Ms. Murray and the economic lives and future net salvage values of AT&T/MCI witness Mr. Majoros. SBC should be required to calculate the support asset costs for its Illinois operations only to facilitate the transfer of these costs to the common cost factor calculation, which is based upon Illinois-specific information.

**A. Issues Common to Shared and Common Factors Development**

**1. Use of New Methodology Generally**

Joint CLECs have no additional comments on this issue, and refer to pages 336-347 of our Initial Brief.

**2. Use of Regulated and Nonregulated Data**

SBC arbitrarily argues that because one of its post-original filing adjustments “had the effect of removing virtually all non-regulated expenses ... there is no need to adjust the factors further.” (SBC Initial Br. at 227) The Commission ought be quite concerned about SBC’s cavalier, “it’s close enough” mentality, particularly because it is SBC – *and only SBC* – that bears the burden of proof in this proceeding. As the Joint CLEC witnesses testified, while the reductions are not significant in terms of dollar amount, these reductions are necessary to avoid a cross subsidy of non-regulated operations. (AT&T/Joint CLEC Ex. 1.2, p. 7)

It is ironic that SBC eschews the need to remove any additional unregulated data from its shared and common cost calculations when Dr. Aron, SBC’s own economist,

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<sup>87</sup> SBC has agreed to correct these errors.

used strictly *regulated* costs as a starting point in making her (flawed) UNE loop and UNE-P comparisons of book cost to UNE revenues. (AT&T/Joint CLEC Ex. 1.2, p. 5)

In sum, as the AT&T/Joint CLEC witnesses testified, the FCC's cost allocation rules provide the Commission a tool to ensure that UNEs do not bear the costs of non-regulated services, over which this Commission has little regulatory price control. The shared and common cost markup will apply only to UNEs, which are regulated services. SBC's own economist agrees. As such, the Commission should require SBC to remove all non-regulated data from its shared and common cost factors.

### **3. Consistency of Numerators and Denominators**

SBC misconstrues the Joint CLECs' arguments regarding the fact that it is absolutely essential to maintain consistency between the common and shared cost numerators and denominators. SBC contends that its use of admittedly historical data in its numerators is acceptable because the CLECs themselves have used ARMIS data in TELRIC studies. (SBC Initial Br. at 227) SBC's argument fails to address the heart of the issue. As the Joint CLECs pointed out, while it would have been preferable had SBC provided data sufficient to use both forward-looking numerators and forward-looking denominators, it simply did not. As the next best alternative, the CLECs recommend the use of ARMIS data in both the numerators and denominators, with certain adjustments.

As the Joint CLECs demonstrated, while the use of ARMIS data does not render the numerators and denominators forward-looking, the relevant inquiry is the *ratio* that results from the numerator and denominator and that *ratio* is sufficiently forward-looking. Staff agrees that because the shared and common cost factor measures the relationship between shared and common costs to direct costs (Staff Initial Br. at 189), the ratio is only meaningful if the ratio compares forward-looking data to forward-

looking data or book data to book data. Staff Initial Br. at 214 (“[t]his ratio is not meaningful because SBCI is comparing a presumably forward looking estimate of costs with an existing cost figure.”). Even SBC agrees that developing a ratio using booked costs is appropriately forward-looking. In fact, as SBC’s Initial Brief (p. 250) makes clear, while SBC used booked data to develop the relationship or ratio between maintenance expense and investment in developing its maintenance factors in its ACF model, even SBC agrees that this ratio “is an accurate indicator of a forward-looking maintenance/investment relationship.” (SBC Initial Br. at 250)

For that *ratio* to have any meaning, however, the numerator and the denominator must both be based on embedded data, or must both be based on forward-looking data. One cannot be historical and the other forward-looking. The reason is clear. Because the common and shared cost factors are designed to determine what level of shared and common costs is necessary to support SBC’s provision of UNEs to CLECs, to ask what level of embedded common/shared costs will support the forward looking costs to provide UNEs is irrelevant. The relevant inquiry is what level of historical common/shared costs are required to support the historical cost of UNEs, or what level of forward-looking common/shared costs are required to support the forward-looking cost of UNEs. Both ratios are meaningful; because SBC has failed to provide data to use the former, the Commission must use the latter.

SBC’s use of the phrase “going-forward” basis hits the nail on the head. (SBC Initial Br. at 227) SBC’s cost studies equate the phrase “going-forward” with “forward looking” and calculate its cost studies on that basis. The two are not the same. Just because SBC will incur costs on a “going forward” basis does not mean that those costs

are “forward looking.” And as SBC witness Mr. Dominak agreed, just because a cost is properly accounted for in an ARMIS account does not mean it is a “forward looking” cost. (Tr. 427) As further example, the revisions SBC made to the common cost factor at the recommendation of Staff witness Dr. Patrick (adopted by Ms. Chang) represent “going forward” costs that are not forward looking and, therefore, are inappropriate to recover in a forward looking environment. (AT&T/Joint CLEC Ex. 1.3, p. 15)

As the Joint CLECs pointed out, in its TELRIC I Order, the Commission directed that SBC exclude from its shared and common cost study a number of “going forward” expenditures that were not appropriately recovered in a “forward looking” environment. Specifically, the Commission ordered SBC (then Ameritech) to remove over \$23 million in expenditures for golf tournaments, White House functions and other image building expenses, as well as \$292 million in retail-related expenses, on the ground that they were discretionary and provided no direct and essential benefit to UNE purchasers. (TELRIC I Order, pp. 51-52; AT&T/Joint CLEC Ex. 1.2, pp. 17-18) SBC’s shared and common cost study suffers from these same flaws.

The key point, then, is that to accurately measure the ratio or relationship between shared and common costs and direct costs, all costs being compared must either be historical or forward looking; no matching is acceptable because to do so completely severs the relationship being studied. As the Michigan Public Service Commission Staff aptly observed in its recent comments on the same studies (albeit with Michigan-specific data):

SBC used a denominator that is not properly matched to its numerator. It is essential to the proper determination of a common cost factor that both the numerator and the denominator be matched in nature. The only two workable matches for the numerator and denominator would be either both

embedded or both forward-looking. A common cost factor calculated using an embedded numerator and a forward-looking denominator should not be allowed. This is precisely the methodology proposed by SBC to calculate its common cost factor.<sup>88</sup>

SBC's mismatched numerators and denominators should be rejected. The Commission should require SBC to implement the Joint CLECs' recommendations using ARMIS data, as adjusted.

#### **4. Productivity and Efficiency**

##### **B. Common Cost Factor**

##### **1. Development of the Denominator**

SBC's arguments regarding the development of the denominator relate to the mismatch between the numerator and denominator; the Joint CLECs therefore refer the Commission to the arguments in the preceding section of this brief and to the arguments in our Initial Brief. In addition, SBC incorrectly asserts that adopting the Joint CLECs' recommendation would result in an historical markup being applied to forward-looking data (*i.e.*, loop rates). SBC is just wrong. The fact that historical ARMIS data is used in the numerator and denominator is irrelevant because it is the *ratio* of common/shared costs to direct costs resulting from that calculation that will be applied to loop rates. That is, we are calculating a *ratio* rather than the direct cost of any particular element. This ratio is no less forward-looking than the ratio that would result from forward-looking data in both the numerator and denominator. Again, the critical issue is what level of common/shared costs are necessary to support UNEs and, so long as the data in the

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<sup>88</sup> *In the matter, on the Commission's own motion, to review the costs of telecommunications services provided by SBC Michigan*, Case No. U-13531, Initial Comments of the Michigan Public Service Commission Staff, January 20, 2004, p. 13 (quoted at AT&T/Joint CLEC Ex. 1.2, pp. 10-12)

numerator and the denominator match, the ratio is appropriately applied to loops and nonrecurring charges.

