

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, of the Commission's own motion,)	
to review the costs of telecommunications services)	Case No. U-13531
provided by SBC MICHIGAN .)	
_____)	

At the September 21, 2004 meeting of the Michigan Public Service Commission in Lansing,
Michigan.

PRESENT: Hon. J. Peter Lark, Chair
Hon. Robert B. Nelson, Commissioner
Hon. Laura Chappelle, Commissioner

OPINION AND ORDER

I.

HISTORY OF PROCEEDINGS

On August 30, 2002, SBC Michigan (SBC) filed an application in Case No. U-13518, seeking Commission approval of proposed revised cost studies for certain telecommunications services and elements pursuant to the federal Telecommunications Act of 1996, 47 USC 251 et seq. (federal Act) and the Michigan Telecommunications Act, MCL 484.2102 et seq. (MTA). On September 16, 2002, the Commission issued an order in Case No. U-13518, granting motions to dismiss filed by AT&T Communications of Michigan, Inc., and TCG Detroit (collectively AT&T) and MCImetro Access Transmission Services, Inc., MCI WorldCom Communications, Inc., and Brooks Fiber Communications of Michigan, Inc. (collectively, MCI), based on the application's non compliance with the Commission's directives in Case No. U-11831. However, the

Commission recognized that SBC's costs to provide service may have undergone changes.

Therefore, pursuant to the provisions of the federal Act and the MTA, the Commission opened on its own motion Case No. U-13531, in which SBC could choose to file cost studies that complied with all of the requirements of Case No. U-11831.

On May 2, 2003, SBC filed an application in this docket seeking approval of new cost studies. Petitions to intervene were filed by the Competitive Local Exchange Carriers Association of Michigan (CLECA), Sage Telecom, Inc. (Sage), Covad Communications Company (Covad), McLeodUSA Telecommunications Services, Inc. (McLeod), Comcast Telecommunications of Michigan, LLC (Comcast)¹, Sprint Communications Company Limited Partnership, the Association of Communications Enterprises, Borderland Communications, LLC, Attorney General Michael A. Cox (Attorney General), MCI, AT&T, LDMI Telecommunications, Inc. (LDMI), XO Michigan, Inc. (XO), Talk America Inc., TDS Metrocom, Inc. (TDS), Z-Tel Communications, Inc. (Z-Tel), TelNet Worldwide, Inc., and Climax Telephone Company. The Commission Staff (Staff) also participated in the proceedings.

In addition, the Commission has received comments from hundreds of members of the public. Those public comments range from concern that the Commission should expeditiously provide rate relief to SBC, to urging the Commission not to permit any rate increases. The number of public comments has increased dramatically since AT&T and SBC have aired advertisements encouraging the public to voice their concerns and provided a method for submitting electronic or telephone comments.

¹On April 7, and May 6, 2004, respectively, Sage and Comcast filed notice of withdrawal from this case.

On June 11, 2003, AT&T filed a motion to dismiss SBC's application on the grounds that, among other things, the application violated the Commission's prior orders in Cases Nos. U-13518 and U-11831 and was premature because the Federal Communications Commission (FCC) had not yet issued its long awaited Triennial Review Order (TRO).² On June 16, 2003, a prehearing conference was conducted by Administrative Law Judge James N. Rigas (ALJ), at which the ALJ determined that the issue raised by the motion should be briefed and the motion to dismiss placed before the Commission. Toward that end, the ALJ gave all parties except SBC until June 25, 2003 to file written comments regarding AT&T's proposed schedule. SBC was given until July 3, 2003 to submit its comments on the issue.

On June 25, 2003, written comments were filed by Sage, Covad, MCI, the Attorney General, the Staff, the CLECA, LDMI, Talk America, TDS, XO, and Z-Tel. On July 3, 2003, SBC filed its response. On August 18, 2003, the Commission issued an order denying AT&T's motion to dismiss and adopting the Staff's scheduling suggestion. That schedule provided for three rounds of comments, with final comments due on February 9, 2004.

On August 21, 2003, the FCC issued its TRO. Thereafter, on September 11, 2003, the Commission issued an order in which it directed SBC to notify the Commission if SBC determined that alterations to its cost studies would be necessary in light of the TRO. If SBC chose to amend its cost studies, it was to file those studies by October 9, 2003.

In the meantime, MCI filed a motion to stay all proceedings in this case until the effects of the TRO could be better understood. In an order dated October 23, 2003, the Commission denied

²Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket No. 01-338, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 98-147, issued August 21, 2003, effective October 2, 2003.

MCI's motion to stay the proceedings. However, the Commission noted that SBC had used methodologies to create its cost studies that differed almost completely from those used in Case No. U-11831. To facilitate review, the Commission ordered SBC to file new cost studies using SBC's proposed models, but using inputs from the final order in Case No. U-11831. Finally, the Commission adjusted the schedule by about eight weeks, with final reply comments due April 12, 2004. On November 17, 2003, SBC filed additional cost studies. On November 24, 2003, SBC filed a petition for rehearing of the October 23, 2003 order. By order dated February 12, 2004, the Commission denied that petition.

On January 20, 2004, the Staff, Talk America, TruComm Corporation, CLECA, AT&T, MCI, and Covad, filed comments or testimony and exhibits or both, some of which were separated from the docket as confidential materials subject to a protective order.

On March 22, 2004, SBC, the Staff, TDS, MCI, and AT&T filed response comments, rebuttal testimony and exhibits, or a combination thereof. Final reply comments and testimony were filed by May 10, 2004 by SBC, AT&T, the Attorney General, the Staff, TDS, Z-Tel, TruComm, and MCI.

On August 20, 2004, the FCC issued Order FCC 04-179³, in which the FCC required incumbent local exchange carriers (ILECs) to continue providing certain elements pursuant to the terms and conditions applicable on June 15, 2004, or a state commission order that has or will affect those rates, for an interim period lasting six months from the date that the order is published in the Federal Register. Those elements required to be provided under that order include switching, enterprise market loops, and dedicated transport. The August 20 FCC order further

³Order and Notice of Proposed Rulemaking in WC Docket No. 04-313, Unbundled Access to Network Elements, and CC Docket No. 01-338, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers.

provides a transition period in which it dictates permissible rate increases for those elements. Additionally, the Commission is specifically permitted to impose price increases greater than those specified in the August 20 FCC order.

II.

DISCUSSION

At the outset, the Commission notes that this case has taken an extraordinary effort on the part of SBC and the intervenors. The Commission appreciates the efforts the parties have made to assist the Commission in reviewing the cost studies proposed by SBC. The issues are complex and plentiful, with interactions between cost studies that are not always obvious or intuitive. Therefore, the Commission affirmatively states that although some issues may appear to affect only unbundled network element (UNE) costs and prices, the Commission's determinations must be consistently incorporated across the network and across all services, both wholesale and retail, except as specifically noted. In this manner, the cost studies may be approved as a consistent whole.

Cost of Capital

Generally, computing the overall cost of capital requires three determinations, (a) the cost of equity, (b) the cost of debt, and (c) the appropriate capital structure. SBC proposed that the overall cost of capital should be held to be 12.9%. That figure assumes a capital structure with 86% equity. It further assumes 13% overall cost of equity and 7.18% average cost of debt.

In its initial comments, the Staff notes its concerns about SBC's proposed cost of capital. It argues that the capital structure, cost of equity and debt should be the same as that approved by the Commission in its July 14, 1997 order in Case No. U-11280 and the November 16, 1999 order in

Case No. U-11831. The Staff's proposed overall cost of capital assumes a capital structure of 75% equity, an overall cost of equity of 11.8% and an average cost of debt of 7%, which produces an overall cost of capital of 10.6%.

AT&T proposes that the Commission use a capital structure that assumes 63.71% equity, 29.38% long term debt, and 6.91% short term debt. The assumed cost rates for those capital types are 8.7%, 4.87%, and 0.95%, respectively.

The Attorney General adds his concerns about the cost of equity and SBC's proposed capital structure.

1. Cost of Equity

SBC proposes a cost of equity of 13%, based on its analysis of what it terms comparable firms. SBC states that its expert performed two alternative quantitative analyses to determine the appropriate cost of equity: the discounted cash flow (DCF) method, and the capital asset pricing model (CAPM). SBC argues that all of the benchmarks confirm the reasonableness of its proposed cost of equity. It states that the FCC's Wireline Competition Bureau recently adopted a cost of equity for Verizon of 14.37%, and that the state commission in Pennsylvania recently found that 14.75% cost of equity to be appropriate for Verizon PA. SBC argues that its cost of equity is reasonable when the Commission considers that capital markets have become increasingly attuned to the risks associated with investing in the telecommunications industry.

Also, SBC argues, the risks of providing UNEs exceed those of operating as an ILEC generally. It argues that as a provider of UNEs, SBC faces the challenges of a competitive market while also remaining constrained by regulation and regulatory uncertainty, all of which it argues, increases its business risk.

SBC further argues that rapid technological changes exacerbate the impact of increasing competition and threaten the future outlook for UNEs. It points out that wireless technology and voice over Internet protocol (VoIP) are making continued growth in land line telecommunications less likely.

SBC argues that the 8.7% cost of equity proposed by AT&T's witness Terry L. Murray is far too low to attract equity investment in a competitive market and fails to reflect an adequate risk premium over the cost of debt. It argues that Ms. Murray miss-matched her analysis by using historical results of selected studies with a forward-looking analysis using the CAPM approach. In SBC's view, Ms. Murray's analysis does not conform to DCF, CAPM, or total element long run incremental cost (TELRIC) principles.

The Attorney General argues that SBC has proposed an excessive cost of equity. He states that ¶ 680 of the TRO indicates that a TELRIC cost of capital should reflect the risks of a competitive market and replicate the price that would exist in a market in which there is full facilities-based competition. The Attorney General argues that it is not clear whether SBC is relying on the TRO or on the existing TELRIC methodology. He argues that the testimony of SBC's witnesses indicates the possibility of inconsistency.

AT&T proposes that the cost of equity should not exceed 8.7%. Its witness Ms. Murray states in her testimony that an average of 28 professional forecasters for the return on the Standard and Poor 500 (S&P 500) for the next 10 years is reported as 7.46%. She stated that most firms in the S&P 500 are subject to some type of competitive risk, and thus provide a general sense of alternatives available to the investors who might otherwise invest in the stock of an efficient carrier providing UNEs in the competitive market. She states that annual returns for the stock market as a whole are likely to average no more than single-digit levels for the foreseeable future.

Ms. Murray criticizes SBC's Dr. William E. Avera's analysis as having multiple flaws. In her view, Dr. Avera uses data that is too stale to form the basis for a reasonable estimate of the forward-looking cost of capital. She states that updating financial data used would eliminate much of the difference between the results of their respective analyses. She states that because the entire structure of the industry has changed in complex ways, updating the analysis for the cost of capital to reflect those changes is not a simple task. However, she testifies, when the updates are done properly, Dr. Avera's study results approach hers.

The Staff takes the position that the cost of equity should remain at 11.8% as approved by the Commission in 1997. It states that it disagrees with SBC's position that because the cost was set prior to issuance of the TRO that it cannot properly reflect the risks of a fully competitive UNE market as required by the TRO.

Moreover, the Staff says, recent developments in other states support its position that the cost of capital as a whole should not be raised from the level approved in 1997. It states that after reviewing the same evidence offered in this proceeding requesting a 12.19% cost of capital, the Indiana Public Utility Regulatory Commission (IURC) reduced SBC Indiana's overall cost of capital from 9.74% to 9.51%. The Staff states that both the previous cost of capital and the newly reduced cost of capital in Indiana are well below the currently authorized 10.6% cost of capital for SBC Michigan. According to the Staff, the IURC assumed a capital structure of 68% equity at a cost of 11.04%. The Staff argues that if the Commission believes that a change is needed, it should revise the cost of capital downward from its currently approved 10.6%.

The Commission finds that the cost of equity should be revised upward and rejects the analysis provided by Ms. Murray as unpersuasive and her results as patently too low. For example, she proposes a cost of equity that is below the average cost of corporate bonds. Equity is

riskier than long term corporate debt because equity holders get paid last. Thus, it makes no sense to hold that the cost of equity should be so low.

The TRO holds that the TELRIC cost of capital must reflect the risks of a competitive market in which there is facilities-based competition, a market in which facilities-based providers risk losing customers to other facilities-based providers.⁴ The cost of equity should therefore reflect the return that investors require for the forward-looking risks involved in investment in telecommunications assets. The Commission agrees that the perceived risk of such investment has increased since 1997. At least one major competitive provider has declared bankruptcy. There have been corporate mergers and spin-offs, both affecting risks. Wireline providers must compete with providers using wireless and VoIP facilities to provide service. Setting the cost of equity too low will discourage investment. However, setting it too high could create a price squeeze that would deter competition. The Commission therefore finds that SBC should use 12.1%, which is near the midpoint between its proposed cost of equity and that proposed by the Staff. In the Commission's view, this adequately recognizes the increased risk, without exaggerating that risk.

2. Cost of Debt

SBC proposes that the cost of debt should be 7.18%, based on the March 1999 yields on single-A and double-A bonds reported by Moody's, as was consistent with SBC's debt ratings. In SBC's view, this results in a conservative estimate of the cost of raising new funds in the marketplace.

SBC argued that AT&T's proposed 4.87% as the cost of debt grossly understates that cost and was apparently based on a single bond issuance by Verizon New England. SBC argues that Ms. Murray's proposed cost of debt is not consistent with the sources upon which she claimed to

⁴TRO, ¶ 680.

have relied. SBC states that the forecast Ms. Murray relies upon anticipates that long-term Treasury bonds will yield approximately 5.26% over the next ten years, with triple-A rated corporate bonds expected to yield 6.45% in 2004. Thus, SBC argues, Ms. Murray's projected cost of debt falls well short of the yields on the lowest-risk corporate bonds, and below forecasted yields on Treasury bonds from her own source. SBC states that Ms. Murray's projection of even lower cost debt from the current historically low levels runs counter to the basic expectation that interest rates will rise as the economy strengthens and to widely referenced forecasts published by government agencies and economic forecasting services.

AT&T proposes that SBC should assume 4.87% for the cost of long term debt and .95% for the cost of short term debt, which would create a weighted average cost of debt of 4.12%. Ms. Murray states that she computed the forward-looking cost of debt by examining the forward-looking yield-to-maturity for the publicly traded bonds of the SBC companies, as reported on the Web site [BondsOnline](#). As of September 29, 2003, Ms. Murray states, the weighted-average yield-to-maturity for publicly traded long-term SBC bonds was 3.64%. Two publicly traded short-term bond issues had a weighted-average yield-to-maturity of .94%. Ms. Murray used the latter for a forward-looking short-term debt component, but, because SBC's company-specific long-term debt cost was so low, she used the yield-to-maturity for ILEC 10-year bonds of 4.87% for forward-looking estimation of long-term debt cost.