Even assuming the use of a forward-looking denominator were appropriate (that is, had SBC provided data necessary to also calculate a forward-looking numerator), the denominator SBC calculates is incorrect because it understates loop investment. First, the number of loops SBC uses to calculate its common cost denominator is approximately half a million lower than the number of loops SBC included in its federal Universal Service Fund submission for 2001. Understating the number of loops overstates the common cost factor. (AT&T/Joint CLEC Ex. 1.2, p. 13)

Moreover, SBC, in calculating the common cost denominator, uses cost values for its cheapest 2-wire loop only, completely ignoring its admittedly more expensive loops, such as xDSL loops, 4-wire loops, DS1 loops and high capacity loops. (Tr. 382-384; AT&T/Joint CLEC Ex. 1.2, p. 14) Excluding the costs of the more expensive loops causes a significant understatement in the amount of direct costs in SBC's denominator, thereby understating loop investment and overstating SBC's common cost factor. (*Id.*)

## **2. The 67XX Accounts (Including Retail Cost Adjustment)**

As both Joint CLECs and Staff pointed out, the Commission was very clear in its TELRIC I Order that SBC must remove all retail-related expenses from common costs. (Staff Initial Br. at 193; TELRIC I Order, p. 52) SBC, in its Initial Brief, erroneously argues that the common costs in SBC's common cost numerator do not include retail operations. (SBC Initial Br. at 232) While the Joint CLECs do not disagree that some of the costs included in the classic overhead or 67XX accounts (from an historical cost perspective) in SBC's common cost numerator are incurred in the course of its wholesale operations, certainly some of those costs are incurred in the course of its retail operations.

Otherwise, SBC would have allocated those costs as shared costs to the wholesale operation.

In fact, the very descriptions contained in AT&T Ex. Cross Ex. 14, as well as the testimony of the Joint CLECs witnesses, demonstrate that some of the costs included in the 67XX accounts (*i.e.*, legislative costs, tariffing costs, independent telephone company costs, legal expenses, expenses to formulate corporate policy, company-wide long term planning costs, human resources costs, personnel administration costs, general purpose computer database and application costs, etc.) are retail-related. (See Joint CLEC Initial Br. at 361-369) As AT&T/Joint CLEC witnesses Messrs. Starkey/Fischer testified, for example, SBC has provided no evidence that refutes the fact that the majority of SBC's external relations costs (Account 6722) support or protect its retail operations and not its wholesale operations. (AT&T/Joint CLEC Ex. 1.3P, p. 24) SBC's own cost activity description confirms that these retail costs are, in fact, contained in Account 6722. (*Id.*) If one were to accept SBC's proposal, one must conclude that the booked ARMIS balances from 2001 contain no discretionary expenses or expenses that do not provide any direct or essential benefit to CLEC purchasers of UNEs. The Commission has already concluded that such expenses must be excluded from SBC's common cost calculation. (TELRIC I Order, p. 51; AT&T Ex. 3.1, p. 22)

Moreover, SBC's own avoided cost methodology recognizes that a significant portion of its total avoidable costs is corporate operations expense from its 67XX accounts. In the currently pending TELRIC case in Michigan, SBC filed an avoidable

cost study to revise the currently effective avoided cost discount in Michigan.<sup>89</sup> This cost study, designed to calculate total retail avoided costs when operating in a wholesale environment, *applies the avoided cost percentage to the total book cost of its corporate overhead in the 67XX accounts*. Through its own avoided cost methodology, then, SBC itself recognizes that a significant portion of its common cost expense can be identified as avoidable retail costs by applying an avoided cost factor. (AT&T/Joint CLEC Ex. 1.2, pp. 25-26) It is therefore appropriate to apply the Commission-approved resale discount to remove these same retail-related expenses from the 67XX accounts in SBC's common cost numerator.

At minimum, however, one need only look to the analysis of SBC's own economist, Dr. Aron, who similarly recognized the need to remove retail-related costs from ARMIS data prior to using it in her (albeit flawed in other ways) economic analysis. It is undisputed that Dr. Aron also used an avoided cost discount to remove retail costs from ARMIS data when performing her UNE cost calculations, recognizing, as the Joint CLECs do, that such an adjustment is both necessary and appropriate. (SBC Ex. 2.0, pp. 9-10; AT&T/Joint CLEC Ex. 1.2, p. 29)

Finally, SBC contends that if retail costs are to be removed from the numerator, they must be removed from the denominator as well. (SBC Initial Br. at 232) SBC's avoided cost study recently submitted in Michigan (and referenced above) reveals that the only account included in both SBC's common cost denominator and its avoided cost study is Account 6623 (Customer Services). However, SBC has excluded this account

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<sup>89</sup> See *In the matter, on the Commission's own motion, to review the costs of telecommunications services provided by SBC Michigan*, Case No. U-13531, Direct Testimony of Thomas Makarewicz, Confidential Exhibit TJM-2 (cited at AT&T/Joint CLEC Ex. 1.2, pp. 25-26).

from its denominator and has included it instead in its shared cost numerator. As such, the common cost denominator is unaffected.

### 3. **Transitional Benefit Obligation**

SBC contends that the transitional benefit obligation (“TBO”) expense will continue to be incurred each year through 2008 and, therefore, it is “forward looking.” (SBC Initial Br. at 234) The TBO is not forward-looking. In fact, as Staff readily agrees and as the Joint CLECs conclusively established in their testimony and Initial Brief, the TBO is not a forward-looking expense appropriately allocated to UNEs because it represents benefit obligations for employee years of service prior to 1992 and, as such, is completely unrelated to SBC’s provision of UNEs. (See Joint CLEC Initial Br. at 369-373) This is another case of SBC inappropriately equating “going forward” with “forward-looking.” The Joint CLECs do not disagree that SBC will amortize the TBO until 2008 and, in that sense, will recognize the TBO on a “going forward” basis. This does not, however, render the TBO “forward-looking” and TELRIC-compliant. In fact, the only reason the TBO is still being amortized is that the FCC chose an amortization period that happens not to have expired by the 2001 test year. (Tr. 430-431)

Staff agrees. As Staff succinctly explains, the TBO exists “only because employees earned compensation for work performed prior to 1992. If work had not been performed prior to 1992, there would be no TBO. ... It is unreasonable to suggest that TBO will be incurred as a result of work performed to provide UNE services in the future.” (Staff Initial Br. at 202)

The FCC’s RAO 20 letter cited at page 233 of SBC’s Initial Brief is also inapposite. According to SBC, this letter evidences the FCC’s intent that the TBO amortization be considered an ongoing expense that must be accounted for in SBC’s

forward-looking cost studies. A careful review of this letter, however, reveals that its purpose was to provide guidance on the Part 32 accounts carriers should use to record the effects of SFAS 106 on their regulatory books of accounts. The FCC also prescribed the amortization period of the transition obligation to be the average remaining service period of active plan participants, or 20 years if this period is less than 20 years. The fact that the FCC required carriers to defer recognition of their TBO obligation over a number of years does not imply that an expense is forward-looking. An expense is considered forward-looking in a TELRIC construct if it reflects what an efficient carrier would incur today to provision UNEs. It does not reflect SBC's recovery of obligations deferred for regulatory purposes. (AT&T/Joint CLEC Ex. 1.2, pp. 32-33)

Moreover, the RAO letter, issued in 1992, preceded the Telecommunications Act of 1996 and the FCC's creation of TELRIC principles for determining forward-looking costs of unbundled network elements. Instead, the FCC's guidance was intended to ensure consistency among carriers reporting to the FCC for interstate ratemaking purposes.<sup>90</sup> (*Id.*)

Finally, SBC's argument that the Joint CLEC/Staff position on TBO is directly contrary to Commission precedent is simply wrong. (SBC Initial Br. at 235) None of the decisions SBC references were proceedings setting rates in accordance with forward-looking TELRIC principles. Rather, they are all traditional ratemaking proceedings –

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<sup>90</sup> Interestingly, SBC's proposal in this proceeding deviates from the very guidance the FCC provided in RAO 20. While the FCC directed that the TBO amounts be spread over plant specific accounts, SBC, in performing its shared and common cost study, chose to remove all TBO expense from these plant specific accounts and add the entirety of it to the common cost numerator. Thus, even if the TBO were appropriately included – and Joint CLECs and Staff contend it is not – the TBO amounts should remain in the accounts to which they were booked. (AT&T/Joint CLEC Ex. 1.2, p. 34)

including some electric utility rate decisions – based on embedded, accounting costs. (AT&T/Joint CLEC Ex. 1.2, pp. 34-35) *See also* Staff Initial Br. at 204 (“[t]he examples cited provided for recovery of TBO under traditional embedded cost/rate of return ratemaking theory.”). SBC’s “apples to oranges” comparison should be rejected, as should inclusion of the TBO.

#### **4. Pension Settlement Gains**

Ironically, and despite the fact that it struggles to downplay data from 2002 and 2003 when it comes to wholesale uncollectibles (which have significantly dropped in those two years since the 2001 test year), SBC relies heavily on the fact that it recognized no pension settlement gains in those same two years to argue that its complete elimination of the 2001 pension settlement credit from Account 6728 is appropriate. Specifically, despite the fact that it recognized pension settlement gains in each of the fifteen years preceding 2002, SBC argues that it is highly unlikely it will experience anything approaching the level of 2001 pension settlement gains in the foreseeable future. To the contrary, SBC contends, the “landscape going forward will be characterized by increasing pension expense.” (SBC Initial Br. at 237)

The Joint CLECs recognize that the pension settlement gains SBC experienced in 2001 were higher than normal. For this reason, the Joint CLECs do not recommend adding the entire 2001 credit back into Account 6728. Rather, we recommend adding back a much smaller amount based on a smoothing technique to normalize the 2001 data. It is not appropriate, however, to assume that SBC will not recognize any pension settlement credits in the future, particularly given SBC’s past track record of consistent gains.

As AT&T/Joint CLEC witnesses Messrs. Starkey and Fischer testified, while it is true that SBC Midwest's unrecognized pension gains turned to losses in 2002, those unrecognized losses have begun to decline. These unrecognized gains and losses have a direct correlation with investment returns from the stock market. Thus, the abnormally high market valuations in the late 1990s became abnormally low valuations in 2001 and 2002 due to the general market decline in stock prices. However, as the Joint CLECs demonstrated, the stock market has stabilized and is beginning to exhibit an upward trend as reflected in the trend of the S&P 500 Index. (See AT&T Ex. 1.2, p. 37)

Moreover, SBC recognizes large pension settlement gains when large numbers of its employees leave the company and take pension buyouts. To the extent SBC continues to streamline its workforce through additional job eliminations such as the 20,000 job reductions reported in SBC's 2002 Annual Report and the 3,400 additional job reductions through 3<sup>rd</sup> quarter 2003 (as SBC reported to the investment community), pension settlement activity is likely to continue throughout the study period for determining UNE rates. In fact, in its Investor Briefing discussed in the Joint CLECs' Initial Brief (p. 409), SBC expected force reductions to accelerate from 3<sup>rd</sup> quarter 2003 levels through 2004. (AT&T/Joint CLEC Ex. 1.2, pp. 37-38)

As SBC's unrecognized pension loss situation continues to decline or reverse into a gain position, SBC is likely to experience pension settlement gains in the future. As such, the Commission should include the average pension settlement gain from 1987-2001, as the Joint CLECs recommend. (*Id.*)

## **5. Merger Savings**

As the Attorney General's Initial Brief accurately points out, this Commission's SBC Merger Order in Docket 98-0555 directed that merger savings be passed on to

wholesale customers through updated rates, including reductions to shared and common costs. (AG Initial Br. at 26) As the Attorney General also expressed concern, SBC indicates in this proceeding that its shared and common costs have *increased* since TELRIC I, despite the promises SBC and Ameritech made in the merger docket (Docket 98-0555) that the merger would bring the benefits of consolidation, including reduced operating expenses. (*Id.*) AT&T and the Joint CLECs agree with the Attorney General's overarching view that "[t]he absence of merger savings related reductions to shared and common costs calls into question the credibility of SBCI's proposed shared and common costs increases." (AG Initial Br. at 26) Joint CLECs likewise agree with the Attorney General that, as a result, the record demonstrates that SBCI has overstated these shared and common costs. (*Id.*)

SBC is simply wrong that the merger savings will not impact the numerator of the shared common cost factor calculation. That is precisely where merger savings will be reflected. In fact, the primary area of savings realized by merging entities is managerial and executive functions (*i.e.*, the 67XX accounts such as Executive, Planning, Human Resources, Other General and Administrative). When two entities merge, it is generally the corporate offices of the merged company that see immediate and long term expense (and staff) reductions. While technicians and other personnel most directly involved in managing the network (and hence, most likely to be included in SBC's direct costs) will also likely see reductions, those reductions generally are not as large or as widespread compared to the managerial functions. It is for this reason the Commission, in its SBC Merger Order, recognized that SBC's shared and common cost markup was the most

reasonable mechanism through which to share merger-related savings with SBC's UNE purchasers.<sup>91</sup>

SBC has failed to meet its burden of proof regarding merger savings. For the above reasons, 30% represents a reasonable, if not conservative, allocation of merger related savings to SBC's common cost pool. (AT&T/Joint CLEC Ex. 1.0, pp. 64-65) The Commission should order SBC to reduce its common cost numerator by **BEGIN CONFIDENTIAL\*\*\*XXXXXXXXXXXXX\*\*\*END CONFIDENTIAL.**

**6. Employee Levels**

Joint CLECs have no further comments on this issue.

**7. Agreed Upon Issues**

Joint CLECs have no further comments on the agreed-upon issues.

**8. Reclassification of Support of Asset Costs as Common Costs**

Joint CLECs have no further comments on this issue. See Section V.B.8 of our Initial Brief.

**C. Shared Cost Factor**

**1. Definition of Wholesale Shared Costs**

In response to the Joint CLECs' testimony that SBC should have developed a UNE-only shared cost factor rather than a shared cost factor based on wholesale expense, SBC contends that ARMIS data does not separately identify wholesale shared costs

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<sup>91</sup> SBC contends that the SBC Merger Order at page 148 indicates that only 50% of net savings are to be flowed through to ratepayers. The only reference to 50% at page 148 is the fact that the California merger statute mandates an allocation of no less than 50% of merger benefits. At page 149, the Commission makes clear that merger savings go first to carriers purchasing UNEs through updated rates from modifications of its TELRIC, shared and common costs and, once that share has been determined, to interexchange carriers and end users.

associated with UNEs and that SBC does not itself track uncollectibles or marketing expenses at the UNE level. (SBC Initial Br. at 242-243) As AT&T/Joint CLEC witnesses Mr. Starkey and Mr. Fischer pointed out, however, SBC made a conscious business decision not to develop a method for tracking those marketing costs and uncollectible revenues. (AT&T/Joint CLEC Ex. 1.2, p. 40) The fact that SBC does not track UNE-specific data only corroborates SBC's general disregard for UNEs. (AT&T/Joint CLEC Ex. 1.2, p. 40) If SBC wanted to track those expenses and revenues – which would have allowed it to develop a UNE-specific shared cost factor – it certainly could have. In fact, the Indiana Commission realized the weakness of SBC's shared cost calculation, requiring SBC to “put in place accounting practices that will allow it to allocate its wholesale costs among different types of wholesale products (i.e., UNE vs. non-UNE).” (Indiana Order, p. 141; AT&T/Joint CLEC Ex. 1.2, p. 44)

SBC argues that its shared cost factor approach understates, not overstates, the shared costs associated with the provision of UNEs because the primary cause of wholesale uncollectibles is CLEC bankruptcies, whereas its access services are more mature and less labor intensive. (SBC Initial Br. at 243) As the Joint CLEC witnesses testified, however, there is no record evidence to verify this wholly unsupported assertion. SBC witness Mr. Barch, who made this statement, provided no data, information or documentation to corroborate it. Rather, he simply requested that the Commission trust his judgment and experience in lieu of making an informed decision based on objective, quantifiable and verified information. By not disclosing what costs (if any) it actually incurs to provide marketing support for UNE services, SBC deprives the CLECs and the Commission of the opportunity to examine and critique SBC's costs

to determine whether they are appropriate to include in SBC's shared cost factor. (AT&T Ex. 1.2, p. 41) Just as this Commission has previously disallowed certain expenditures in SBC's common cost study because SBC failed to prove that they are appropriate and/or failed to quantify them,<sup>92</sup> SBC's marketing costs should also be rejected. Without verifiable cost support to identify appropriate UNE-marketing costs, one viable alternative – and the one the Joint CLECs recommend – is to estimate the amount of marketing costs attributable to UNEs, as discussed in our Initial Brief (pp. 386-388).

## 2. Uncollectible Expense

SBC contends that the primary cause of wholesale uncollectibles is CLEC bankruptcies and, therefore, its shared cost factor understates, not overstates, costs. (SBC Initial Br. at 243) Ironically, even if this were true (which SBC has failed to demonstrate) SBC's argument only corroborates the fact that SBC's prediction of wholesale uncollectibles used in its cost study actually *overstates, not understates, the level of uncollectibles on a forward-looking basis*, and therefore, overstates SBC's shared cost factor.