The Commission finds that the forward-looking cost of debt should be adjusted downward to 6.1%. The market is currently experiencing historically low interest rates. Although those rates are expected to increase as the economy improves, it is expected to be a slow, gradual process, with no precipitous increases. Because this proceeding is to determine a forward-looking cost of capital, the Commission cannot assume that interest rates remain at or fall below historical low

levels for purposes of this cost study, but current interest rates are far below that approved for the cost of debt in SBC's prior cost cases.

3. Capital Structure

The final piece of the cost of capital is determining an appropriate capital structure. SBC argues that the capital structure must be based on a market value capital structure, which is required for determining a forward-looking cost of capital. It argues that the capital structure should be assumed to be 86% equity and 14% long-term debt.

In contrast to SBC's proposal, the company argues, Ms. Murray bases her recommended capital structure on an average of market and book value data. Dr. Avera testifies that this approach is inconsistent with TELRIC principles and sound economic theory. SBC argues that if the prescribed rate of return is based on weights different from market values, it will not measure the forward-looking costs required to raise capital in the markets.

Further, SBC argues that inclusion of short-term debt in the capital structure is not appropriate. In SBC's view, the facilities that it must install to provide UNE services are long-lived assets, which generally do not create the need for short-term debt. It argues that the capital structure should be made up of equity and long-term debt.

Through Ms. Murray, AT&T argues that SBC has created a capital structure that is far too heavily weighted toward equity. In her view, when current interest rates depart significantly from interest rates at the time of debt issuance, the equity percentage is likely to be overstated if one compares market value equity to book value debt. She states that as interest rates fall, corporate bonds issued with higher interest rates become more valuable. The price of those bonds rises until the yield equals the investors' required return. Therefore, the market value of debt rises, as does the percentage of debt in the market based capital structure.

Ms. Murray testifies that current market capitalization does not provide the best guide to SBC's forward-looking target capital structure. Instead, Ms. Murray recommends that the Commission use an equal weighting of the market and book capitalization of the three Regional Bell Companies (RBOCs) included in her comparable group. She developed what she states is an estimate of a long-run target capital structure similar to the capital structure that would result if today's market and book capitalization merged toward each other. She compares her recommended structure of 63.71% equity, 29.38% long-term debt, and 6.9% short-term debt to target capital structures of other RBOCs and states that it is within the range of those targets.

Ms. Murray criticizes Dr. Avera's method of determining a market based capital structure as of the end of 1998. After that time, she states, stock prices had fallen dramatically, which shrank the ratio of equity to debt.

The Commission finds that the capital structure approved in Cases Nos. U-11280 and U-11831 should be used for computing SBC's capital costs. In the Commission's view, 86% equity is far above the percentage needed to attract capital. Moreover, it is based on a market value equity and book value of debt, when debt is currently more valuable in the market and market equity is stale. The Commission is not persuaded that increased market risk should require such an increase in equity. The Commission finds that any increased risk is already sufficiently recognized in the cost of equity adopted in this order.

Similarly, the Commission is not persuaded that SBC must include a short-term debt component for purposes of this cost case. In previous cost cases, the Commission has approved a capital structure without reference to a short-term debt component, and AT&T's arguments for change are not persuasive.

Thus, the assumed overall cost of capital for purposes of this cost case is 10.6%, calculated as follows:

	<u>Capital Structure</u>	<u>Cost</u>	<u>Weighted Average</u>
Equity	75%	12.1%	9.075%
Debt	25%	6.1%	1.525%
Total	100%		10.6%

Depreciation

In the two prior cost cases, the Commission adopted depreciation lives at the low end of a range that the FCC had prescribed for regulatory purposes. The FCC had taken the position that its prescribed regulatory depreciation rates should be a safe harbor for use in TELRIC cases.

In the present case, SBC proposes to use the depreciation rates that it employs for financial accounting purposes, pursuant to Generally Accepted Accounting Principles, which are, on the whole, considerably shorter than the FCC-prescribed lives. In support of its position, SBC argues that things have changed dramatically since the Commission's earlier orders. First, it claims that the FCC has now clarified that depreciation lives must be set assuming a fully competitive market in which the ILEC faces significant facilities-based competition, which SBC argues shortens the useful economic life of equipment. Second, SBC argues, through the testimony of Lawrence K. Vanston, it has demonstrated that shorter lives are appropriate in light of the demands of new market entrants for UNEs, new technology that will render current technologies obsolete, and the pace of competition. It contends that any value remaining in the facilities for use as UNEs or other service, although considered in Dr. Vanston's analysis, is not sufficient to stem the steep decline in value of SBC's facilities.

SBC argues that the FCC has specifically held financial reporting lives are consistent with TELRIC. It goes on to argue that the FCC-prescribed lives are long outdated, and neither reflect the more rapid decline in the economic value of assets in the fully competitive market that must be assumed under TELRIC nor reflect the effects of ongoing and rapid technological changes. It asserts that the lives SBC uses for financial reporting purposes are more market-based and reflect a more economically realistic view of depreciation. SBC adds that adopting the shorter financial reporting lives would promote the deployment of new technologies as they become available, because it speeds the recovery of the value of assets put into facilities.

Through the testimony of Michael Mojoros, Jr., AT&T argues that the Commission should again require that SBC use the FCC-prescribed depreciation lives. He testifies that the FCC began using forward-looking depreciation practices in the early 1980s, which generally led to increasing reserve levels for the ILECs because of the shorter depreciation lives. In Mr. Mojoros' view, using the FCC-prescribed rates results in more than adequate depreciation accruals for the company. AT&T points out that financial reporting lives are meant for a different purpose than determining TELRIC costs, that of protecting investors. It argues that auditors will not object to financial reports with lives far shorter than a realistic expectation because such conservatism is likely to protect investors' interests. However, in a TELRIC proceeding, overestimating the depreciation rate will distort the company's costs and inflate the price that SBC's competitors must pay.

Although initially taking the position that the Commission should again adopt the FCC prescribed projection lives for purposes of determining TELRIC, the Staff, in its final reply comments, takes the position that SBC's proposal to use financial reporting lives is appropriate as they are economic based and forward-looking, reflecting future changes in the economic value of SBC's assets. The Staff further agrees with SBC that use of the financial reporting asset lives for

TELRIC purposes eliminates a potential barrier to SBC's ability to take advantage of and deploy technological advances as they become available in Michigan. The Staff states that SBC's proposed asset lives properly account for implementation of new technology as well as current and growing competition. It states that its final recommendation falls within the range of reasonableness for depreciation allowed by the current costing rules, as set out in the TRO.

The FCC in its TRO noted that depreciation is one of two primary vehicles for recognizing the risk associated with new facilities and new services in TELRIC determinations. The TRO does not mandate or prohibit either the use of financial reporting asset lives or FCC-prescribed asset lives. In fact, the FCC specifically declined the incumbent carriers' request that it require state commissions to use financial reporting asset lives for TELRIC determinations. The TRO does require that the Commission use a depreciation rate that reflects the actual forward-looking decline in economic value of the company's assets. The adopted rates must reflect the effect on asset values from all of the assumptions made for TELRIC, including a fully competitive market by facilities-based providers.

The Commission is persuaded that SBC's proposed depreciation lives should be adopted for purposes of this proceeding. Although the proposed lives are generally considerably shorter than those approved in the prior cost cases, the Commission notes that telecommunication competition has advanced in Michigan, with increasing numbers of telecommunications providers, and technological advancements are occurring at an ever-increasing pace. Even considering the use of some assets for different purposes, which SBC did, some of those assets still have diminished in value as it relates to SBC. Moreover, SBC predicts that it will need to replace assets to take advantage of new technology. For example, it states that it will need to invest in fiber deeper into

the network, and that the configuration will be different than current fiber to take advantage of advancements that permit more information to pass over one fiber.

The Commission recognizes that financial reporting depreciation values are created for a different purpose than the FCC's depreciation lives. However, the Commission is not persuaded that SBC would so skew its accounting practices that the depreciation lives it reports to financial institutions could not be reasonable approximations of the decline in the economic value of its assets. The company certainly has an incentive to represent that its assets have value. Such value assists in determining the company's rating by bond companies and whether and at what cost it will be able to attract capital. Thus, although SBC's auditors provide no lower limit for asset value, the company is not without incentive to accurately report its depreciation.

Fill Factors

Fill factors reflect the percentage of the facilities that will be used on a forward-looking basis. It determines how the cost of spare capacity deployed in the network to service future demand will be recovered. In SBC's prior two cost cases, the Commission adopted the use of objective fill factors rather than the company's actual fill factors to reflect forward-looking conditions.

In the present case, SBC proposes to use what it says are its actual fill factors. It argues that use of fill factors that reflect actual network utilization permit the carrier to fully recover its costs, whereas fill factors that assume maximum utilization of the network effectively disallow those costs. It cites AT&T Communications of Illinois Inc et al v Illinois Bell Telephone Co, 349 F3d 402 (CA7, 2003) in support of its claim that use of actual fill factors is consistent with TELRIC principles. It further asserts that its fill factors have remained essentially constant over a long period, notwithstanding the turbulent nature of the industry, which it claims further demonstrates

that the Company's current fills are unlikely to change in the future. It says that its fill factors reflect the reality that any network, historical or forward-looking, must have spare capacity.

SBC argues that the CLECs continue to insist on using fill factors that no company could achieve in any world, real or forward-looking. It argues that the competitive local exchange carriers (CLECs) assume the impossible, that SBC's network is engineered to perfectly match the level of demand presented by its customers today, with no spare capacity for future needs. Moreover, SBC argues, spare capacity is built in because (1) it is more cost effective; (2) it is needed to meet regulatory quality of service standards; and (3) the manufacture of cable in fixed sizes makes it impossible to exactly match demand.

In its initial comments, the Staff took the position that the Commission should not alter its previous findings and conclusions concerning the use of projected fill factors as contrasted with actual fill factors. However, the Staff's final reply comments state that the Commission should adopt SBC's proposed fill factors, after modifying them by adding 15 percentage points to each one. It states that the modified proposed fill factors maintain, in part, an element of the targeted fill approach. The Staff argues that increasing competition, market risk, and other factors require that all providers become more efficient in the construction and maintenance of their networks. It asserts that its proposal attempts to address the uncertainty of certain federal proceedings while remaining faithful to basic TELRIC principles.

MCI argues that the Commission should reject SBC's proposed use of actual fill factors, citing the United States District Court, Northern District of Illinois' decision in Voices for Choices et al v Illinois Bell Telephone Co et al, 2003 US Dist LEXIS 9548, (2003), in which the Court stated that for Illinois TELRIC purposes, "like fill factors, depreciation must be based on a hypothetical

efficient ILEC's practices rather than SBC's actual practices." Id. In MCI's view, SBC's actual fill factors do not represent the expected fill of an efficient incumbent LEC.

AT&T argues that no change is required to the Commission-approved fill factors from the prior cost case. It asserts that all of SBC's cost studies should be restated to reflect current objective fill factors to ensure consistency between the fill factors used in SBC's wholesale TELRIC and retail total service long run incremental cost (TSLRIC) studies. It argues that if the Commission finds that a change in fill factors is necessary, it should note the numerous deficiencies that exist in SBC's actual fill factor calculations. The final reply testimony of AT&T witnesses Michael Starkey and Warren Fischer set out ways in which the "actual fill" factors do not really reflect SBC's actual fill. For example, they state that SBC indirectly determined the "actual fill" of its network interface devices by counting lines associated with a particular billed entity in a particular location. But, AT&T argues, those calculations fail to account for the undisputed fact that multiple businesses share the same building and thus, understate the actual fill. Further, these witnesses state that SBC improperly discarded a significant portion of its billing data pertaining to customer locations with over 900 lines per location, which are the customers with higher than average fills. This too, AT&T argues, understates fills.

Further, Messrs. Starkey and Fischer state that there are defective pairs (referred to as Universally Bad Pairs), which SBC considers to be uneconomical to recover. In AT&T's view, because no service can be assigned to these pairs, they should not be included in the calculation of a fill factor.

Moreover, these witnesses state that SBC is currently experiencing a dramatic technological overhaul that temporarily reduces utilization of feeder facilities. As part of SBC's broadband initiative, the witnesses state, SBC is aggressively overlaying its existing copper network with a

more advanced fiber network and, in so doing, is willing to accumulate an enormous amount of short term spare capacity for the benefits that the new technology will bring in the long term. At the same time, the upgraded network elements do not support stand-alone UNE loops. Therefore, AT&T argues, SBC's proposed fills are not only transitional, but also will force competitors to subsidize the deployment of facilities that may not be unbundled for their benefit.

The witnesses state that the merger conditions, which limited removal of copper facilities, caused a temporary increase in spare capacity. Therefore, they assert, it is possible that the redundant capacity has been removed since the date SBC submitted its fill study. Such removal would significantly change the premise of the cost study. Moreover, AT&T's witnesses state, fill factors are a mechanism of cost recovery, and it is important to distinguish between the existing physical facilities and the economic cost of those facilities. According to Messrs. Starkey and Fischer, a significant portion of the existing facilities have already been fully depreciated, and consequently should be removed from the calculation of forward-looking fill factors.

The Attorney General takes issue with SBC's use of actual fill factors as unduly reliant upon actual historical data for a specific point in time and reflecting embedded legacy plant. He argues that SBC has failed to justify any significant change in the fill factors approved by the Commission in SBC's last cost case. He states that the Staff's initial comments provide adequate justification for rejecting SBC's proposed fill factors and using instead the previously approved fill factors.

The Commission rejects SBC's proposal to use actual fills because, in the Commission's view, they do not comply with the requirements of TELRIC methodology, for several reasons. Actual fills rely on facilities that the company now has in place, not the facilities that an efficient carrier building a network would put in place as required by TELRIC. Moreover, the Commission notes

the many problems established by the AT&T witnesses concerning erroneous inclusion of facilities and inappropriate methods SBC used to determine its “actual” fills. The Commission finds that SBC’s proposed fill factors significantly understate the fill levels that would be experienced by an efficient carrier, with all of the assumptions that must be employed for determining TELRIC.

However, the Commission is persuaded that given the current state of the telecommunications market and the need for even an efficient carrier to maintain sufficient spare facilities to accommodate reasonable growth, the fill factors approved in Case No. U-11831 are no longer appropriate for use in the current proceeding. The Commission is not persuaded that merely adding 15 percentage points to each of SBC’s proposed fill factors will create sufficiently forward-looking, TELRIC compliant fill factors. Rather, the Commission is persuaded that it should require SBC to use fill factors that add back 50% of the difference between the fill factors established in Case No. U-11831 and those that SBC proposes in this case. The Commission has previously found that it was reasonable to split the difference between two positions supported by the record or to choose the midpoint of a range of record positions. See, e.g., the Commission’s July 14, 1997 order in Case No. U-11280, pp. 20-24.