Moreover, as the Joint CLEC witnesses pointed out, SBC's own data conclusively demonstrates that SBC's bad debt expense trend has reversed since 2001, the test year used in SBC's shared and common cost study. SBC's bad debt expense based on its use of the allowance method declined significantly from 2001 to 2002 and again from 2002 to 2003. (AT&T/Joint CLEC Ex. 1.2, pp. 48-49) Certainly this reversal in bad debt expense was neither predicted, expected nor assumed by SBC when it performed its shared cost study. While SBC opined at the time it filed its shared cost study that SBC's

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<sup>92</sup> See TELRIC I Order, pp. 50-51.

bad debt expense would likely increase, thereby understating SBC's shared costs, history has proven that assumption to be wrong. SBC's proposed wholesale uncollectibles are, if anything, overstated, thereby overstating its shared cost factor. Even SBC witness Mr. Dominak acknowledged on cross examination that 2001, the year SBC used to determine its level of wholesale uncollectibles, was particularly volatile and risky. (Tr. 449-450) All indicia therefore point to the inevitable conclusion that SBC's estimated wholesale uncollectibles are inflated.

This conclusion is further corroborated by the marked decline not only in bad debt expense, but a decrease in CLEC bankruptcies. (AT&T/Joint CLEC Ex. 1.2, p. 51) In addition, contrary to SBC's expectations and as SBC witness Mr. Dominak testified, the WorldCom bankruptcy actually *reduced* SBC's bad debt exposure. (SBC Ex. 17.1, p. 16) Clearly, the primary justification behind SBC's reliance on wholesale bad debt expense to support its cost studies – substantial reserves for CLEC bankruptcies – is no longer sustainable. (AT&T/Joint CLEC Ex. 1.2, p. 52) Again, all indicia lead to the fact that SBC's estimated wholesale uncollectibles are inflated.

AT&T/Joint CLECs conceptually agree with the Attorney General and Staff that it is more appropriate for SBC to calculate uncollectibles using a revenue-based mechanism than to calculate wholesale uncollectible expense by dividing wholesale uncollective *revenue* (*i.e.*, SBC's wholesale uncollectible expense is an estimate of the amount of wholesale *revenue* it will not collect) by wholesale *costs*, as SBC proposes. (AG Initial Br. at 27) As the Joint CLECs discussed in our Initial Brief, to the extent the numerator of the shared cost factor is based on a revenue analysis, revenues should also be included in the shared cost denominator.

In Joint CLECs' Initial Brief, the primary focus of our recommended adjustment to SBC's wholesale uncollectibles was on a linear trend of SBC's bad debt expense adjusted for projected recoveries. (Joint CLEC Initial Br. at 385-386) To address concerns regarding potential inaccuracies that may occur from estimating SBC's write-offs, Joint CLECs agreed to modify their original recommendation to focus, instead, on using an average of the wholesale revenue write-offs that SBC *has actually experienced* from 1998-2003. (AT&T/Joint CLEC Ex. 1.2, pp. 52-53) The Joint CLECs' modified proposal represents the real economic loss SBC actually incurred because it is based on the average write-offs SBC actually recorded from 1998-2003. The effect of the Joint CLECs' modified proposal increases the wholesale uncollectible cost in the shared cost numerator from **BEGIN CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL** to **BEGIN CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**, which is still significantly less than SBC's proposal of **BEGIN CONFIDENTIAL** xxxxxxxxxxxx **END CONFIDENTIAL**. (*Id.*)

### 3. Wholesale Marketing Expense

SBC contends that using revenues to apportion wholesale marketing expenses to UNEs is inappropriate because SBC's wholesale services generate widely varying levels of contribution and, as such, using a revenue-based allocator will over-allocate marketing expenses to those services that generate more contribution. (SBC Initial Br. at 247-248) This is a problem of SBC's own making, however, because SBC has failed to demonstrate the marketing expense attributable to SBC's wholesale services, including UNEs. Absent the cost detail by wholesale product line that SBC has chosen to not produce, the Joint CLECs used revenue as a cost allocator because a firm's decision to expend money on marketing functions is usually based on the amount of revenue the firm

expects to generate from those activities. Occasionally, the relationship is indirect, such as when a company sponsors a golf tournament or a retreat for its customers in the hope of generating goodwill to retain those customers. At other times the relationship is direct, such as where product management expenses are incurred in direct support of the company's product line. Rather than disallowing all wholesale marketing costs in calculating a shared cost factor, the Joint CLECs' recommended approach provides the Commission a viable alternative by which to identify UNE-related marketing costs in the absence of the verifiable cost data from SBC. (AT&T/Joint CLEC Ex. 1.2, pp. 40-41)

As we stated in our Initial Brief, the Joint CLECs agree with CUB that SBC has failed to provide sufficient evidence to support the inclusion of resale marketing, special access marketing and advertising expenses in the marketing expenses it uses to calculate its shared cost factor. (CUB Initial Br. at 26) To the contrary, as the Joint CLECs discussed in detail, there is no evidence upon which to assume (as SBC does) that the marketing expense for these other wholesale products is reflective of the marketing expense for UNEs. As CUB also correctly notes, SBC has failed to provide sufficient evidence that it actively markets its wholesale services to competitors. (*Id.*) We do know, however, that SBC *does not actively market* its UNEs to competitors, because it has said so. (AT&T/Joint CLEC Ex. 1.0, pp. 72-73) The Joint CLECs therefore agree with CUB that the wholesale marketing costs SBC uses to calculate its shared cost factor are likely overstated.

#### **4. Calculation of Wholesale Shared Cost Denominator**

Because the direct costs SBC uses in its wholesale shared cost denominator are a subset of the direct costs SBC uses in its common cost denominator and are calculated

using the same flawed methodology described earlier, SBC's shared cost denominator should be rejected for the same reasons.

The Joint CLECs agree with Staff that SBC's shared cost factor denominator contains "several inherent flaws." (Staff Initial Br. at 212-216) To remedy these flaws, however, Joint CLECs recommend that the Commission adopt their proposal to use UNE revenues rather than any "extended TELRIC" methodology. The "extended TELRIC" methodology is an entirely new proposal that no party has been able to investigate, analyze or quantify. Even SBC points out that the information necessary to implement Staff's proposal is not in the record. Specifically, as SBC notes, the development of a new "extended TELRIC" denominator would require the analysis of demand and cost data for all wholesale services SBC provides. (SBC Initial Br. at 249) That information is not in the record and, with all due respect, this proposal should be rejected.

## **VI. ANNUAL COST AND OTHER FACTORS**

### **Summary of Recommendations**

Joint CLECs' recommended adjustments to SBC's Annual Charge Factors are included in the Summary of Recommendations at the start of Section V, above.

#### **A. Annual Charge Factors**

##### **1. Adjustments to maintenance and other expense factors, including use of non-regulated data and network utilization factor**

As SBC notes, its annual charge factor methodology assumes there is a relationship between maintenance expense and investment. (SBC Initial Br. at 250) This relationship assumes that the expense is a dependent variable of the investment; that is, as investment changes, so does expense. SBC's network utilization factor *breaks* this

relationship, and allows SBC to recover the same level of per unit maintenance and other expenses, regardless of the amount of investment. (AT&T Ex. 1.2, p. 55)

Specifically, SBC's theory that per unit maintenance costs should remain the same is predicated on the assumption that SBC's forward-looking network will require the same number of facilities that exist today. However, a forward-looking network is constructed using a carrier's existing footprint and the most efficient, forward-looking, currently available technology. If a team of network engineers were told to construct a network with an effective utilization rate of 80%, the network they would construct would have *fewer* facilities in place today, with higher fill factors. For example, assuming hypothetically that SBC has an existing 600-pair cable that produces its current maintenance expense, an efficient, forward-looking network would likely only require a 300-pair network because of the higher fill factor. That is, because more of the facilities are filled with use, fewer of them are required. With half as many facilities, SBC should incur less maintenance expense. (AT&T/Joint CLEC Ex. 1.2P, pp. 55-56)

Therefore, as discussed at length in the Joint CLECs' Initial Brief, the Commission must reject SBC's maintenance utilization adjustment. SBC has simply failed to demonstrate its validity. In fact, SBC's own data demonstrate that, contrary to the assumption used in its ACF model, its maintenance expenses *do not increase* on a linear basis as its network utilization levels increase.

As the Joint CLECs have explained, incremental increases in utilization are not likely to cause incremental increases in maintenance costs (*i.e.*, a linear relationship) until the level of utilization reaches a very high level. By adopting target fill factors, the Commission has already recognized that a level of utilization exists beyond which

maintenance costs will increase at a rate higher than increased investment for new plant. That level of utilization is the level represented by the currently effective target fill factors that were adopted by this Commission, and which remain valid and forward-looking today. The use of target fill factors ensures that UNE rates are not based on fill factors higher than the level at which this economic crossover point is reached and at which increased maintenance costs are incurred.

Thus, it is unreasonable to assume that a linear relationship exists between utilization levels and maintenance expenses at the extremely low (and non-TELRIC-compliant) fill factors SBC uses in its cost studies. SBC's entire algorithm is theoretically and economically unsound, and must be rejected. (AT&T/Joint CLEC Ex.1.2, pp. 56-57) Staff agrees that SBC's algorithm is "not substantiated", and should be rejected. (Staff Initial Br. at 218-219)

## **2. Ad Valorem Tax Factor**

The Joint CLECs reiterate our position that SBC should be required to restate its book investment to current cost in the denominator of its ad valorem tax factor to ensure consistency with the methodology SBC employs to calculate its other cost factors. (Joint CLEC Initial Br. at 397-98)

## **3. Capital Cost Factors**

As AT&T/MCI witness Ms. Murray explained, her recommended weighted-average cost of capital – and the one the Joint CLECs recommend SBC be required to use in its ACF model – is expressed in nominal (as opposed to real, or constant dollar) terms. Using a nominal cost of capital to develop annual cost factors therefore implicitly compensates SBC's investors for inflation in the cost of capital equipment (*i.e.*, investments). (AT&T/MCI Joint Ex. 2, p. 48) Therefore, for SBC to apply a separate

inflation factor double counts the impact of inflation on investment. (Joint CLEC Initial Br. at 406)

**B. Investment Factors**

SBC contends that because CLECs do not sign formal leases for collocation space and SBC does not, therefore, know precisely how long the CLEC will continue to compensate SBC for that space, the Joint CLECs' adjustment should be rejected. (SBC Initial Br. at 251-252) SBC does not deny that including this space – for which it is already being compensated – in the development of its investment factors double counts costs. The Commission has two choices: (1) to allow SBC to include this space, thereby guaranteeing double recovery; or (2) to adopt the Joint CLECs' adjustment to remove the double count, assume the CLEC will remain financially viable and continue to lease the collocation space from SBC, and compensate SBC for it. The Commission should eliminate this known and undisputed double count.

**C. Support Asset Factors, including reclassification of support asset costs to common costs**

The Joint CLECs agree with Staff that support asset costs are not appropriately recovered via nonrecurring charges. As discussed at length in our Initial Brief (pp. 402-405), these support asset costs are really general assets/expenses used in providing the entirety of SBC's products and services and, therefore, are appropriately recovered as common costs. Even SBC agrees that as between Staff's proposal to recover support asset costs in recurring rates and the Joint CLECs' proposal to recover them as common

costs, the Commission should choose the latter, as the Indiana Commission did.<sup>93</sup> (SBC Initial Br. at 254)

**D. Inflation/Deflation Factors**

SBC contends that to the extent the Commission adopts an inflation factor, it should choose the CPI-W rather than the PPI. (SBC Initial Br. at 254-255) The Joint CLECs refer the Commission to pages 407-408 of our Initial Brief where we demonstrated that the PPI is the clear choice.

**E. Productivity Offset**

According to SBC, no productivity offset is required if the Commission elects to apply an inflation factor because future productivity gains are already incorporated into its cost studies. (SBC Initial Br. at 255-257) As the Joint CLECs explained in detail in their Initial Brief – and as the Indiana Commission recently concluded – SBC’s cost studies only reflect the benefits of technology changes related to plant investment; they fail to address the much broader spectrum of impacts on productivity.

For example, SBC’s analysis fails to account for the continual improvement in output per hour that the telecommunications industry can reasonably expect to incur in the foreseeable future based on a track record of such improvements having continuously occurred over a period in excess of 50 years. As the Joint CLECs correctly pointed out, productivity measurements must also reflect increases in output due to restructuring of network and administrative processes to function with fewer employees, streamlined supply chains that lower the overall cost of procurement, capital investments in

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<sup>93</sup> Joint CLECs agree with Staff that if the Commission requires that all support asset costs be treated as common costs, all mainframe computer investment and expense must be moved back into the common cost numerator. (Staff Initial Br. at 200-201; AT&T/Joint CLEC Ex. 1.1, p. 13)

technology used by employees to do their jobs more efficiently, and improvements in management skills through training. This is particularly important in light of the fact that the TELRIC methodology assumes and should capture only those costs incurred in an efficient, forward-looking environment. (AT&T/Joint CLEC Ex. 1.0, pp. 162-163)

As SBC witness Mr. Barch admitted on cross examination, SBC's cost studies do not take into account any of the short-term or long-term cost reduction initiatives recently announced (November 2003) by SBC executives to the investor community. (Tr. 363-369; see also SBC Ex. 7.2, pp. 33-34) According to the presentation of SBC executive Mr. Atterbury, SBC has, in the short term, recently eliminated nearly \$1 billion in operations and support costs by workforce reductions and productivity improvements. (AT&T/Joint CLEC Ex. 1.1, pp. 67-68) SBC is also embarking on major long term cost reduction initiatives, including consolidation of call and network centers, creation of one national customer service bureau rather than regional bureaus, consolidated nationwide technical support (rather than regional support), automation of outside plant records and more efficient technician routing designed to save 30 million road miles and 750,000 technician hours annually.<sup>94</sup> (AT&T/Joint CLEC Ex. 1.2, pp. 69-70) According to Mr. Atterbury, these improvements would collectively save SBC \$1.3 billion in annual capital and expense by 2006, none of which is incorporated in SBC's cost studies. (AT&T Ex. 1.2, p. 70-71; Tr. 363-369; SBC Ex. 7.2, pp. 33-34)

SBC, in its Initial Brief, contends that there was no way to reflect these adjustments in its cost studies because they cannot be quantified, "there are no estimates

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<sup>94</sup> Page 409 of Joint CLECs' Initial Brief erroneously misstated that these SBC initiatives would save "750,000 technicians annually." Not even we would argue that that reduction would be achievable in an efficient forward-looking network.

of the effect of those particular initiatives at the level of detail” sufficient for SBC to use in its cost studies, and SBC does not know whether or when it will actually achieve the savings it anticipated. (SBC Initial Br. at 256-257) SBC’s arguments must be rejected for several reasons. First, SBC does not deny that these initiatives will occur; in fact, SBC witness Mr. Barch – the sponsor of the cost study – indicated that the SBC executives “certainly” would have made sure SBC intended to make these productivity improvements before revealing them to Wall Street. (Tr. 365-366) Second, by their very nature, cost studies involve the use of subjective expertise, judgment and estimation (*e.g.*, SBC’s allowance method for estimating year end uncollectibles). The fact that SBC had no “hard and fast” numbers is no excuse to wholly exclude known and planned productivity improvements.

Finally, perhaps the reason SBC lacked the quantification necessary to incorporate these productivity improvements is that SBC witness Mr. Barch failed to ask for it. As Mr. Barch testified on cross examination, he had no discussions with the executives and teams planning the improvements (Tr. 366), he made no attempt to ascertain the details and granularity underlying the planned productivity initiatives (Tr. 367-368) and, remarkably, the extent of his knowledge about them is *what he read in the testimony of Joint CLEC witnesses Mr. Starkey and Mr. Fischer*. (Tr. 368) It is no wonder, then, that Mr. Barch did not have the necessary detail; he never bothered to find out (and no one else at SBC, apparently, undertook to provide it to him).

Moreover, when asked to identify where its cost studies accounted for productivity gains due to workforce restructuring/reductions and productivity gains due to fewer labor hours required to maintain its network, SBC indicated that it had not

performed those analyses. (AT&T/Joint CLEC Ex. 1.2, pp. 68-69) There is no question that SBC has failed in its studies presented in this case to account for productivity gains it will experience from its workforce reductions and its consolidation efforts. Thus, if SBC is allowed to apply an inflation factor, an explicit productivity factor is necessarily required. (See AT&T/Joint CLEC Ex. 1.0, Attachment MS/WF-17)

The Joint CLECs have calculated an appropriate productivity factor by trending SBC's actual expense-to-investment ratios from 1990 – 2002 to the mid-point of 2003, resulting in a productivity factor of **8.804%**. (AT&T/Joint CLEC Ex. 1.0, pp. 164-165) The Joint CLECs' composite inflation and productivity calculation resulted in a net productivity increase of **4.868%** (8.804% productivity minus 3.936% inflation) over the planning period of the study (base year 2000 to mid-2003). (AT&T/Joint CLEC Ex. 1.0, pp. 164-165) As Messrs. Starkey and Fischer noted, this net productivity adjustment is conservative because it was developed using SBC's historical financial data and does not, therefore, reflect any specific forward-looking adjustments to expenses. Nor does it compare SBC's operational practices with any best in class or "best practices" benchmarks. Indeed, the overwhelming record evidence demonstrates that the Joint CLECs' proposed productivity offset is conservative when compared to the general productivity trends experienced by the telecommunications industry both in the recent past and over the last 50 years. (AT&T/Joint CLEC Ex. 1.0, pp. 165-168)

**F. Depreciation and Net Salvage**

Joint CLECs reiterate that the Commission should adopt the depreciation and net salvage recommendations of AT&T/MCI witness Mr. Majoros, discussed in Section III.B.2 of our Initial Brief and Section III. B.2 of this brief, to calculate SBC's Annual Charge and Other Factors.