Loop Costs

1. Appropriate Model

SBC’s filing uses the Loop Cost Analysis Tool (LoopCAT) as the model for determining the TELRIC of UNE loops. In support of its chosen model, SBC states that LoopCAT produces per loop investment and operating expenses that are consistent with the company’s recent investment and expenses, which are also consistent with a forward-looking network. SBC asserts that the

loop recurring cost study developed using LoopCAT incorporates forward-looking network designs, technologies, and material costs, consistent with the TELRIC standard.

In answer to its critics about selecting a new cost model for this case, SBC states that it did so after the merger of Ameritech and SBC. The model used during the last cost case, AFAM⁵, SBC states, was not Y2K compliant.⁶ SBC used a successor program called LFAM.⁷ Both older programs were rejected at the time of the merger with SBC, because they rely upon a significant number of assumptions built into the software. Thus, SBC says, the rejected models were not easily audited or manipulated with different inputs, which formed the basis of many complaints from other parties and the Staff.

SBC states that its LoopCAT model uses actual data from its Loop Engineering Information System (LEIS) for loop length information. Further, it uses actual cable sizing data and then applies current vendor pricing for what SBC argues is a forward-looking cost.

Further, SBC states that its loop cost study uses forward-looking assumptions, e.g., when a loop is longer than a certain length, LoopCAT assumes that it is provided over fiber feeder with a digital loop carrier (DLC) system, even though SBC's current network has some copper loops that are longer than the assumed length for use of fiber. Thus, SBC argues, its study assumes fiber loop plant well beyond that which exists in the current network. SBC asserts that the cost study also applies the lower maintenance costs for fiber, rather than copper, and assumes use of Litespan DLC systems, although SBC does not currently have 100% Litespan DLC in its existing network.

⁵AFAM is the acronym for Ameritech Facility Analysis Model, the model used in SBC's previous cost case.

⁶Y2K compliant refers to resolving problems that many software programs had or were expected to experience when the year 2000 arrived.

⁷LFAM, or Loop Facilities Analysis Model, is a modified version of AFAM. MCI referred to its proposed model as AFAM/LFAM.

SBC argues that almost all of the differences in cost results between AFAM/LFAM and LoopCAT are attributable to differences in the inputs, not to the change in cost model. It argues that pursuant to the October 23, 2003 order, SBC filed a lengthy affidavit accompanied by numerous cost model runs detailing the input changes that produced cost differences. SBC states that it was able to replicate the ordered costs by duplicating the primary inputs the Commission ordered in Case No. U-11831, some results were even lower than those obtained through use of AFAM/LFAM. It states that the changes in results primarily result from changes to inputs for fill factors, cost of capital, depreciation lives, and the weighting of Integrated Digital Loop Carrier (IDLC) and Universal DLC (UDLC).

The Staff takes the position that SBC should be required to maintain a working compliance run of the model used to determine existing approved costs so that a comparison can be made. However, the Staff states that, with the model corrections that have been instituted to address deficiencies discovered in the model, it is reasonably TELRIC compliant. Of the 13 modifications to the model that SBC employed for its rebuttal testimony, the Staff states that only the adjustment for controlled environmental vaults (CEVs) is troublesome. It further notes that its support of LoopCAT is not intended to suggest that MCI's proposed use of AFAM/LFAM model cannot produce appropriate loop costs.

MCI takes the position that loop costs should be determined using LFAM rather than LoopCAT. It argues that LoopCAT has a number of problems that it believes render the program unusable for setting appropriate, forward-looking costs. Through the testimony of Michael Starkey and John Balke, it argues that given the same inputs, LFAM tends to produce lower and more accurate cost results than LoopCAT. It argues that the "overly averaged" inputs in LoopCAT result in artificially concentrated range of costs between disparate density zones and

ignore cost differences that should be recognized for purposes of TELRIC. It argues that if the Commission adopts LoopCAT, it should recognize the restrictions and shortcomings that the Staff and other parties will be burdened with when estimating UNE loop rates in this and future proceedings.

In its final reply comments, AT&T argues that the Commission should consider the Staff's concerns (as expressed in the Staff's initial and rebuttal comments) with regard to use of the LoopCAT model. At the very least, it argues, SBC should be required to correct known errors in the model. AT&T argues that SBC has not sufficiently corrected errors that it acknowledges are present in the model.

The Commission finds that the LoopCAT model is an adequate model for purposes of this proceeding, after corrections for known problems acknowledged by SBC on JRS-R-1. The model does have the advantage of being more open to revision and sensitivity analysis than its predecessors. SBC has acknowledged certain problems that it will correct upon its compliance filing following this order. However, there are some specific problems with inputs and design in addition to those that SBC acknowledges that will be addressed separately.

2. Linear Loading Factors

A linear loading factor is a multiplier that SBC applied to cost data to calculate total installation costs, based on the assumption that there is a linear (or straight-line) relationship between material investment costs and installation costs. In other words, a linear loading factor assumes that as material costs increase, installation costs increase proportionately. SBC proposes use of linear loading factors for installation of cable and wire for the loop.

AT&T argues that use of linear loading factors is not appropriate because installation costs are not in a linear relationship with material costs. Also, AT&T argues that the database from which

SBC obtained the data for its calculation of the factor was not appropriate, because it results in double counting certain costs. In response, SBC filed a new linear factor for installation that is based on data from SBC's general ledger. In AT&T's view, linear loading factors are still inappropriate because, among other things, they (1) reflect embedded costs, (2) fail to reflect economies of scale, (3) are inherently inaccurate, (4) distort de-averaged UNE costs, and (5) create a likelihood of double counting costs.

Moreover, AT&T argues, SBC inappropriately calculated the factor when it included all cases in which there were no or negative material or installation costs in the denominator of the ratio, thereby inflating the result. AT&T proposes that SBC should use a bottom-up approach to develop its cable and wire installation costs. Through the testimony of Brian F. Pitkin and Steven E. Turner, AT&T proposes to use data from SBC's Job Administration Management System (JAMS) to develop bottom-up costs for installing loop components. These witnesses argue that SBC's rebuttal witnesses, James R. Smallwood and Dorothy R. DeBaene do not adequately respond to AT&T's initial comments and testimony on these issues.

Messrs. Pitkin and Turner point out that the new SBC filing results in increased costs for plug-in installation in comparison to the installation costs derived from the previous data source that was intended to eliminate double counting. Thus, these witnesses argue, there must be an underlying problem with the general ledger data that has not been discovered because the parties have not had access to the general ledger. Moreover, AT&T argues, using a different database does not answer the lack of linear relationship between materials and installation costs.

Additionally, these witnesses state that the criticisms of their analysis by Ms. DeBaene reflect that she has not reviewed their current testimony and work papers made available in this case.

Rather, they state, Ms. DeBaene counters arguments raised in other jurisdictions that have now been modified to remedy SBC's previous criticisms.

Finally, AT&T argues, if the Commission determines that a linear loading factor is an appropriate method for determining installation costs, these witnesses recommend that the Commission adopt their revisions to that factor, which eliminates projects with zero or negative material or installation costs. See, final reply testimony Pitkin & Turner, pp. 79-80.

SBC's witness Dorothy De Baene testifies that AT&T's arguments are inconsistent with telecommunications network reality. For example, Ms. De Baene states, Messrs. Pitkin and Turner suggest that SBC should assume that it would place all drop wires on a street at one time as part of a single project to take advantage of economies of scale. However, she states, such an assumption is unrealistic, because multiple drop wires would rarely be set for installation at neighboring residences on a single dispatch.

Moreover, Ms. De Baene testifies that use of the JAMS data for developing inputs to the LoopCAT model is not appropriate, because JAMS' primary purpose is to track job progress, construction productivity, material ordering and disbursements, and inventory tracking. She asserts that it is a job management tool, not a financial system. Although admitting that JAMS provides an estimate for undertakings, Ms. De Baene states that the JAMS data does not include all of the costs for installation. Such excluded costs would include those for permits, rights-of-way or license fees, and interest charged during construction, all of which are added later through the JAMS transmission equipment ordering module, the Authorizations System Management (AUTH) system. Ms. De Baene testifies that SBC uses total actual costs rather than estimated partial costs available through JAMS.

Moreover, she testifies that Messrs. Pitkin and Turner make several errors in using the JAMS data to develop labor hours and costs. She asserts that these witnesses make adjustments to the model for set-up times that cannot be accomplished in the real world, among other errors.

The Staff takes the approach of modifying SBC's rebuttal cost studies in a manner that assumes the use of a linear loading factor. Echoing an SBC assertion, the Staff states that the Commission approved the use of a linear loading factor in the last cost case. It states that the choice for the Commission is between a linear loading factor, or the use of AT&T's new proposal. The Staff argues that the use of the linear loading factors is reasonable and consistent with TELRIC principles. However, it states that AT&T's approach is not without merit. It recommends that the Commission require SBC's next cost case filing to present information permitting a bottom-up calculation for installation costs, but permit SBC to also request continued use of linear loading factors.

The Commission finds that linear loading factors are not appropriate for determining the cost of installation. SBC has not demonstrated that any linear relationship exists between installation and materials costs. Rather, the Commission is persuaded that a bottom-up analysis should be employed to determine the costs of installing loop facilities. Moreover, the Commission is not persuaded that SBC's developed installation costs are appropriate to adopt. Those costs reflect embedded, historical costs that do not sufficiently reflect a forward-looking environment, as required by TELRIC. Therefore, the Commission finds that the installation costs developed by AT&T using the JAMS data should be adopted for purposes of this case, with additions made in the AUTH system that are not included in JAMS. The claim that the Commission approved a linear loading factor in Case No. U-11831 has no citation to any Commission order that explicitly adopts that method of determining costs. Rather, the Commission finds no reference to linear

loading factors in its orders in Case No. U-11831 and concludes that the issue was not in dispute and, therefore, not ruled upon. The Commission is not persuaded that SBC's other criticisms of AT&T's analysis are well-taken.

3. IDLC/UDLC Mix

In the Commission's August 31, 2000 order in Case No. U-11831, the Commission concluded that for TELRIC purposes, SBC should assume 100% deployment of the more efficient IDLC, rather than including a percentage of UDLC, an older technology. In its cost study filing in the current proceeding, SBC assumes predominantly UDLC technology.

SBC argues that its mix of UDLC and IDLC technology is appropriate, and was calculated by looking at the percentage of IDLC systems in the network and multiplying that percentage by the percentage of UNE-Platform (UNE-P) loops. UDLC technology takes individual circuits, multiplexes them onto a fiber facility, then demultiplexes them to individual circuits again at the central office. IDLC systems do not demultiplex the circuits back to the individual circuit. Instead, the system leaves groups of circuits together at the DS1 level and those circuits are routed directly to the central office switch.

SBC argues that AT&T's criticisms assume that all loops riding on a DLC platform can and should be integrated. SBC argues that assumption is not correct. It argues that any loop handed off to a CLEC in a DS-0 format cannot be integrated, thereby requiring substantial amounts of UDLC in the network. Further, SBC argues, UDLC capability is required for all non-switch special circuits riding on a DLC system. Moreover, the switch must be able to handle the IDLC signal. According to SBC, IDLC capable switches cost more, and are not deployed ubiquitously, without cost justification.

Although recognizing that the Commission required that costs be developed assuming ubiquitous IDLC deployment, SBC argues that the Commission stated that this could be achieved by removing the cost of the central office terminal line card from the unbundled loop cost studies. However, SBC argues, a terminal line card is still necessary with IDLC technology. SBC admits that it is not the same card (the difference is between a DS1 and a POTS⁸ line). Nevertheless, SBC asserts, there is a cost associated with the DS1 line card that is required for IDLC.

It argues that Messrs. Pitkin and Turner's claim that IDLC facilities are more efficient and less expensive than UDLC facility are based on a misreading of SBC's Loop Deployment Policies and Guidelines and those witnesses' refusal to acknowledge the technical limitations of IDLC equipment. It asserts that when an SBC customer is served over IDLC, there is no way to unbundle that line below the DS1 level. If such a customer switches to a CLEC, SBC asserts that it must find another way to provide an unbundled loop or inform the CLEC that no facilities are available.

In their initial testimony, Messrs. Pitkin and Turner testify that next generation DLC (NGDLC) technology, for example the Litespan 2000, is capable of unbundling a single loop at the central office terminal (COT) and sending it to a CLEC's switch. The CLEC must obtain a DS1 interface at the COT, to which SBC would program the unbundled loop. These witnesses state that unbundling ILDC systems is readily available technology using the NGDLC multi-hosting capabilities. CLEC circuits can be groomed onto a DS-1 going to the CLEC collocation arrangement.

Pitkin and Turner agree that 4-wire analog loops cannot be served in an integrated mode. However, they state that this should not mean that the COT is always in a universal configuration.

⁸POTS refers to plain old telephone service.

Rather, they state that assuming a reasonable level of concentration, there should remain one channel bank to accommodate these loops when the COT is otherwise integrated.

The Staff argues that the Commission should approve 100% deployment of IDLC, as it did in the previous cost cases.

The Commission is not persuaded by SBC's arguments that 100% IDLC or NGDLC is inappropriate for purposes of determining the TELRIC of the loop. The assumptions required for TELRIC include determining the costs of a network built today with the most efficient forward-looking technology available, but assuming the current placement of wire centers. If SBC were to build the network today, there is little doubt that the most efficient facilities would be IDLC or NGDLC across the network. The Commission is not persuaded by SBC's arguments to the contrary. Therefore, the Commission finds that SBC should assume 100% IDLC in the network for purposes of this proceeding.

4. Accounting for Multiple Dwelling Units

In its initial testimony, AT&T complains that SBC's cost study increases costs by assuming every loop is connected to a feeder distribution interface (FDI), when multiple dwelling units (MDUs) often are served by fiber to the building and hence, no FDI. SBC concedes this issue, but in attempting to correct it, uses average costs across its entire service area. AT&T objects and argues that SBC should use deaveraged costs to reflect the higher concentration of MDUs in urban areas than in rural areas.

The Commission is persuaded that SBC has not appropriately incorporated its conceded position on the percentage of MDUs not served by an FDI. The Commission finds that SBC should alter its loop cost study to reflect the deaveraged costs by using United States Census data, as set out in Messrs. Pitkin and Turner's initial testimony.

5. Additional Discounts on Purchased Facilities

AT&T argues that SBC failed to include an additional discount that is detailed in a purchasing agreement between SBC and Alcatel. In AT&T's view, SBC has already received the benefits of this discount, whether directly or indirectly through an agreement to accept other benefits in lieu of the contractually agreed to discount. It argues that the Indiana Commission found that this discount should be reflected in the LoopCAT calculation.

SBC, through its witness Donald G. Palmer, asserts that all currently applicable contract discounts that SBC is entitled to from Alcatel have in fact been appropriately accounted for in the equipment prices modeled in LoopCAT. Mr. Palmer insists that there are no other discounts or benefits that SBC expects to receive in the future that are not accounted for in the loop study. He testifies that the amendment language relied upon by AT&T was the result of a complex extensive negotiation related to prior performance problems, and were intended to make each party whole. Moreover, he asserts that the amendments do not affect the costs that SBC will incur in the future. Therefore, he argues, they should not be reflected in the loop study.