## **VII. IMPUTATION AND PRICE SQUEEZE**

Both SBC and Staff address the issues of imputation and price squeeze in their Initial Briefs. The Joint CLECs respond to SBC's positions and Staff's positions below.

### **A. Response to SBC**

#### **1. Application of Imputation**

SBC's primary argument is that the imputation requirements of Section 13-505.1 of the PUA do not apply to its proposed unbundled loop rate increases in this case. SBC contends that 13-505.1 does not apply to UNEs at all because those imputation requirements are triggered only when SBC provides "services" or "service elements" to its competitors. (SBC Initial Br., p. 259). In support of its position, SBC claims that the FCC has determined that UNEs are not services and notes that Section 13-505.1 of the PUA was enacted in 1992, prior to the requirement that ILEC's lease UNEs as contemplated by the federal Telecommunications Act of 1996. SBC also asserts that its position is supported by the fact that the General Assembly added a definition of "network element" in Section 13-216 of the PUA in 2001, which refers to a "facility or equipment," not "service elements" that are referred to in Section 13-505.1. (*Id.* at 260)

SBC's position is wrong as a matter of law and if accepted would render the imputation requirements of Section 13-505.1 and Part 792 of the Commission's rules (83 Ill. Adm. Code Part 792) meaningless. First, as Staff correctly argues in its Initial Brief, SBC's proposed rate increases and the unbundled loops at issue in this docket are properly classified as "service elements." (Staff Initial Br. at 222) Network elements, including those that are defined in Section 13-216 of the PUA, are clearly covered by the PUA's definition of "telecommunications service," which within the meaning of the PUA is:

[T]he provision or offering for rent, sale or lease, or in exchange for other value received, of the transmittal of information, by means of electromagnetic, including light, transmission with or without benefit of any closed transmission medium, **including all instrumentalities, facilities, apparatus, and services** (including the collection, storage, forwarding, switching, and delivery of such information) used to provide such transmission and also **includes access and interconnection arrangements and services.** (220 ILCS 5/13-203 (emphasis added))

The General Assembly clearly intended to include wholesale products and services within the meaning of “telecommunications services.” Thus, UNEs clearly fall within the ambit of “noncompetitive services ... utilized to provide the service subject to imputation.”

Moreover, the definition of “network element” contained in Section 13-216 of the PUA is not limited in the fashion that SBC suggests. It provides as follows:

“Network element” means a facility or equipment used in the provision of a telecommunications service. The term also includes features, functions, and capabilities that are provided by means of the facility or equipment, including, but not limited to, subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service. (220 ILCS 5/13-216 (emphasis added))

Network elements are clearly encompassed within the PUA’s definition of telecommunications service, and the PUA’s definition of network element does nothing to change that. In fact, viewed in its entirety, the PUA’s definition of network element makes clear that features, functions and capabilities or other provision of telecommunications service fall within its parameters. SBC’s contention to the contrary is unpersuasive.

Not only is SBC’s contention contrary to law, it is contrary to the position that SBC took in the rulemaking proceeding in Docket 99-0535 that revised the Commission’s Part 792 imputation requirements. In that case, SBC clearly

acknowledged that UNEs are subject to the requirements of Section 13-505.1 of the PUA. For example, in discussing the price squeeze that Section 13-505.1 is designed to prevent, the Commission noted that SBC's (then Ameritech's) position was as follows:

Ameritech claims that a price squeeze may occur **when a carrier provides both a competitive service to end users, and provides a noncompetitive service or service element** that is a necessary input to the competitive service to both itself and an equally efficient competitor. Ameritech continues that **a price squeeze occurs if the first firm chooses to increase its rates in the noncompetitive service or service element to the point where it becomes unprofitable for the second firm to provide the competitive service, since the rates for the noncompetitive service or service element are a cost to the second firm.**<sup>95</sup>

In that proceeding, SBC proposed certain changes to Section 792.30(c) in an attempt to narrow the application of the imputation requirements. SBC made its position clear that unbundled network elements, such unbundled local switching, are subject to imputation requirements. The Commission summarized SBC's position on this issue as follows:

Ameritech claims the purpose of an imputation test is to protect competitors from a price squeeze who are actually purchasing a noncompetitive element from Ameritech. In its reply brief, without citation to the record, Ameritech asserts that in Illinois today, many competitors have introduced their own switches; that these switch-based competitors do not rely on Ameritech's network to provide service to their customers; and that, as a result, imputation tests are becoming increasingly irrelevant as arbiters of fair competition because noncompetitive Ameritech tariff rates are not being paid by competitors to provision their own competitive service. Ameritech believes it is important for the Commission to reflect this "reality" in its imputation test requirements. Ameritech claims the Commission can do so by providing in its rule that only noncompetitive elements and services actually relied upon by competitors in provisioning their own competitive services need be reflected in an imputation test. (Imputation Rule Order at \*62-\*63)

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<sup>95</sup> *Revision of 83 Ill. Admin Code Part 792, Docket 99-0535, Order, June 19, 2002, 2002 Ill. PUC LEXIS 565 ("Imputation Rule Order"), at \*26 (emphasis added).*

Consistent with this position, SBC proposed language to reflect the fact that the imputation of a rate for a service or service element should only be required if the competitor actually uses it to provide its own competitive services, suggesting the Commission include in its rule the following language to achieve that objective:

**When any tariff is filed that increases rates for a noncompetitive service or a noncompetitive service element, or its functional equivalent, which is utilized by a competitor in providing a service subject to imputation.** (Imputation Rule Order at \*60-\*61 (emphasis added).)

SBC's position in Docket 99-0535 was that its proposed change would ensure that imputation applies only in situations for which SBC believed that competitors truly needed the protections provided by the imputation test – in SBC's view only, where the CLECs actually utilize particular service **elements** in competing with the retail service provided by SBC. (*Id.*) The Commission rejected SBC's attempt to narrow the reading of its imputation requirements, finding that “. . .an imputation test is intended to prevent an anti-competitive price squeeze with respect to services or service element that are or may be used by a competitor, not just to protect only those competitors who are currently using such services or service elements.” (*Id.* at \*113-\*114)

Not only did SBC's position in Docket 99-0535 contradict the position that SBC takes in this proceeding, but its own actions with respect to the recently enacted and enjoined SBC wholesale rate increase law (SB 885) make it clear that SBC acknowledges that the imputation requirements apply to its proposed increases in unbundled loop rates. As Joint CLECs pointed out in their Initial Brief, Section 13-408(d) of the PUA enacted by SB 885 explicitly excluded the application of Section 13-505.1 to the drastic unbundled loop rate increases that resulted from the implementation of that now permanently enjoined law. Section 13-408(d) provided that the unbundled loop rate

increases could not cause corollary increases in SBC's retail rates, thereby precluding application of the imputation requirements contained in Illinois law that would have otherwise applied to the wholesale rate increases mandated by SBC Section 13-408. The imputation exemption language would not have been included in Section 13-408(d) of the SBC automatic wholesale rate increase law unless SBC understood that the imputation requirements would apply to business network access lines ("NALs").

For all of these reasons, SBC's contention that the imputation requirements of Section 13-505.1 of the PUA and Part 792 of the Commission's rules do not apply in this case are wholly unpersuasive. The Commission should reject SBC's contentions and apply the imputation requirements in this proceeding, as it is obligated by the PUA to do.

## **2. Appropriate Imputation Methodology**

SBC's fallback argument is that if imputation does apply in this case, it should not apply in the manner that Staff and the Joint CLECs suggest. SBC complains that an imputation test should not be required for a stand-alone business NAL as Staff and the Joint CLECs contend. (SBC Initial Br. at 261) This argument is belied by the fact that SBC conducted just such an imputation test at the request of SBC witness Eric Panfil for the express purpose of supporting its proposed unbundled loop rate increases.<sup>96</sup> Notably, SBC's Network Access Line Imputation Cost Study did not include revenue from central office features, local calling and switched access to interexchange carriers, which SBC appears to now claim are appropriately included in an imputation analysis. Yet again, the record demonstrates that SBC's actions are inconsistent with the arguments that it advances with respect to imputation. While Joint CLECs do not agree that SBC's

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<sup>96</sup> MCI Cross Ex. 2-P (SBC – Illinois Network Access Line Imputation Cost Study dated 12/20/02); Tr., pp. 179, 181-82.