The Commission finds that SBC has properly accounted for any discounts that it will receive pursuant to its contracts. The discounts AT&T complains about relate to something other than costs that SBC will incur to provide loops.

6. Portion of Loop Costs Allocated to DSL

AT&T takes the position that a portion of the DLC common equipment costs should be allocated to digital subscriber line (DSL) service. Its witnesses Pitkin and Turner state that the current DLCs have the capability to provide DSL services. It argues that SBC attempts to require voice service customers to pay for the full cost of the equipment that will also be used for DSL.

They state that there are three types of DLC investments: (1) costs for DLC associated solely with voice grade, (2) costs for DLC associated solely with DSL, and (3) costs for DLC associated with both DSL and voice service. It is AT&T's position that the costs in the third group should be apportioned between voice and DSL on a 75%/25% split. It states that this is consistent with presentation regarding Project Pronto in Texas, and with the underlying architecture of the DLC systems that are configured so that 25% of the DLC is reserved for DSL services.

SBC's witness Ms. Debaene argues that AT&T's witnesses mistakenly assume that the remote terminals used in SBC's loop cost study are DSL-enabled. In fact, she states, the remote terminal investment developed in LoopCAT is based on the provision of voice service; thus, additional electronics would have to be added to support DSL service. In her view it is illogical to reduce the cost by 25% simply because Litespan has the capability to provide DSL. Mr. Smallwood testified that the cost study did not include the cost of equipment needed to make the remote terminal DSL capable.

The Commission is not persuaded an adjustment should be made to reflect the use of the loop by DSL services. To adopt AT&T's position would be inconsistent with the Commission's precedent concerning allocation of loop costs to other services. See, the Commission's August 31, 1999 order in Case No. U-11996. Accordingly, the Commission finds that AT&T's proposed adjustment is not reasonable and should not be adopted.

7. Unilateral Modifications to SBC's Cost Studies

AT&T complains that in SBC's rebuttal testimony and exhibits, the ILEC has unilaterally modified its cost studies in an inappropriate manner with regard to removing of building entrance facility costs, changing the loop sample source from its original source to the LEIS, using two configurations for serving IDLC facilities, use of CEVs, incorporation of 448-pair litespan systems

into LoopCAT, and a significant change in its DLC-remote terminal mix that reflects SBC's embedded equipment rather than forward-looking design from its engineers.

AT&T states that SBC has unilaterally made the above modifications that are not in answer to any party's comments, but merely serve to increase costs and negate the reductions that conceded issues would create.

The Staff takes the position that SBC's modifications to its loop study are reasonable with the exception of the CEVs and the 448-pair Litespan systems. In the Staff's view, those modifications should be removed and the Staff's modified CEV adjustment should be added. The Staff points out that if the Commission only considers cost decreases, as AT&T would like, it is not fair to SBC. The Staff states that the CEV issue was identified by SBC in its reply comments in response to the Staff's request that SBC recognize adjustments or modifications that have been required in other jurisdictions. The Staff states that SBC's proposed CEV modification broadens the types of DLC systems included in the cost study and reassesses the TELRIC compliant forward-looking mix of remote terminal cabinets.

The Staff proposes to modify the CEV adjustment, which results in reducing without eliminating the increase in costs caused by SBC's adjustment. The Staff proposes to roll the 448-line capacity cabinets into the 672-line cabinet percentage and roll the CEV percentage into the 2016-line cabinet percentage, and remove both the 448-line and CEVs as separate items. The Staff states that these cabinet sizes were chosen because they are the closest to those being replaced.

The Commission finds that the change in SBC's data source is reasonable. Further, the Commission concludes that with regard to the CEVs, the Staff's proposal is reasonable and should be adopted for purposes of this proceeding. As adjusted, the inclusion of CEVs has little effect on

loop costs. Moreover, it appears that SBC has used this change to support its new mix of DLC-remote terminal facilities. The Commission is persuaded that SBC's use of a new mix of DLC-remote terminal equipment should not be adopted. It appears that the data used is from SBC's embedded system, not the forward-looking design required by TELRIC, and its inclusion serves only to increase the cost of the loop unnecessarily. SBC has not provided an adequate explanation for the change in its mix to include a much larger proportion of small facilities, which incur increased per line loop costs.

Switching Recurring Costs

SBC states that it procures switches for its Michigan facilities through Nortel, Siemens, and Lucent. It contends that contracting with three companies encourages all of them to negotiate competitive prices for SBC's business. SBC used its Switching Information Cost Analysis Tool (SICAT) for computing recurring switching costs. SBC states that it used prices from current contracts with its three vendors as inputs to the SICAT. It asserts that the model and the current contracts are forward-looking and TELRIC-compliant. The issues raised by the CLECs are discussed below.

1. Mix of Replacement/New and Growth Lines

The contract with each vendor SBC uses in Michigan provides different pricing for replacement lines or new lines than it does for growth lines. Growth lines are significantly more expensive. For purposes of calculating recurring cost of the switch, SBC assumes that replacement and new lines would make up about 53% of the added lines, while growth lines would make up about 47%. SBC asserts that the prices received from its vendors for replacement/new

lines would not be nearly as favorable without the vendors' expectations for recovering a higher profit from the level of growth lines that SBC projects.

The CLECs take issue with the assumed mix. MCI and AT&T argue that the assumed percentage should be much more heavily weighted towards replacement/new lines, rather than growth lines. MCI's witness, James D. Webber, testified that SBC's proposed weighting is not based upon the model or method approved by the Commission in Case No. U-11831, which assumed 70% replacement and 30% growth lines.

Mr. Webber further states that SBC would have to maintain an annual growth of 5.5% over the 17 years useful life of a switch to support its proposed weighting of replacement and growth lines. In altering the model to reflect a more reasonable approach, Mr. Webber states that he assumed a 1% growth rate. He states that his assumed growth rate is more in keeping with the FCC's recent Virginia Arbitration Order,⁹ in which Verizon was required to use a blend of 88% replacement and 12% growth.

AT&T witness, August H. Ankum, testified that contrary to SBC's position, the actual vendor contracts reflect that increasing the number of replacement/new lines would decrease the price per line. He proposed that the Commission reconfirm the methodology adopted in Case No. U-11831, and that the method be expressed more explicitly in terms of the calculations used by the FCC in the Virginia Arbitration Order, which he included in his revised SICAT model. Using a 1% growth rate in his model, Dr. Ankum reached the conclusion that the appropriate mix would be 90.7% replacement/new and 9.3% growth.

The Staff argues that the Commission should approve the same mix as was assumed in Case No. U-11831. In its view, the arguments and positions are essentially the same and are similarly

⁹DA 03-2738, CC Docket Nos. 00-218 and 00251, issued August 29, 2003.

unconvincing. The Staff argues that SBC has not adequately justified the dramatic change in its assumed mix.

The Commission finds that it should again adopt the assumed mix of 70% replacement and 30% growth approved in Case No. U-11831. SBC's experience does not support its conclusion that nearly half of its switch investment will be growth lines. Neither do its most current vendor contracts appear to support SBC's theory that it gains a favorable price on replacement lines only because of the vendor's expectation concerning future growth lines. For example, those contracts provide a minimum, without a prescribed maximum, of the lower cost replacement lines that SBC may order under the contract. Conversely, there are no minimum requirements for purchasing growth lines. The Commission finds more likely that the difference in price between replacement and growth lines reflects the savings inherent in a large scale replacement in comparison to a smaller scale growth addition, as argued by Dr. Ankum in his final reply testimony, p. 23, than dependence upon the vendor's expected growth line installation.

2. Mix of Vendors

As noted earlier, SBC uses three vendors for switch investment in Michigan. In its SICAT model, it assumes that the vendors share SBC's business in proportion to the current investment mix. AT&T's witness Dr. Ankum objects to this assumption and asserts that Siemens is the most economically efficient vendor under current contract. Thus, he argues, SBC should assume that its switch investment will be purchased under the Siemens contract. To SBC's objection that he did not consider additional factors other than the price under the contract (e.g., power requirements, floor space, feature availability, etc.), Dr. Ankum states that all of those considerations are included in the annual cost factors included in AT&T's cost study. He points out that SBC has chosen to use the same annual charge factor for each of the switch vendors. Therefore, he

concludes that the differences on those factors must be miniscule. He adds that merely because Siemens switches are underrepresented in SBC's Michigan network, does not alter the need to assume the most economically efficient facilities for purposes of TELRIC.

The Staff proposes that the Commission approve use of SBC's proposed switch vendor mix. In its view, the proposed mix is reasonable.

The Commission finds that for TELRIC purposes, SBC should assume a mix of vendors that reflects the most efficient technology for reasonably foreseeable capacity requirements to reconstruct the network. This does not require that SBC actually rebuild the network or convert all of its switches to Siemens switches. However, the required assumptions for determining TELRIC include reconstructing the network using the most efficient technology to serve reasonably foreseeable demand.¹⁰ However, the Commission concludes that AT&T's proposed modification on this issue should not be adopted. The Commission finds persuasive SBC's argument that a mix of vendors is appropriate to maintain a competitive atmosphere for present and future negotiations with those vendors. Although the Commission does not adopt AT&T's adjustment, it specifically does not base that decision on adoption of SBC's current mix of switches within its embedded system. SBC's embedded system is not determinative of the most efficient system that it could build today. Therefore, considerations of costs to change switches should not affect the resultant mix of vendors. The Commission expects that in its next cost case, SBC will support its vendor mix with other than its current embedded mix.

3. Flat or Usage Sensitive Rates

SBC takes the position that switching has usage sensitive costs and that the Commission should approve usage-sensitive switching rates. It insists that switching costs vary with usage,

¹⁰FCC 96-325, ¶ 685.

because the size of the switch is dependent in part on the expected usage. It believes that those that use the switch more, i.e. have longer or more frequent calls, should pay the increased costs caused by their heavier usage. SBC says that under its proposed rate structure (one charge for call set-up and another for call duration), the separate SS7 signaling charge would no longer exist. It insists that its proposed pricing should be adopted in order to provide the correct incentives to CLECs when they establish retail prices for their customers.

SBC's witness, Dr. Kent Currie, testifies that equipment components of a switching system are sized by the vendor to provide sufficient capacity for access lines, busy hour (BH) call attempts, and BH centum call seconds (BHCCS). He states that these demand variables drive capacity requirements of the different switch components and the vendor's cost to produce a switching system. He asserts that the industry recognizes that users of access lines and callers during switch busy hours consume capacity and cause costs. For that reason, Dr. Currie states, SBC has identified switch costs for lines or ports, call set-up, and call duration.

Dr. Currie goes on to state that SBC pays its vendors the same within a particular range of usage. He also states that although short run prices remain constant for different levels of usage per line, long run costs will probably increase with increased usage. This is true, he says, because the increase in usage will probably affect the sizing of the usage-sensitive components of the switch and alter the vendor's cost of production.

Dr. Currie further states that other jurisdictions, including the FCC and the Ohio Commission have approved proposals to split switch port and usage costs. According to Dr. Currie, the FCC has found that a 30% fixed to 70% usage mix is not unreasonable.

AT&T objects and argues that the costs of the switch do not increase with increased usage. In Dr. Ankum's view, SBC witnesses confuse engineering considerations with economic considera-

tions. In his view, the question is not whether switch engineers construct a different switch for high volume users than they do for low volume users, but whether the switch designed for high volume users is more expensive. Dr. Ankum testifies that because the answer here is no, there is no justification to assess usage-based charges and recover more from high volume users than from low volume users. He explains that the vendor contracts have a per line charge that includes processors with so much spare capacity that in his view, it is not reasonable to argue that high volume users will exhaust that capacity. Although one of SBC's Michigan vendors has a limit on CCS before a higher charge might apply, Dr. Ankum states that the limit is so high as to have a zero probability of being exceeded in the foreseeable future. Although certain customers may exceed the CCS limit on its lines, Dr. Ankum states that it is the average use per line over the switch module that is important.

In answer to SBC witness Linda Klais' statement that processor costs are usage sensitive, Dr. Ankum points out that processor costs are not a part of the CCS calculations. In answer to her statement concerning the number of growth jobs required in SBC's network, Dr. Ankum points out that it is only the older switches placed under previous generation contracts that have required growth additions for usage. He states that under current contracts, there is effectively no extra cost to SBC for high usage.

In a related argument, AT&T also objects to switch-related aspects of SBC's access cost studies. Specifically, Dr. Ankum testifies that there are no usage costs associated with the end-office switch, identified by SBC as "local switching per MOU costs." Ankum Testimony, pp. 129-131. He argues that because costs of end-office switching are not usage sensitive, SBC does not incur usage costs when switched access traffic originates or terminates on the end-office switch. Dr. Ankum concedes, however, that some costs, such as end-office trunk ports and some

SS7s, are usage sensitive and should not be eliminated. Dr. Ankum recommends that the Commission find that there are no usage sensitive costs associated with end-office switching and that the switched access local switching costs per MOU be set at zero.

Additionally, Dr. Ankum addresses the matter of reciprocal compensation as it relates to switching costs. He asserts that to the extent a CLEC orders UNE-P, the CLEC fully compensates SBC for all switching related costs. Therefore, AT&T argues, when a local call terminates onto a UNE-P customer served by SBC's end-office switch, SBC has already been compensated in the form of the monthly UNE-P charges that include the flat-rate switching element charge. In that situation, AT&T argues, there is no reason to again charge the terminating carrier reciprocal compensation charges for end-office switching. Consequently, AT&T argues that, for local calls subject to reciprocal compensation charges placed to UNE-P customers, the Commission should likewise set the end-office switching costs at zero.

MCI's Mr. Webber shares AT&T's opinion that the vendor contracts demonstrate that switching investments do not vary with changes in peak usage demand over the relevant range, and do not support SBC's proposed per minute of use (MOU) switching rates.

The Staff agrees that switching costs do not vary with increased usage. Moreover, the Staff states that recovery of shared switching costs should be recovered in a manner that efficiently apportions costs among users. The flat rate charge for shared facilities allocates uniformly across line ports the cost of the switching matrix and trunk ports. In the Staff's view, a flat rated charge has at least two advantages: (1) it is easily implemented and (2) it minimizes the possibility of over or under recovery of costs.

The Commission finds that SBC should use a flat rate to charge for its switching costs. In the Commission's view, SBC has failed to demonstrate that on a forward-looking basis, switch costs

will vary by projected usage. SBC's stated intention with regard to the usage sensitive charge reflects its interest in inhibiting its competitors from obtaining and retaining high volume customers by requiring that those competitors pay more for the higher usage, even though SBC will not incur higher costs per line for the projected usage under current vendor contracts.