Network Access Line Imputation Cost Study reflects an appropriately conducted imputation analysis in all respects, it does correctly focus on determining whether SBC's business NAL revenues exceed the imputed costs of providing that service. SBC obviously conducted what it believes to be an appropriate imputation analysis in support of its filing; it should not now be heard to complain that its own approach was inconsistent with the imputation requirements of the PUA and the Commission rules.

In addition, SBC contends that the dire retail rate consequences discussed by Joint CLECs and Staff are not the result of imputation *per se*. (SBC Initial Br. at 262) SBC claims that such retail rate consequences would result from what it calls the very narrow, and inappropriate, UNE loop/port-to-business network access line form of the analysis that Staff and the Joint CLECs urge the Commission to adopt. SBC acknowledges that "harmful rate consequences" of the imputation analyses would be considerable. (*Id.*) SBC's arguments focus solely on what the result of the imputation tests would be if the Commission adopted its proposed rate increases, and ignores entirely the fact that another option exists – namely, that a violation of the imputation requirements can be cured either through retail rate increases, noncompetitive wholesale service element decreases, or some combination thereof. The Joint CLECs are not advocating that the solution to SBC's imputation problem is necessarily a general retail rate increase. Rather, the appropriate remedy is to set the wholesale rates at levels that are appropriate.

Despite the flexibility for curing imputation violations that is built into Section 13-505.1 of the PUA, SBC puts all of its eggs in one basket and puts the Commission, yet again, in the position of having to accept or reject SBC's all or nothing proposal. SBC decries the harmful consequences of having to increase its retail rates, intimating that the

Commission should not allow that to happen and should instead adopt a course that would allow SBC to significantly increase nonrecurring service elements without having to commensurately increase its retail rates, just as the now enjoined Section 13-408(d) would have done. SBC's proposal would, of course, force the Commission to ignore the stark reality that the imputation requirements force it to consider. However, the Commission cannot shirk the statutory requirements imposed upon it by 13-505.1 of the PUA.

SBC is advocating that the Commission morph the imputation test into some form of a business case analysis in which all potential revenues associated a customer's access line(s) are taken into consideration. This recommendation is disingenuous and should be rejected.

First, the objective of the statutory imputation test is to see if there is a sufficient margin between the wholesale (UNE rates) and retail rates so that an efficient carrier using SBC's UNEs can operate viably (which is the same as seeing whether the proposed wholesale rates constitute a price squeeze.) The imputation analyses conducted by Staff, Joint CLECs and SBC's Network Access Line Imputation Cost Study all demonstrate that that SBC's proposed rates cause SBC's retail rates to fail that test. In other words, the margins are too small to permit economically viable competition by means of UNEs. The solution to this problem is not – as proposed by SBC -- to broaden the analysis and to bring in additional revenues from other retail services.

Second, SBC's approach assumes that all CLECs have the same business plan and target the same set of customers with the same preferences for vertical features and other services. This is of course not true. Further, if the Commission were to be swayed by

SBC's reasoning it would fall into the trap of creating a self-fulfilling prophecy in which CLECs would in effect be forced to select customers with the profile that SBC used in its "profitability analysis." Clearly, this would be creating a "market place" dynamic that is inconsistent with the vision of the Telecommunications Act of 1996. It would also limit the competitive options for CLECs so drastically that it may fundamentally undermine all competitive development.

For all of the foregoing reasons, the Commission should reject SBC's arguments urging the Commission not to apply imputation requirements of Section 13-505.1 and Part 792 and should further reject SBC's contention about the form such imputation requirements should take and how they should be applied.

**B. Response to Staff**

Staff takes issue with Joint CLEC witness Dr. Ankum's inclusion of imputed costs associated with retail related expenses and nonrecurring costs and revenues in his imputation analysis. Staff bases its review of Dr. Ankum's imputation test on a narrow legalistic reading of Section 13-505.1 (and Code Part 792). This is dangerous and may defeat the overall purpose of the various sections that are concerned with competitive safeguards. The objective of an imputation test is to determine whether the relationship between the ILEC's wholesale rates and retail rates is reasonable. Specifically, the objective is to determine whether there is a reasonable margin between wholesale rates, faced by dependent competitors, and the retail rates against which those dependent competitors must compete. The notion is that a company with market power, such as SBC, is able (in the absence of regulatory oversight) to squeeze that margin so narrowly that an efficient but dependent competitor cannot viably compete. All of this is

rudimentary economics and all of this is pertinent to the current proceeding *whether or not* it is codified in the Section 13-505.1.

The purpose of an imputation test has been recognized by SBC as follows:

As a preliminary matter, Ameritech asserts that the purpose of Part 792 and imputation tests in general, is to prevent price squeezes. Ameritech states that imputation tests use the rates, where appropriate, charged to other carriers, to ensure that a carrier does not anti-competitively increase the price of a noncompetitive service required and used by a competitor to provide competitive service to give itself a competitive advantage in a downstream product. Ameritech claims that imputation also prevents an ILEC from pricing a competitive service so low that an equally efficient provider, who must buy some components from an ILEC, cannot afford to match its price. (Imputation Rule Order at \*25-\*26)

Staff objects to Dr. Ankum's inclusion of retail related expenses in the imputation test on costs on two grounds. First, Staff contends that such retail related costs are common costs, which are not identified in Section 13-505.1 or Commission Code Part 792 as related to, or properly included in, imputation tests. Second, Staff claims that this inclusion equates to an improper guarantee, via imputation, of a contribution margin for CLECs (those using SBC UNE loops to provide retail business access line services). (Staff Initial Br. at 229.)

Staff's objections are misplaced. First, Section 13-505.1 of the PUA expressly states that imputation should include tariffed rates of noncompetitive service element inputs plus ". . .any other identifiable, long-run service incremental costs associated with the provision of the service." Clearly, retail related costs are part of SBC's retail services and, as such, the imputation statute provides that they should be accounted for.

As to Staff's second objection -- that inclusion of retail related costs amounts to "an improper guarantee, via imputation, of a contribution margin for CLECs (those using SBC UNE loops to provide retail business access line services)" -- this begs the question

of what the purposes of an imputation rule requirement are. While Joint CLECs agree that imputation requirements should not be a blanket “guarantee” that *any* CLEC can compete profitably, it should be a guarantee that an efficient CLEC using unbundled loops leased from SBC can provide retail service and *not be precluded from doing so in an economically viable manner*. If the imputation rule in Staff’s mind does not serve this purpose, then what purpose does Staff believe is served by this rule? To leave out certain cost components in comparing revenues with costs is to create an illusion that revenues are adequate to cover costs when in fact they may not be. While Joint CLECs agree that the results of the imputation analysis are disturbing, Joint CLECs do not believe – as Staff appears to – that altering the imputation analysis to achieve more palatable results is the answer. The question of whether there is a sufficient margin between wholesale rates and retail rates (so that an efficient CLEC can use UNEs to compete in Illinois) is the most important issue before this Commission. If the answer to this question is yes, then competition is possible in Illinois; if the answer is no, then competition is doomed. Joint CLECs believe that the Commission deserves to have all the facts and figures to evaluate this question. To omit the retail related expenses from the imputation test, as suggested by Staff, is to leave out real costs, incurred by real companies, in the real world. Again, it is hard to see what purpose would be served by presenting the Commission with an incomplete analysis.

Staff also objects to Dr. Ankum’s inclusion of nonrecurring charges and revenues in the imputation test. The Joint CLECs’ reasons for including these costs are the same as those stated above: to provide the Commission with an accurate picture of whether or not an efficient CLEC can use SBC’s UNEs to compete on an economically viable basis

in Illinois. Again, to leave out certain costs that even the most efficient carrier – including SBC itself -- will incur is to present incomplete or misleading information to the Commission about whether the margin between wholesale and retail rates is sufficient to permit competition in Illinois.