The Commission finds that there are no usage sensitive costs associated with end-office switching and that the switched access local switching costs per MOU should be set at zero. Likewise, the Commission finds that for local calls subject to reciprocal compensation charges placed to UNE-P customers, the end-office switching costs should be set at zero. In sum, the Commission finds that AT&T's proposed recalculation of SBC's access service costs should be used for this proceeding, as adjusted for the inputs approved in this order.

4. Inclusion of Upgrade Costs

SBC includes switch upgrade costs in its SICAT model, stating that an upgrade can be more cost efficient than replacing a switch, and may allow SBC to continue to provide service going forward in an efficient and cost effective manner. SBC says upgrades to software are important in that they permit the switch to remain technologically current, extend the economic life of the switch, and lower the company's cost of switching.

AT&T objects to the inclusion of switch upgrade costs, arguing that SBC's engineering guidelines require that new switches are placed with state of the art facilities, which should not require upgrades. He further states that the replacement/new prices and growth line prices provide for the capabilities for which SBC seeks to charge as an update. For example, although a 113C processor is currently included at no extra charge in the new end office prices, SBC lists the 113C processor as an upgrade for older switches in the SICAT model.

Dr. Ankum further testifies that the FCC has found that upgrade costs are inconsistent with TELRIC assumption that the replacement of the network must be based on least-cost, most efficient forward-looking technologies. He states that SBC has not demonstrated why CLECs should pay in current rates for future upgrades to current state of the art switches.

MCI's Mr. Webber states that SBC witness, Ms. Klais' analysis on this issue uses upgrade costs based on the current embedded network, which was installed under prior switch vendor contracts with different terms and conditions. However, Mr. Webber points out, the present case is focused on developing studies that take into consideration today's contracts and their terms and conditions as well as the company's likely long run costs. According to Mr. Webber, SBC's performing 40 growth upgrades on older switches is not relevant unless the upgrades would have been needed had the affected switches been installed and maintained under the current contract and under SBC's current engineering guidelines. Mr. Webber asserts that the upgrades referenced by Ms. Klais would have been available to SBC within the current vendor contract terms without additional charge.

The Commission finds that the cost of upgrades should be included in the SICAT model. There is credible evidence that upgrades permit the switch to remain technologically current, extend its economic life, and lower the company's overall cost of switching. Even forward-looking switches may require software upgrades or patches to maintain a fully functioning system.

5. Conversion Costs

SBC includes in SICAT costs for converting older switches to new TELRIC compliant switches under the new vendor contracts.

AT&T's Dr. Ankum testifies that these costs are exclusively associated with older, analog switches, and are in no way a good proxy for any future conversion costs when the current

switches may be replaced. Therefore, he concludes that conversion costs are really embedded costs and should be removed from the SICAT model.

MCI's witness Mr. Webber also testifies that these costs should be removed from SICAT, based on the scorched node assumptions of TELRIC. He states that the conversion of lines will not occur when you assume a new build of the network.

The Commission agrees with AT&T's analysis of this point. SBC should remove the conversion costs from its SICAT model.

6. Tandem Switch Port Utilization

In the initial testimony of Dr. Ankum, AT&T challenges the data SBC employs for tandem usage and proposes a different calculation because SBC's result is ridiculously low. Dr. Ankum theorized that SBC effectively had applied a fill factor twice for tandem switching. The testimony of MCI's witness, Mr. Webber concurred with Dr. Ankum.

SBC has not responded to this criticism.

The Commission finds therefore that AT&T's recalculation of the tandem switching MOU should be used for this proceeding, but using the fill factors established elsewhere in this order.

7. Signaling System 7 (SS7) Costs

AT&T witness Dr. Ankum testifies that SBC's proposed SS7 cost increases are grossly out of line with the currently approved SS7 costs and the increases for other switch components. He states in his final reply testimony that SBC has not adequately explained the reason for such a dramatic increase in these costs. SBC's calculation results in a 1200% increase from the last approved costs for SS7. Dr. Ankum states the he was not able to identify where the excess costs come from, but theorized that it may be a mistake similar to that found in tandem switch usage.

Because SBC has failed to explain this increase, AT&T argues, the Commission should not approve those costs and, instead, should adopt the costs approved in the prior cost case.

Testimony from Michael R. Baranowski and Julie A. Murphy also criticizes the SBC Program for Interoffice and Circuit Equipment (SPICE) model, with which SBC's SS7 study was performed, claiming that SBC relies on embedded costs rather than the costs appropriate in a forward-looking, efficient network. Moreover, these witnesses claim, the model was very difficult to work with, and created a "black box" around assumptions so that it was difficult to determine where the problem might be.

SBC's final reply comments do not address this issue. However, the rebuttal testimony of David J. Barch states that the current study reflects SBC's current signaling network architecture. It states that SBC has no cost-compelling plans to replace the signaling switches, and considers its current architecture efficient and forward-looking. Generally, SBC states that it does not represent that the approved costs in Case No. U-11831 are TELRIC. Therefore, it does not need to explain the great difference between the previously approved costs and the current proposed costs.

The Commission finds that SBC has failed to adequately explain the dramatic increase in SS7 costs over those approved in Case No. U-11831. Therefore, the Commission adopts the SS7 costs approved in Case No. U-11831.

Shared and Common Cost Factors

Shared and common cost factors reflect the relationship of shared and common costs to direct costs and attempts to capture costs that cannot be directly attributed to an individual service or element. SBC developed three distinct factors for this filing: (1) common cost factor, (2) wholesale shared cost factor, and (3) a retail shared cost factor. SBC states that for practical purposes in UNE pricing, the common cost factor is combined with the wholesale shared cost

factor to produce the wholesale shared and common cost factor. The product of the UNE direct cost (i.e., TELRIC) and the wholesale shared and common cost factor is used to determine UNE rates.

SBC states that it began with 2001 baseline data and made certain adjustments to reflect forward-looking effects. SBC argues that AT&T's and MCI's restatements of SBC Michigan shared and common factors are unreasonable. It argues that no company could cover its forward-looking overhead expenses for the miniscule factors suggested by AT&T and MCI.

The Staff, AT&T, and MCI challenge SBC's proposed shared and common cost factors on several fronts, which are addressed below.

Common Cost Factor

1. Common Cost Numerator

SBC states that the common cost numerator is the sum of SBC's assigned portion of common costs, based on Part 32 regulatory accounting rules. These costs include all of the 67XX accounts, such as executives, human resources, legal, information technology, procurement, and external relations, plus added items such as mainframe computer systems capital and expenses. The other parties challenge certain portions of these costs as not properly included in common costs. They further question the calculation of the factor's denominator. As more fully described below, the Commission finds that the common and shared cost factor should use the calculation method proposed by AT&T with the modifications proposed by the Staff. Additionally, the Commission notes that Mr. Makarewicz made certain "corrections" to SBC's cost study. Confidential Exhibit TJM-R2, p. 1, attached to his rebuttal testimony. The Commission finds that only adjustments numbers 2, 6, and 7 of Mr. Makarewicz's corrections should be adopted. The Commission rejects the remaining proposed corrections because they are inconsistent with the Commission's findings

concerning the appropriate shared and common cost denominator. The Commission further addresses an error in one of these adjustments below.

a. Transitional Benefit Obligation (TBO)

SBC explains that the TBO arises out of the 1991 change of accounting standards for recording post-retirement benefit expense for employees and retirees. The Statement of Financial Accounting Standards (SFAS) 106 was amended to require that companies record these expenses on an accrual basis, rather than the cash basis that many companies used. The statement requires that companies record post-retirement benefit expense as the employee earns those benefits during his or her working life. SBC states that the estimated expense is the current present value of the anticipated post-retirement benefits as determined by an actuary. The TBO was created because of the need to transition from one system to the other. At the time that the accounting change occurred, SBC had employees that had earned some portion of their post-retirement benefits. Because the cash accounting system did not recognize that earned amount, transitioning to the new accrual system meant recognizing that benefit obligation earned but not yet recorded. SBC explains further that the Commission required companies to amortize the TBO over at least 20 years for regulatory purposes. See, the Commission's December 8, 1992 order in Case Nos. U-10040 and U-10040-A. Therefore, SBC concludes, the annual amount of TBO expensed each year is a current expense and properly included in the shared and common cost factor.

SBC states that it has removed TBO costs from its maintenance factors, as discussed in the direct testimony of David Barch. It further states that it has taken the sum of all TBO expense and identified it as a common cost included in the shared and common cost factor.

All of the other parties object to including the TBO as a part of common costs. MCI argues that the TBO is a labor related cost of past employees. It argues that its exclusion from TELRIC is

dictated by the fact that it is historical, having been established before wholesale services or UNEs were available. Therefore, MCI reasons, those costs do not belong in UNE costs.

AT&T argues that the TBO is not a forward-looking expense, but rather a non economic cost with no cash-flow implications. In AT&T's view it is merely an accounting recognition of past expenses for employee years of service prior to 1991. AT&T's witnesses Messrs. Starkey and Fischer testify that the FCC has not permitted the inclusion of the TBO in interstate rates after 1995. Messrs. Starkey and Fischer state that to include the TBO in UNE rates would violate the FCC rule that TELRIC includes only those costs that are incurred on a forward-looking basis.

MCI's witnesses Olesya Denney and Peter Gose testify that SBC's arguments for including the TBO in common costs disregard the distinction between forward-looking and future expenses. If an expense would be incurred by a new entrant in the industry, then it is a forward-looking expense. Conversely, if the expense is not one that a new entrant would face, it is not a forward-looking expense. Moreover, MCI points out, SBC immediately recognized the TBO in its financial reports.

The Staff also recommends that the TBO be removed from common costs for purposes of this case.

The Commission finds that the TBO does not properly belong in the calculation of common costs. It is not a forward-looking cost, being a recognition of the obligation existing in 1991 for employee-earned post-retirement benefits. There is no quarrel that the costs of post-retirement benefits earned on a current and forward-looking basis belong in this calculation. However, the TBO is an obligation in addition to the benefits currently being earned. It is a current obligation, based on past service.

b. Operations Support Services (OSS) Testing Expense

SBC included in its common costs OSS testing expenses, which it “normalized” by using an average of OSS testing expenses incurred in 2000 through 2003.

The Staff proposes that these testing expenses be eliminated from the calculation of common costs, because they are expenses SBC incurred in preparation for its application for relief from the prohibition against providing interLATA service (Section 271 application). As such, the Staff argued, it is not a forward-looking cost and should be removed.

MCI agreed with the Staff’s position. The final reply testimony of witnesses Denney and Gose states that SBC has not addressed the fact that these costs are not forward-looking. They state that SBC’s information that it incurred these costs in 2000 through 2003 does nothing to help the lack of forward-looking nature, because the FCC granted SBC’s Section 271 application in 2003. Further, the data from 2003 shows a marked decrease in costs from those experienced in 2001 and 2002. These witnesses state that in the Illinois cost proceeding, SBC Illinois agreed with this adjustment and completely removed OSS testing costs.

The Attorney General adds his agreement that the OSS testing costs should be removed as suggested by AT&T, MCI, and the Staff.

The Commission finds that the OSS testing expenses should be removed from the numerator of the common cost factor because it occurred during an historical process and is not likely to be encountered again. Thus, to normalize the numerator, these expenses should be removed.

c. Pension Settlement Gains

In its final reply comments, SBC states that pension settlements are associated with lump sum payments to exiting employees in exchange for their rights to receive specified pension benefits. If the total lump sum pension payments are significant enough to exceed certain thresholds in a

period, recognition of deferred actuarial gains and unamortized balance of any existing transition asset are accelerated. The accelerated recognition is referred to as a settlement gain. SBC states that the settlement is irrevocable and relieves the employer of primary responsibility for a pension benefit obligation and eliminates risks related to that obligation. SBC argues that the pension settlement gains are recognized gains that occurred in prior periods, but were deferred in accordance with SFAS 87.

SBC further states that in 2001, the company realized an amount of lump-sum pension payments to departing employees, which was sufficient to pass the threshold and which resulted in a partial settlement of the company's pension plan, recorded as credits to Account 6728. SBC argues that such an occurrence is considered not to be related to the operation of the pension plan and is not in the ordinary course of business. Therefore, it argues, it is appropriate to exclude the credits for purposes of defining a normalized or forward-looking year of financial data to be used to determine rates.

The Attorney General argues that it is not necessary to adjust for pension settlement gains if SBC removes the one-time or amortized costs related to downsizing efforts that are included in the cost studies. He states that the burden should be on SBC as to demonstrating that all downsizing costs such as the one-time lump sum payment, severance payments, nonrecurring insurance costs, and costs of retraining or placement of employees in other jobs. The Attorney General goes on to say that if these amounts are not identified, then the pension settlement gains should be normalized and an adjustment made.

The Staff proposes that a normalized amount be calculated for pension settlement gains to be included as an adjustment to TELRIC costs. The Staff states that there have been several pension settlement gains in past years and it believes such an event is likely to occur again in future years.

MCI agrees with the Staff and argues that an adjustment is necessary to include some normalized level of net pension settlement gains rather than the actual amount observed in the base year. The testimony of witnesses Denney and Gose states that the level of recognized pension settlement gains or losses is highly volatile and affected by business cycles. Market returns determine whether the recognition will be a gain or a loss, and events that trigger this accounting adjustment tend to be related to the business cycle, because cost cutting becomes more important during recessionary periods. MCI took the position that 10-year historical data supports finding an average annual net pension gain of over \$50 million. Only in 2002 did SBC experience a net pension loss.

In the final reply testimony of Messrs. Starkey and Fischer, these witnesses propose a revised pension settlement gain adjustment to include both gains and losses for the years 1994-2003. The Staff's final comments also propose this adjustment.

The Commission is persuaded that the Staff's and AT&T's revised adjustment for pension settlement gains should be adopted. Pension costs are a part of forward-looking costs, and may be affected (offset or increased) by net pension settlement gains or losses. These gains or losses should be considered when determining pension expense for purposes of calculating common costs in this case.

d. Executive Expense

In its restated shared and common cost study, SBC removes a certain amount from the executive expense amount that it says was incorrectly recorded on the books. Mr. Makarewicz explains that the Automated Reporting Management Information System (ARMIS) Account 6711 was overstated because some of this should have been booked to Accounts 6612 (sales) and 6623

(customer service). To adjust for this problem, Mr. Makarewicz removed the amount from Account 6711 and split it evenly between the other two accounts.

Testimony from MCI's witnesses Denney and Gose states that the allocation appears to be pure guess work. The importance of the split is that Account 6612 contains shared costs and Account 6623 contains direct costs. Thus, depending on the account in which the amount appears, it will either be included in the numerator or the denominator of the Common and Shared Cost factors. These witnesses point out that the total expenses in these two accounts differ substantially in that Account 6623 is more than three times the amount in Account 6612. MCI proposes that the amount be split proportionately based on the total amounts in the accounts.

The Commission is not persuaded that MCI's proposed adjustment to SBC's executive cost adjustment must be made. There is no evidence to suggest that MCI's proposal is any closer to accurate than SBC's adjustment. However, it appears that there is a miscalculation or a misprint of SBC's adjustment, because the sum of the two amounts added to sales and customer service is about \$400,000 more than what was removed from the executive account. SBC should correct that error by reducing the sales and customer service accounts by equal portions of the overage.

e. Support Assets

Support assets are those assets that are used to support activities in which employees engage to perform their work. Assets such as land, buildings, vehicles, desks, tools, among others, belong in this category. Support asset expenses include the depreciation, cost of money, income taxes and operating expenses attributable to these assets. Support assets have traditionally been a large portion of the common and shared cost analysis. In this case, SBC placed the majority of costs associated with support assets into calculations for maintenance and labor costs.

The Staff, AT&T, the Attorney General, and MCI recommend that support assets be moved back into shared and common costs and removed from all other places in the cost studies. MCI further recommends that the Commission reduce the support assets to reflect the cost saving measures that SBC has taken in the recent past. The Staff further states that support assets should be restated to reflect a 2001 test year rather than the original 2000 test year, to ensure consistency with all of the other shared and common costs.

The Commission agrees that support assets are more properly recognized in common costs than as a factor in non-recurring costs for the various UNEs. Therefore, the Commission adopts this adjustment to the cost studies, as modified by the final reply testimony of Messrs. Starkey and Fischer, and approves the Staff's proposal to restate the costs for 2001. As to MCI's proposal to reduce the amount related to support assets by employing SBC's forward-looking adjustment, the Commission is not persuaded that the additional adjustment is required at this time.

f. Avoided Cost Discount

AT&T criticizes SBC's calculation of its common cost numerator because in its view, SBC merely summed the entirety of its embedded expenses booked to Accounts 6711 through 6728 and identified the result as an estimate of forward-looking common costs. In AT&T's view, it is likely that a portion of SBC's 67XX expense should be allocated directly to some product or group of products. It argues that it found only one instance in which SBC had attempted to do so. AT&T states that SBC admitted it had not reviewed 8 of the 10 accounts for expenses that might be better allocated as a direct or shared cost. AT&T argues that SBC's failure to examine and appropriately remove items that might be assignable to direct or shared costs, violated the FCC's directive to attribute costs to specific elements to the greatest possible extent. AT&T proposes to adjust SBC's

common costs by employing an avoided cost discount to remove expenses that should be allocated to direct or shared costs for SBC's retail products or other non-UNE wholesale products.

The Staff, the Attorney General, and MCI agree with AT&T's approach.

SBC argues that although in the short run, an individual's function may be considered related to a retail direct cost, or a wholesale shared cost, these people are not permanently dedicated to any particular product or even to wholesale or retail operations. Thus, it argues, the only accurate and economically meaningful way to classify these overhead functions over the long run is to treat them as common.

The Commission finds that the use of the avoided cost discount factor to reduce the embedded costs of Accounts 67XX is a reasonable method to remove costs that should have and could have been allocated either to direct retail or shared wholesale costs. In the Commission's view, SBC did not take the necessary steps to analyze those costs included in these accounts to determine whether they could be properly assignable to other than common costs. The Commission is not persuaded by SBC's argument that removing costs that might be assignable to retail direct costs or wholesale shared costs from the common cost numerator will create a mismatch in the equation. Rather, it is a way of recognizing that certain costs SBC included in that numerator are not common costs, because they are more appropriately designated direct retail or shared wholesale. Given the detail that AT&T had available for its review, the Commission finds that use of the avoided cost discount as a proxy for removing non common costs from the numerator of the factor is appropriate. Moreover, the Commission notes that AT&T's final reply comments correctly state that the costs removed using the avoided cost discount should be added to the denominator as they are presumed to be part of total direct costs.

g. Regulated and Unregulated Costs

SBC uses both regulated and unregulated costs for calculating its common cost factor. AT&T argues that the Commission should require SBC to use only regulated costs. The Commission rejects this proposal. Common costs are, by definition, costs that cannot be assigned to anything other than the operation as a whole. Therefore, the Commission finds that this proposed adjustment should be rejected.

2. Common Cost Denominator

The common cost denominator is comprised of SBC's total direct costs. SBC proposes to increase those costs by using an inflation factor to make the denominator what it argues would be forward-looking. The CLECs and the Staff object to SBC's proposal to make the denominator forward-looking because the numerator is calculated using historical embedded amounts. Thus, they argue, SBC's proposed numerator and denominator do not match. Although arguing that the best resolution would be to use both a forward-looking numerator and a forward-looking denominator, in the absence of information to support a forward-looking numerator, they propose an embedded denominator. Use of embedded data for both numerator and denominator is not without basis. As Messrs. Starkey and Fischer point out, the relationship of expense to investment remains essentially constant over time. However, it is essential that the numerator and the denominator match.

The Commission is persuaded that it should adopt the denominator proposed by the Staff and AT&T for purposes of this proceeding. In so doing, the Commission rejects SBC's proposed inflation factor for calculating the denominators for its shared and common cost factors. The Commission finds that the denominators for the shared and common cost factors should be based on the same direct costs, without an inflation factor, for consistency.

Shared Cost Factor

SBC states in its final reply comments that the shared cost factor equals wholesale marketing costs plus wholesale uncollectible costs divided by wholesale direct costs. It derives the numerator by first adding marketing costs, including product management, product sales, and product advertising. The wholesale marketing expenses are compared to total marketing expenses for SBC to derive the wholesale portion of total marketing expenses in 2001.

1. Shared Cost Numerator

a. Uncollectibles

SBC proposes to include in the numerator of the shared cost factor an amount for uncollectible revenue by starting with the total company-wide uncollectible balance for 2001. SBC then estimates a percentage of uncollectible revenue as related to wholesale services.

AT&T raises three concerns with this calculation. First, Messrs. Starkey and Fischer state that although the calculation of wholesale uncollectibles represents a substantial component of shared and common cost factor, SBC provided very little information supporting that calculation. Second, these witnesses state that SBC's "wholesale services" are comprised of too broad a range of services, and contribute to attributing expenses to the generic group that should be allocated directly to other products. In their view, the attributes of wholesale services as a group have very little relationship to UNE products in particular. Third, they complained that SBC used its year-end balance in account 5301, the account that tracks only those revenues that were originally reserved for bad debt. It does not reflect that portion of the reserve that was eventually collected or written off. Thus, these witnesses state, it tends to overstate the amount of uncollectible revenue. Moreover, they state that SBC did not do anything to ameliorate the wide range of annual uncollectible expense.

To remedy these failures, AT&T proposes that the bad debt amount (write off) from Account 1181 should be used rather than the uncollectible reserve. To smooth out the volatile nature of the annual uncollectibles, it proposes to use a six-year annual average from 1997-2002. In this manner, Messrs. Starkey and Fischer state, the calculation will be more reflective of SBC's true economic loss. To Mr. Makarewicz's assertion that SBC faces an upward trend in uncollectibles, Messrs. Starkey and Fischer state that going to the quarter beyond the end of the period for which Mr. Makarewicz made that assessment, demonstrates that SBC's exposure to loss from the MCI bankruptcy proceedings was not as great as once thought. Moreover, they point out that the reserve in 2003, as of September 30, had declined by 26% from the reserve stated the year prior.

MCI and the Staff support the use of AT&T's proposed method to deal with wholesale uncollectibles. However, the Staff states, there is no need to adjust SBC's shared retail uncollectibles.

SBC argues that evidence from 2002 indicates a continued upward trend in uncollectibles, especially in the wholesale sector. In its view, therefore, the 2001 wholesale uncollectible cost percentage is a conservative base to use for the 2002-2005 planning period of the study. It argues that the study identifies both shared and direct expenses for all of SBC's wholesale operations. It argues that to focus only on UNE-related uncollectibles would introduce an inconsistency between the numerator and the denominator, because the direct cost denominator derives the portion of direct costs associated with all of wholesale, not just the UNE portion of direct costs. SBC argues that there is no evidence to suggest that wholesale uncollectibles will subside.

The Commission finds that AT&T's proposal for remedying the anomalous 2001 wholesale uncollectibles is appropriate and should be adopted. There is evidence that the economy is improving on a going forward basis. Moreover, it appears that SBC has overstated its

uncollectibles by using the uncollectible reserve account rather than the account for actual write-offs. Finally, the Commission finds that SBC should retain its calculation of retail uncollectible percentage.

b. Marketing

AT&T's Messrs. Starkey and Fischer take issue with SBC's inclusion of marketing expenses in the numerator of the shared cost factor. They state that the advertising that SBC has done does not promote the use of UNEs and cannot therefore be considered a cost attributable in any way to UNEs.

In its final reply comments, SBC argues that its wholesale marketing organization defines the overall marketing direction for SBC's industry markets group and manages the UNE, switched access, and resale product families. It states that among other things, it is comprised of hundreds of managers, account team members, and others who manage pricing, product design, distribution, and regulatory activities. SBC argues that these individuals are not included in other areas that SBC considers direct wholesale or common costs. It asserts that these are not retail related costs, but are costs shared among only wholesale services and UNEs. Therefore, SBC argues, they are appropriately included in wholesale shared costs. Moreover, SBC argues, the objection to advertising costs should also be rejected. It states that the very small amount of advertising costs included in marketing shared wholesale costs relate to SBC participation in trade shows and similar functions.

The Commission is not persuaded that AT&T's proposed adjustment for marketing expense should be adopted. SBC has set out the activities associated with these costs, which appear reasonably related to wholesale services, including UNEs.

2. Shared Cost Denominator

In addition to the above proposed changes, Messrs. Starkey and Fischer argue that SBC uses an inappropriate shared cost denominator by choosing to use “wholesale direct costs.” These witnesses propose that a more rational denominator would be UNE-specific revenues. They reason that the two categories of costs placed in shared cost, marketing and uncollectibles, are more causally related to revenues than they are to direct costs. They point out that using UNE revenue as the denominator raises the shared cost factor, and mitigates the reduction in the shared cost factor that results from their other recommended adjustments. In their view, the common cost factor should be applied first, then the shared cost factor.

The Staff argues that the shared cost factor denominator should be based on wholesale direct cost rather than UNE revenue as proposed by AT&T.

MCI argues that SBC has understated its wholesale direct costs by using the expense data of its wholesale corporate organizations to determine the percentage of direct costs that would be attributable to wholesale services. MCI proposes that the denominator should be determined using the sum of TELRIC cost estimates filed by SBC. Further, MCI argues that direct costs for the wholesale service of interstate access should also be included, which SBC did not include. It argues that SBC’s approach is flawed because it ignores investment and relies on a classification of its organizations rather than services.

In its final reply comments, SBC argues that its calculation of the denominator for the wholesale shared cost factor represents the wholesale portion of total direct costs. It says that those costs include the forward-looking capital costs and operating expenses for all of the direct cost accounts, plus ad valorem tax and state commission assessment. The total direct cost is then multiplied by the wholesale percentage to obtain the wholesale total direct cost figure.

SBC argues that the Commission should reject MCI's approach because the result parallels a revenues approach to determining the percentage of costs that should be considered direct wholesale. It states that wholesale revenues represent a disproportionately high portion of total revenues in a manner divergent from underlying costs. It argues that MCI incorrectly states that operating expense is an improper measure because it ignores investment. In fact, SBC states, its proposed proxy of operating expense explicitly acknowledges investment, because operating expense includes depreciation expense, a direct cost of capital investment.

SBC further urges the Commission to reject AT&T's approach because the FCC has found that revenues measure only the ability of an activity to bear costs, and not the amount of resources used by the activity. It argues that to derive TELRIC by the ability of the activity to bear the costs rather than the resources used is unlawful. It argues that attempting to allocate these costs based on revenues violates the requirement that UNE prices be cost-based rather than margin-based.

The Commission is persuaded that the denominator of the shared cost factor should be approached in the same manner as the denominator for the common cost factor. Direct costs should be used without SBC's proposed inflation factor, as discussed in the previous section on the common cost denominator. The Commission rejects AT&T's proposal to use revenues as the basis for denominator for the shared cost factor. Finally, the Commission concludes that the factors should be used sequentially, as proposed by AT&T and the Staff.

Annual Cost Factors (ACFs)

SBC states that ACFs are the means by which it derives the annual forward-looking costs associated with the forward-looking investments it incurs to provide services or elements. It states that ACFs typically are composed of two families of cost factors: capital cost factors (the annual capital costs associated with investment) and operating expense factors (the relation between

expenses and investments). SBC explains that the ACF is the ratio of capital costs and operating expenses per dollar of plant investment. It further states that investment factors and inflation should be considered when setting the ACFs.

SBC states that it developed its capital cost factors using the Capital Cost System (CAPCS). According to SBC, that model calculates the cost of money, depreciation, and income taxes required to reimburse SBC for its investment and the placement of assets that are required to provide various services and UNEs.

SBC proposes to use a factor to increase its maintenance expenses when assumed fill levels increase. It states that its adjustment merely holds the maintenance cost per unit constant over any assumed increased fill. SBC further proposed an adjustment for inflation and claimed that productivity was also captured in the study.

SBC contends that it did not attempt to single out the small percentage of land and building space dedicated to collocating entities because this unrealistically assumes that collocation space will be occupied at a predictable level for a defined period of time. CLECs, SBC argues, are not required to sign long-term leases, therefore any length of stay may be volatile and short-term. Although AT&T relied on the Producer Price Index to calculate an inflation factor, SBC maintains that the Consumer Price Index (CPI) is the appropriate factor because a majority of TELRICs are labor-related, and the CPI is the best measure to translate hourly or weekly earnings into inflation-adjusted dollars.

AT&T objects to several of SBC's proposed ACFs. Specifically, AT&T argues that SBC: (1) overstates the cost of capital and depreciation life, (2) uses total company expenses and investments rather than those only attributable to its regulated operations, (3) fails to remove

inventory and expenses attributed to building space leased to collocators, and (4) uses an inappropriate inflation factor, without a productivity factor.

AT&T claims that SBC uses two CAPCSs to calculate capital cost factors, one using Michigan-specific inputs to determine Michigan-specific capital cost factors, the other using combined support expense and investment data from Illinois, Indiana, Ohio, Wisconsin, and Michigan.

AT&T further charges that the method by which SBC calculates expense factors using (1) both regulated and non-regulated data, (2) obsolete 1998 service order data, relying on out-of-region data from Missouri, Arkansas, Kansas, Oklahoma, and Texas, (3) maintenance factor adjustment in its ACF model resulting in unwarranted cost increases, and (4) average book investment as the denominator in the ad valorem tax factor rather than the current or replacement cost, is flawed.