As for the claims that, in Staff’s words, the “impact on SBC’s retail revenue of allowing Dr. Ankum’s proposed nonrecurring charges and retail related expenses into the imputation test are staggering,” the Joint CLECs note that this observation is hardly a reason to vilify the messenger, Dr. Ankum. The Joint CLECs concur that the results of the imputation tests are ominous. However, this does not mean that the Commission should act like an ostrich and bury its head because the results of SBC’s proposed rate increases are threatening. Rather, the Commission must squarely face what the Staff, Joint CLEC and SBC Network Access Line Cost Study make clear – that SBC’s proposed line rate increases, if approved, would either (i) necessitate significant retail rate increases, or (ii) deal a devastating blow to the competition the Commission has labored so hard to make a reality in Illinois. For these reasons, Joint CLECs urge the ALJs and the Commission to reject Staff’s criticisms of Dr. Ankum’s imputation analyses.

## **VIII. OTHER LEGAL ISSUES**

### **A. Preemption, Tariffing And Related Issues**

Joint CLECs agree with Staff that in light of SBC Illinois’ position that its original filing of its tariffs in this case was not voluntary and that this case is no longer a tariff proceeding, there are “serious questions about the Commission’s authority to proceed in this docket.” (Staff Initial Br., p. 233) Joint CLECs refer the ALJs and the Commission to our discussion in Section VIII.A of our Initial Brief (pp. 433-439).

**B. Procedural and Evidentiary Issues – the ALJs Correctly Struck SBC’s Updated Labor Rates and its Studies Based on Those Rates**

As discussed at pages 439-443 of Joint CLECs’ Initial Brief, certain CLECs filed a motion to strike various portions of the rebuttal and surrebuttal testimony submitted in this docket by SBC Illinois, Staff and the IBEW. The only portion of the motion that the ALJs granted was to strike the “updated” labor rate information, and the related testimony and revised studies, that had been included by SBC as part of its rebuttal testimony submitted on January 20, 2004. In its Initial Brief (pp. 268-70), SBC argues that the Commission should overrule the ALJs and reinstate the labor rate information. SBC’s argument should be rejected.

Specifically, in its “rebuttal testimony” filed January 20, 2004, SBC “updated” the labor rates it used in all fifteen of its nonrecurring cost studies sponsored by SBC witness Dr. Currie. The explanation given by Dr. Currie was that all of the nonrecurring cost studies had been “updated” to incorporate “the development of labor rates that rely on more current information.” (SBC Ex. 5.1, p. 8) The updated labor rates were sponsored by SBC witness Mr. Barch in his January 20, 2004, “rebuttal” testimony. In fact, the “updated” labor rates permeated many of the cost studies in this docket.

Joint CLECs had, and continue to have, several objections to the “updating” of SBC Illinois’ cost studies to incorporate new labor rates. First, when this case resumed after the “abatement” period that resulted from SBC’s unlawful UNE loop automatic rate increase law, the Commission directed that the case should be completed within 6 months, and Joint CLECs were given only one month to file rebuttal testimony in response to the massive “rebuttal” case that SBC filed on January 20. Despite SBC’s arguments to the contrary (SBC Initial Br., p. 270), in the context of this case Joint

CLECs were in fact prejudiced by this update. While reviewing and responding to the revised labor rates and the consequently updated 15 nonrecurring cost studies within 30 days might have been a manageable task had these been the only changes Joint CLECs had to respond to, it was an impossible task given the massive scope of SBC's overall rebuttal case, which SBC had eight months to prepare.<sup>97</sup>

Second, and more substantively, SBC's revision of its nonrecurring cost studies to incorporate updated labor rates constituted selective updating. When this case was reopened, SBC had the opportunity to withdraw its cost studies that were originally filed in December 2002 and to submit new cost studies based on more current cost information. SBC chose not to do this.<sup>98</sup> Instead, SBC selectively updated its costs studies. SBC might argue that it also made revisions to its cost studies that reduced the costs and thus the proposed UNE loop rates and related nonrecurring charges. However, all of the cost-reducing revisions that SBC made to its cost studies were to correct obvious errors that had been pointed out by Staff or intervenor witnesses in their May 2003 direct testimony – such as removing costs that SBC had double-counted in its originally-filed studies. Other updates to incorporate more current data and information that would have reduced SBC's costs and proposed UNE rates were not made. For example, as discussed at length elsewhere in this brief and in Joint CLECs' Initial Brief,

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<sup>97</sup>Joint CLECs believe that they were similarly prejudiced by the inclusion of the other new and updated items in SBC's January 20 "rebuttal" filing that Joint CLECs moved to strike.

<sup>98</sup>Had SBC submitted new cost studies, a new procedural schedule appropriate for a new filing would have been established, and Joint CLECs (and Staff) presumably would have been given approximately four months (as they were given to prepare their direct cases filed on May 6, 2003) to review, conduct discovery on and submit responsive testimony to SBC's revised direct case filing – rather than just 30 days.

interest rates and other cost of capital indicators had declined markedly, yet SBC Illinois did not submit revised cost of capital studies to incorporate the lower costs of capital.

Thus, the issue is not really what SBC counsel said or meant in stating at the December 18, 2003, status hearing that SBC would stand on and proceed with its proposed tariffs and cost studies as originally filed. (SBC Initial Br., p. 270) Rather, the issue is whether SBC should be allowed to make selective updating of and revisions to its cost studies to its benefit. It should not, and the ALJs' ruling striking the updated labor rates and updated nonrecurring cost studies was correct.

Moreover, SBC puts itself in a Catch-22 (of its own creation) in arguing that it "updated its labor rates based on 2001 data, which makes it consistent with the vintage of the rest of the data used in its cost studies." (SBC Initial Br., p. 269) If the updated labor rate information is in fact 2001 data, and if it is consistent with the vintage of the rest of the data used in SBC's cost studies, then SBC should have (and should have been able to) include this information in its direct case filing in December 2002. (Had SBC done so, Staff and intervenors would have had some four months to review, conduct discovery on and prepare rebuttal testimony concerning the revised labor rates.) SBC has failed to explain why it did not include the 2001 labor rate data in its direct case that was filed in December 2002. Because the new labor rate information was available to SBC prior to its original direct case filing herein, SBC should not be allowed to introduce its updated labor rate information in its rebuttal filing. Indeed, the fact that the "updated" labor rate information was based on 2001 data belies SBC's assertion that the labor rate information and the revised costs studies were "legitimate rebuttal testimony." (SBC Initial Br., p. 269)

Accordingly, the ALJs correctly granted this portion of the Joint CLECs' Motion to Strike.

**IX. CONCLUSION**

For the reasons set forth in Joint CLECs' Initial Brief and in this Reply Brief, the Joint CLECs respectfully request that the Commission resolve each disputed issue in this docket in accordance with Joint CLECs' positions and recommendations as set forth in our Initial Brief and Reply Brief.

Respectfully submitted,

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Cheryl Hamill  
David J. Chorzempa  
AT&T Law Department  
222 West Adams, Suite 1500  
Chicago, Illinois 60606  
(312) 230-2665  
chamill@att.com  
dchorzempa@att.com  
Attorneys for AT&T  
Communications of Illinois, Inc.

---

Owen E. MacBride  
Keely V. Lewis  
6600 Sears Tower  
Chicago, Illinois 60606  
(312) 258-5680  
omacbride@schiffhardin.com  
klewis@schiffhardin.com  
Attorney for McLeodUSA  
Telecommunications Services, Inc.,  
RCN Telecom Services of Illinois,  
LLC and TDS Metrocom, LLC

---

Darrell Townsley  
WorldCom, Inc. d/b/a MCI  
205 North Michigan Avenue  
Suite 1100  
Chicago, Illinois 60601  
(312) 260-3533  
darrell.townsley@mci.com  
Attorney for WorldCom, Inc.  
d/b/a MCI

---

William A. Haas  
Vice President and Deputy General  
General Counsel  
McLeodUSA Incorporated  
McLeodUSA Technology Park  
6400 C Street SW  
P.O. Box 3177  
Cedar Rapids, Iowa, 52406  
(319) 790-7295  
whaas@mcleodusa.com

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Peter R. Healy  
Manager, CLEC External Relations  
TDS MetroCom, LLC  
525 Junction Rd., Suite 6000  
Madison, WI 53717-2105  
(608) 644-4117  
peter.healy@tdsmetro.com

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Thomas H. Rowland  
Stephen J. Moore  
Kevin D. Rhoda  
Rowland & Moore LLP  
200 West Superior Street Suite 400  
Chicago, Illinois 60610  
(312) 803-1000  
Attorneys for  
CIMCO Communications, Inc.  
Forte Communications, Inc., and  
XO Illinois, Inc.  
tom@telecomreg.com  
steve@telecomreg.com