The Staff proposes certain cost study modifications that affect the ACFs. Specifically, the Staff proposes that SBC should use the approved cost of capital and move support assets, on a Michigan-only basis, to common costs from labor and maintenance and other places. Further, the Staff says that SBC has developed a series of inflation factors, but proposes no specific productivity offsets, based on SBC's claim that productivity gains are already captured in its cost studies. The Staff proposes that the inflation factor be excluded. The Staff disagrees with AT&T's proposal to separate regulated and unregulated data.

AT&T and the Staff also object to SBC's algorithm, the maintenance factor utilization adjustment, which adjusts certain maintenance expenses if the Commission approves fill factors different (higher) from those proposed by SBC. The purpose of the algorithm is to increase maintenance expenses as fill increases, based on SBC's contention that costs will increase as usage

increases. AT&T recommends that the Commission reject this algorithm. The Staff recommends that this ACF model function be disabled.

According to the Staff, pursuant to its discussions with SBC, SBC found some problems with running the algorithm, and thus proposes a \$2.37 per line maintenance expense derived from the compliance cost study for unbundled loops in Case No. U-11831. Recognizing that this figure is derived using 1997 data and that labor costs for maintenance and repair have increased since that time, the Staff concludes that SBC's proposal is reasonable and represents a conservative measure of forward-looking maintenance expenses and a compromise position for SBC that is reasonable.

The Commission finds that the Staff's position leads to a reasonable result and that it should be adopted for purposes of this cost study. The Commission's rulings on the appropriate cost of capital, fill factors, and depreciation, as well as other inputs that affect these factors, should be employed in calculating SBC's ACFs. The Commission rejects AT&T's argument that only regulated data should be used.

Unbundled Transport

SBC has presented a number of cost studies, with supporting documentation, related to providing unbundled dedicated transport (UDT) to CLECs. SBC argues that these cost studies are forward-looking and TELRIC-compliant. SBC argues that while AT&T and MCI attempt to disprove or amend the cost inputs and results of SBC's studies, those attempts ignore numerous critical steps in the process, resulting in gross understatements of forward-looking task times and activity costs. SBC's Final Reply Comments, pp. 220-221. SBC urges the Commission to adopt its cost studies and rate proposals.

AT&T provides the testimony of witness Baranowski and Murphy, who review SBC's SPICE Model supporting interoffice transport costs. They provide a number of generalized criticisms of

SBC's transport and signaling cost studies, that they contend are widespread. Baranowski and Murphy Initial Testimony, pp. 5-62. They argue that SBC's studies 1) fail to use an efficient, forward-looking network; 2) use outdated equipment prices; 3) fail to reflect appropriate installation costs; and 4) fail to reflect efficient fill factors, forward-looking cost of capital, economic lives, or expense.

Nevertheless, these witnesses do not propose a cost model of their own. Instead, they recommend that the Commission keep the current rates in effect because SBC failed to meet the evidentiary burden showing that its costs have increased. Alternatively, if the Commission determines that it cannot keep current rates in effect, AT&T recommends that the Commission adopt its conservative adjustments to SBC's proposed costs.

AT&T claims that SBC is attempting to re-litigate many of the issues decided by the Commission in previous proceedings, and in doing so, inflate UNE rates well beyond TELRIC costs. AT&T Final Reply Comments, pp. 25-27. SBC contends that the rates developed in prior proceedings are not representative of its forward-looking costs and therefore differ from its current proposal. AT&T argues that SBC's assertion is troublesome because SBC's transport costs were adopted without significant alteration in Case No. U-11831. AT&T claims that SBC cannot assert that the Commission erred in the previous cost case because the Commission largely adopted SBC's approach. Now, without adequate explanation, SBC has proposed entirely new cost studies using a new cost model.

AT&T points out that SBC's proposed transport and signaling rates are, in some instances, substantially higher than existing rates. AT&T claims that SBC's assertion that the new cost studies are more forward-looking is insufficient to warrant such a departure. Consequently, as noted above, AT&T requests that the Commission adopt its adjustments to SBC's proposed

transport rates, or keep the current rates in effect because SBC failed to adequately support its proposed rates.

The Staff makes a number of recommendations regarding the inputs used for SBC transport costs. The rationales for most of the Staff's recommendations are discussed in other parts of this order and will not be repeated here. Specifically, the Staff recommends changing the inputs in the following respects: 1) use SBC's proposed depreciation lives; 2) 10.6% cost of capital; 3) use SBC's proposed switch mix; 4) use shared and common costs as recalculated by the Staff; 5) use a replacement/growth line ratio of 70%/30%; 6) set the fill factor at SBC's proposed actual fills plus 15%; 7) remove support assets from annual cost factors; 8) eliminate effects of capital and expense inflation adjustments; and 9) set annual transport and tandem switching message and MOU at the levels established in Case No. U-11831, as recommended by AT&T. Staff Final Comments, pp. 30-31.

MCI groups its criticisms of SBC's transport costs with its concerns identified for unbundled loops, enhanced extended loops (EELs), operator services and directory assistance (OS/DA), directory assistance listings (DAL), 8XXQuery, calling name database (CNAM), and high frequency portion of the loop (HFPL). MCI takes issue with SBC's new cost models and questions the reasonableness of rates in relation to the FCC's TELRIC standard, as well as with previous Commission decisions. Specifically, MCI contends that the SPICE model takes a snapshot of the existing network, without any forward-looking redesign to estimate the costs associated with an efficient carrier on a long-run basis, and calculates costs associated with those embedded characteristics. Starkey and Balke Initial Testimony, pp. 113-114. MCI argues that the models used in SBC's last cost case, Case No. U-11831, are superior to the models presented here. MCI argues that SBC should be ordered to remove inefficiently designed samples from the SPICE

model, or be ordered to develop estimates for transport and equipment based on truly forward-looking designs, not embedded designs. At a minimum, MCI argues, corrections need to be made to SBC's cost study for annual cost factors, installation factor flaws, and utilization factors.

MCI also contends that SBC has failed to prove that its current rates are deficient. Consequently, MCI argues that the Commission should not dramatically increase rates, as requested. If anything, MCI contends, SBC's costs have declined dramatically since SBC's last cost case. In sum, MCI spends a great deal of time being critical of the underlying inputs directly impacting unbundled dedicated transport rates, and argues that SBC has presented little testimony to rebut its recommendations. Consequently, MCI argues, the Commission should adopt MCI's recommendations.

The Commission is not persuaded that SBC's cost studies, as proposed, support the increased costs for UDT. The Commission adopts the Staff's proposed modifications, as altered by the Commission's modification to inputs discussed in other portions of this order. With those modifications, the Commission finds that the cost studies associated with providing UDT should be approved.

Nonrecurring Charges and Labor Cost Rates

Nonrecurring costs (NRCs) are intended to cover the nonrecurring, one-time costs that SBC incurs to fill a CLEC's order for a UNE. SBC incurs two types of NRCs: (1) service order costs, such as the costs associated with receiving, preparing, and issuing a work order; and (2) provisioning costs, such as the work activities necessary to assign, connect, test, and turn over the UNE to the CLEC. Nonrecurring charges are a hotly debated topic because they are generally recognized to constitute a barrier to competitive forces. In its Local Competition First Report and Order (paragraph 555), the FCC observed that NRCs can be a serious barrier to entry if they are

unduly high. The topic of labor rates is intrinsically tied to the subject of NRCs. Indeed, according to SBC, “[t]he three most significant factors that drive SBC Michigan's nonrecurring costs are labor rates, the time it takes to perform an activity (task times), and the flow-through (or fall-out) rate, which reflects how often a CLEC’s order can be processed completely electronically.” Final SBC comments, p. 105.

SBC contends that its NRCs and labor cost rates are reasonable and should be adopted by the Commission. With regard to its NRCs, SBC insists that its NRCs rely on the best telecommunications technologies that SBC is currently deploying. SBC asserts that although TELRIC calls for a projection, it does not demand that every ingredient be hypothetical. According to SBC, it is unreasonable to assume that anyone could determine the long-run costs of the most efficient technology without understanding the costs of today’s most efficient producers, such as itself. SBC argues that the CLECs’ recommendations are flawed because they are based on hypothetical, untested, unproven, or unidentified technologies.

SBC developed 15 different TELRIC service order studies related to (1) existing UNE-P, (2) new UNE-P combinations, (3) special access to UNE conversions, (4) unbundled loops, (5) unbundled local switching, (6) EELs¹¹, (7) service order for unbundled tandem switching (UTS), (8) service order for unbundled transport, (9) service order to cancel or change service, (10) dark fiber administrative charges for inquiry and form orders, (11) service order for due date change, (12) HFPL service order, (13) service order for query access to line information database (LIDB), (14) service order for SS7, and (15) sub-loop service orders.

SBC contends that the basic methodology used to identify and quantify its nonrecurring costs is straightforward and not controversial. SBC explains that it first identified the specific forward-

¹¹EEL, SBC explains, is a combination of unbundled loop and dedicated interoffice transport.

looking work activities and personnel required to process or provision a UNE order. Next, SBC calculated how often each work activity is required, to develop (and subsequently apply) a probability of occurrence factor. Thereafter, SBC identified the forward-looking time and resources required to complete each work activity, as well as the labor cost for the individuals that typically perform each activity. Finally, SBC multiplied the time required for each task by that task's associated labor cost and its occurrence factor, and summed the resulting costs to produce the total nonrecurring cost of processing or provisioning the UNE order. According to SBC, its methodology is reasonable and consistent with all applicable legal standards, and should be followed by the Commission.

In opposing adoption of SBC's NRCs, the Staff points out that SBC has essentially followed the same methodology in this case that was rejected by the Commission on two prior occasions. According to the Staff, in Case No. U-11280 the Commission adopted the recommendation of the Staff to require Ameritech Michigan to reduce its nonrecurring costs by 50%. The Commission found Ameritech Michigan's support for the higher costs to be based on arbitrary labor costs, a vague definition of the costs, and a flawed methodology. The Staff also points out that in Case No. U-11831, the parties other than Ameritech Michigan maintained that Ameritech Michigan's proposed NRCs were still excessive. The Commission agreed. In so doing, the Commission stated:

The Commission concludes that it should not accept the results of Ameritech Michigan's study. The study assumes that Ameritech Michigan's current operations are as efficient as they should be with a forward-looking approach using existing technology. Ameritech Michigan says that it used the standard of its current procedures with any planned efficiency improvements in the next three years, and none were planned. Apparently, Ameritech Michigan has concluded that further improvements are not warranted at this time, even though the systems are capable of doing better. The result is an erroneous assumption that the current extensive manual intervention in numerous operations is the least-cost, forward-looking approach. Further, the study rests on numerous estimates about the work to

be done, the time required to do the work, and the probability that a particular function will be performed. Taken as a whole, the estimates do not yield reasonable results.

November 16, 1999 order in Case No. U-11831, p. 27.

The Staff maintains that adoption of SBC's NRCs would be problematic for several reasons. The Staff insists that SBC's approach tends to inflate costs by use of existing plant and procedures and through inclusion of cost items more properly includable in recurring charges. Additionally, the Staff is concerned that SBC has, for the first time, proposed that support assets, which previously had been recovered in shared and common costs, be recovered in the NRCs. The Staff contends that even if SBC were to remove support assets from the calculation of NRCs, which would reduce NRC rates by up to 30%, that adjustment still would not set SBC's NRCs at a reasonable level that would promote competition in Michigan.

AT&T agrees with the Staff's general position regarding SBC's cost study submissions. Moreover, AT&T contends that the Staff has placed this case in the correct context by explaining how SBC's present filing all but ignores the Commission's ruling in prior proceedings. AT&T states that the rates approved in Case No. U-11831 not only have a presumption of validity, but also were validated by the FCC's 271 order. According to AT&T, SBC bears the burden to show that the Commission's prior presumptively valid decisions should be abandoned and replaced with decisions that result in astronomically higher rates. AT&T insists that SBC cannot meet that burden because SBC (1) continues to violate the Commission's rules for filing new cost studies, and (2) has utterly failed to show that the Commission's orders in Case No. U-11831 were unjust.

MCI argues that SBC's position on NRCs is inconsistent with TELRIC pricing because it focuses on SBC's existing network architecture and processes and incorporates only those technologies and process improvements that SBC plans to deploy in the next three years. For

these reasons, MCI argues that the Commission should reject all of SBC's NRC studies. Specifically, MCI contends that SBC's position on the use of flow-through rates is flawed. According to MCI, SBC distorted the cost study by using actual flow-through rates¹² rather than rates that reflect the improvement of a forward-looking TELRIC network. MCI contends that systems that rely more on automated, not manual, processing would reduce fall-out rates¹³. MCI objects to the proliferation of check, validation, and review activities, which consume enormous amounts of time, and argues that such activities should be excluded from the studies. MCI also argues for elimination of computer processing costs from the cost studies. MCI asserts that SBC's subject matter experts were biased with regard to their explanations of SBC's work activity times. MCI maintains that SBC's NRCs should be revised to reflect more reasonable values for dedicated inside plant, dedicated outside plant, travel times, cross connect times, and test times.

Covad argues that SBC intends to charge for activities that are not performed for disconnection and reconnection. It further complains that multiple service order charges apply to a simple cross-connect.

With regard to specific issue of the labor rates¹⁴ reflected in its cost studies, SBC offers the testimony of David J. Barch, an Associate Director - Cost Analysis & Regulatory for SBC Services, Inc. Mr. Barch maintains that the assumptions underlying SBC's cost studies are consistent with the nine costing principles enumerated in the September 8, 1994 order in Case

¹²A flow-through is the percentage of electronic orders that are processed without manual intervention.

¹³A fall-out rate measures the frequency that an order that is normally processed by an automated system "falls out" and requires manual handling.

¹⁴In general, labor rates are used to determine the cost of performing specific activities by multiplying the labor rate of the employee performing an activity by the time it takes to complete that activity or task time.

No. U-10620. According to Mr. Barch, the direct costs of labor are reflected on a per productive hour basis. He also states that SBC's forward-looking labor rates are estimated by first identifying the basic hourly wage or salary of each type of employee, and adjusting that hourly wage or salary for paid break times, paid absences, and special payments (*e.g.*, paid overtime) to develop a current wage or salary per productive hour of work. "Loading factors" were then applied to that hourly wage to account for social security, Medicare, benefits, and other employment-related expenses. Mr. Barch provides a detailed explanation of the manner in which the labor rates used in the cost studies developed. Components of SBC's labor rates include average wage per hour¹⁵, break time or tour length, paid absences, special payments, social security, relief, and pensions, other benefits and expenses, and support asset expenses¹⁶. Mr. Barch states that these items are used to develop a resulting labor cost in terms of a productive hour per work rather than a paid hour. By developing a labor rate on the basis of productive hours, the rate can be applied to actual work time for an activity to determine the direct cost of that activity. He states that the rates do not include supervisory costs above direct supervision or any common costs (*e.g.*, executive, legal, and other corporate operations expenses).

Robert Flappan, AT&T Corp.'s Regulatory Affairs Director, contends that SBC's labor rates are too high and do not reflect the forward-looking environment required by TELRIC.

Mr. Flappan insists that a new entrant, unencumbered by legacy labor contracts, would do everything possible to reduce labor expenditures. He explains that SBC's cost rates for labor

¹⁵For management employees, different average wage per hour amounts are provided for different market zones. Wages per hour vary among market areas depending upon wage scales and the seniority of the workforce.

¹⁶Support assets include land and buildings, furniture, tools and work equipment, motor vehicles, and other assets used by employees in their day-to-day work. Support asset expenses are the depreciation, cost of money, income taxes, and operating expenses attributable to these assets. Support asset expenses were included in SBC's case as direct labor costs.

improperly rely upon embedded accounting data and make no effort to reflect lower labor rates that should be experienced by a well managed efficient new entrant. Citing high unemployment, available unskilled laborers, and declining employment opportunities with telecommunications carriers, Mr. Flappan argues that SBC's historic high labor costs should be reduced. Accepting SBC's proposal for basic wage levels, Mr. Flappan's adjustments for break time, inflation, paid absences, special payments, social security, relief, pensions, other benefits and expenses, management hours, support assets, and clerical and supervisory support reduced SBC's proposed labor costs by roughly 40%.

SBC responds that Mr. Flappan is operating under a misapprehension as to the TELRIC requirements. SBC contends that Mr. Flappan's view is that TELRIC requires a "scorched employee" analysis, akin to the "scorched node" approach used in determining network costs. SBC insists that because it is a union company and because its union contracts are expected to continue over the foreseeable future, then the level of wages and benefits, which SBC is contractually obligated under its union contracts to provide to its union employees, should be the basis for determining non-management labor costs. Indeed, SBC asserts that its collective bargaining agreement provides the most meaningful evidence of what the future is likely to look like in terms of labor costs.

SBC also contends that technological improvements have no direct effect on the level of labor rates, though they do lead to efficiency gains that are reflected in non-labor rate inputs in SBC's TELRIC studies. According to SBC, in his rebuttal testimony, Mr. Barch demonstrates that SBC's labor rates are actually lower than those of AT&T employees performing identical or functionally equivalent tasks. SBC offers that labor resources to install, monitor, and maintain complex network equipment must be more skilled, and as a result, will demand higher wages. SBC also

maintains that it simply cannot overlook known wage increases as Mr. Flappan does. Indeed, SBC criticizes AT&T for suggesting that SBC pay its union employees less than AT&T is paying its employees who are members of the same union.

With regard to employee benefit levels, SBC contends that Mr. Flappan's contention that SBC's benefit levels are well above the national average for all private industry is skewed by his reliance upon misleading data. According to SBC, Mr. Flappan's use of benefit statistics from the Bureau of Labor Statistics (BLS) also suffers a serious problem with a mismatch between the items contained in BLS categories such as retirement and savings, insurance benefits, and other benefits as compared to those included in the detailed labor rate components related to SBC's Michigan benefits.

Finally, SBC insists that Mr. Flappan's contention that SBC's treatment of other expenses¹⁷ is not TELRIC-compliant should be rejected as well. According to SBC, these expenses are incurred in a forward-looking environment and should be included in SBC's cost studies.

In response, AT&T maintains that SBC's rebuttal witnesses advanced inappropriate interpretations regarding the testimony of Mr. Flappan. AT&T asserts that Mr. Flappan made no adjustments to SBC's base wages in his proposed labor rates. Moreover, contrary to other SBC claims, AT&T asserts that Mr. Flappan's statements confirm that AT&T is not arbitrarily proposing a reduction in SBC's labor rates. Rather, AT&T insists that Mr. Flappan's methodology is fair and unbiased.

The Staff did not engage in the same exhaustive element-by-element analysis followed by SBC and AT&T. Rather, the Staff focused on the Commission's repeated rejection of efforts by CLECs

¹⁷This cost study component represents reasonable forward-looking costs that are not accounted for in any other component of SBC's labor rates, including business travel expenses, jury duty expense reimbursement, meal expense reimbursement, and other similar expenses.

to base labor rates on non-union labor wages, which is cause to reject at least a portion of AT&T's position, and on SBC's inclusion of support asset costs in its labor rates, which represents a significant change from past practice.

A major difference of opinion with regard to SBC's labor rates is related to the issue of support assets, described earlier in this order. SBC maintains that support asset costs are direct costs because the resources captured in the support asset are required to allow employees to perform specific work functions identified in the cost studies. See, Mr. Barch's direct testimony at p. 33. On the other hand, AT&T proposes the removal of SBC's support assets from SBC's labor rates and their inclusion in shared and common costs. The Staff supported AT&T on this issue. In the earlier discussion of shared and common costs, the Commission determined that the position taken by AT&T and the Staff on this issue should be adopted, which necessarily leads the Commission to conclude that the labor rates proposed by SBC must be rejected.

However, rejection of SBC's position on NRCs and labor rates does not necessitate acceptance of the CLECs' positions on these issues. In its final comments, the Staff notes that "[t]here are also flaws in the MCI and AT&T proposals for NRCs. Just as SBC's methodology results in costs that are unreasonably high, many of the proposals of MCI and AT&T develop unreasonably low amounts." Staff's Final Comments, p. 32. For example, the Commission has repeatedly rejected arguments that TELRIC costs should be based on non-union wage levels as proposed by AT&T.

The Staff indicates that the Commission has several options with regard to the NRC and labor rate issues. According to the Staff, one approach to these issues would be to start with the NRC rates adopted in Case No. U-11831 and then to increase them in an amount equal to the percentage the average UNE-P recurring rate is allowed to increase. According to the Staff, such approach

would account for increases in costs (labor, etc.) subsequent to SBC's previous cost case. However, the Staff emphasizes that a drawback to this approach is that parties have proposed many more NRCs in this cost docket than were previously approved by the Commission. Nevertheless, given the numerous changes SBC presented in this case (including new proposals in its last round of comments) which SBC has not quantified, but instead proposes to "fix" in the compliance phase, the Staff contends that this approach may provide a reasonable, conservative choice.

As an alternative, the Staff suggests that the Commission could adopt the NRCs developed by AT&T or MCI. Although the Staff maintains that these proposals generate costs that are lower than those believed reasonable by the Staff, it is the position of the Staff that adoption of one of these models, with certain adjustments, would generate costs more in line with the direction costs should be going. As a third and recommended alternative, the Staff suggests that the Commission adopt a combination of adjusted existing rates and AT&T's proposal for NRCs. According to the Staff, the Commission should adopt the following procedures:

First, the Commission should use the existing rates from Case No. U-11831, with an "adder" to increase rates to a level equal to the percentage the average UNE-P recurring rate is allowed to increase. Next, compare the AT&T rates for all NRCs and determine if AT&T proposes a higher rate than what the first step produces. If it does, use the AT&T rate with 20% increase as discussed below. In those instances where there is not a corresponding rate from Case No. U-11831, Staff recommends a 20% increase to AT&T's proposed rates to compensate for labor rates and activity times. However, if this results in a rate that is above the amount requested by SBC, the Commission should use the SBC proposed rate. Finally, if SBC's rate is lower than the existing rate, use the AT&T rate plus 20%.

Final Staff comments, pp. 34-35.

In its final comments, AT&T agrees with the Staff's general position regarding SBC's cost study submissions. Moreover, AT&T contends that the Staff has placed this case in the correct context by explaining how SBC's present filing all but ignores the Commission's ruling in prior proceedings. AT&T states that the rates approved in Case No. U-11831 not only have a presump-

tion of validity, but also were validated by the FCC's 271 order. AT&T reiterates that SBC bears the burden to show that the Commission's prior presumptively valid decisions should be abandoned and replaced with decisions that result in astronomically higher rates, a burden that AT&T asserts cannot be met.

The Commission finds that SBC's proposed cost study is not in tune with TELRIC pricing and is not focused on cost containment. The assumptions made by SBC, such as its novel and unprecedented inclusion of support assets in the determination of its labor cost rates, skew the NRCs to the point that they are unreasonable and anticompetitive. The result involves the erroneous assumption that SBC's current system that frequently precipitates manual intervention is a least-cost, forward-looking methodology. It is not. As pointed out by the Staff and the CLECs, the study relies on numerous estimates about the work to be done, the time required to do the work, and the probability that a particular function will be performed, which taken as a whole, do not yield reasonable results. For the reasons pointed out by the Staff and the CLECs, the Commission is persuaded that SBC's NRC and labor cost rates must be rejected. For example, SBC's reliance on its current average times to complete tasks does not reflect technological improvements or fastest times normally expected as employees progress on the learning curve. Likewise, the Commission notes that the CLECs' adjustments to NRC and labor cost rate portions of SBC's cost study are flawed. Therefore, the Commission finds that the Staff's proposals for NRCs should be adopted. The Commission does not adopt a particular schedule of labor cost rates, but rather adopts the Staff's proposal, which does not reflect a separate determination concerning labor costs, but makes undifferentiated assumptions for all nonrecurring costs. However, to clarify a potential question, the Commission finds that the increase of NRCs in proportion to the increase permitted in UNE-P rates over those established in Case No. U-11831 is limited to the increase in UNE-P

rates provided in this order. It is not an ongoing permission to increase NRCs whenever UNE-P rates increase through other means.

EELs

MCI argues that the Commission should require that SBC provide CLECs the option of purchasing concentrated EELs, because of the significant efficiencies that may be realized by combining traffic using EELs. MCI further argues that this is the appropriate case to establish the costs for providing concentrated EELs.

The Commission notes that the portion of the TRO in which the FCC delegated to the state commissions issues concerning whether a CLEC is impaired without access to certain elements has now been vacated. At this time, the Commission is unaware of any requirement that SBC provide facilities to concentrate EELs at UNE prices, or any authority for the Commission to determine that SBC must do so. Thus, the Commission concludes that this is not the appropriate case to determine the costs associated with concentrating EELs.

The Commission further notes the August 20 FCC Order requires ILECs to continue providing certain elements pursuant to the terms and conditions applicable on June 15, 2004, or a state commission order that has or will affect those rates, for an interim period lasting six months from the date that the order is published in the Federal Register. Those elements required to be provided under that order include switching, enterprise market loops, and dedicated transport. Because EELs consist of a combination of loops, dedicated transport, multiplexing and associated cross-connects, the FCC order affects the terms and conditions under which these combinations will be offered. The Commission's determinations in this order may also affect the rates for EELs, depending upon the interconnection agreement terms between the parties.

Collocation

AT&T recommends that the Commission either retain the collocation rates currently in existence in Michigan or use an updated Collocation Cost Model (CCM), which formed the basis of the Commission's prior adoption of rates in Michigan.

AT&T's expert witness, Steven E. Turner, developed a prototype physical caged collocation arrangement typical of an arrangement that a CLEC would order. He then compiled a table showing what SBC's current collocation rates are in seven states¹⁸ for this collocation prototype. The table shows that the collocation rate for this prototype would be .44% more in Texas, but 3.05% less in five of the states than those collocation rates currently charged by SBC in Michigan. California's collocation rates would be 16.1% higher, which can be accounted for, Mr. Turner says, by California's appreciably higher land and building costs.

The Texas and California rates were established using the CCM proposed by AT&T, but with some specific inputs for substantially higher land and building costs in California. The collocation rates charged in Kansas, Missouri, and Oklahoma were established by agreement. SBC's collocation rates in Nevada and Wisconsin are identical to those charged in Kansas, Missouri, and Oklahoma, except for one cageless collocation rate element.

AT&T points out that despite SBC's voluntary agreement to similar rates in other states that are essentially equivalent to those already in existence in Michigan, SBC proposes collocation costs more than double those currently in existence. This is being done, Mr. Turner believes, because as SBC admitted, its "settled" collocation rates were based upon 50% of the price of the rates found in SBC's model and 50% of the price of the rates found in the CCM. By doubling its requested collocation rates in this application, if the Commission were to use the 50% model, SBC's new

¹⁸ Texas, Kansas, Missouri, Oklahoma, Nevada, Wisconsin, and California.

collocation rates would be appreciably higher than those currently in existence in Michigan and other states. AT&T concludes that SBC's proposed collocation rates are unreasonable and are not accurate representations of the forward-looking, economic costs of providing collocation services, but are inflated "straw man" proposals SBC hopes will be averaged with the true economic cost proposals estimated through the CCM.

MCI contends that SBC's collocation estimates duplicate work steps, inflate time and material costs, and are based upon other unsubstantiated costs. MCI further says that although MCI made numerous, substantial adjustments to SBC's collocation cost studies, SBC's rebuttal to those adjustments are virtually non-existent. In addition to failing to address annual charge factors and labor rates, MCI argues that SBC's collocation rates are flawed because (1) work steps are unnecessary and work times are substantially inflated in planning, coordination, and construction activities, (2) SBC's use of actual invoice prices for collocation cage construction as opposed to competitive pricing with delivery of material directly to the job site is fundamentally flawed, (3) use of actual invoice prices for cable racking as opposed to competitive pricing is not reflective of the marketplace, (4) SBC's proposed lengths of DC power cable is unsubstantiated and excessive, (5) SBC bills for 100% of the full-fused power capacity of the A and B links supplying power to collocators resulting in an inappropriate capacity charge, (6) SBC includes security and access card costs in its rate for collocation space rather than in a separate charge, and (7) SBC's floor space charges rely on historic costs, rather than forward-looking costs, and are not comparable to those prices charged by other collocation providers. MCI further proposes that CLECs should also be permitted to construct their own cages and provide their own DC power distribution panels.

SBC concludes that because the MTA is less detailed, the federal Act is the yardstick for collocation and federal law requires that TELRIC principles be applied in determining collocation rates. SBC therefore urges the Commission to adopt its cost model for collocation (CMC) and reject AT&T's CCM because TELRIC principles are applied in the CMC, based upon the network as it currently exists as opposed to the hypothetical "best case" network in the model central office configuration used in the CCM. In fact, SBC continues, the FCC's TELRIC methodology calls for a determination of costs associated with "efficient, new technology that is compatible with the existing infrastructure."¹⁹ SBC also contends that the AT&T model does not include costs for security, uses inputs that are decades old, and uses quotes from a Canadian firm that's never made installations in Michigan.

The Commission is not persuaded that it should retreat from AT&T's CCM approved in the November 16, 1999 order in Case No. U-11831. TSLRIC principles require the assumption that the location of the buildings will remain unchanged but does not require that the existing buildings with their existing configurations will be used. The CCM, recently used in establishing collocation rates in Texas and California, avoids this fundamental flaw. Further, it appears current Michigan rates are comparable to those established in Texas and California, after accounting for differences in land and building prices. Moreover, Michigan collocation rates are currently higher than those agreed upon by SBC in Kansas, Missouri, Oklahoma, Nevada, and Wisconsin. Therefore, the Commission rejects the collocation study done by SBC and its recurring and nonrecurring costs. Rather, the Commission approves the model offered by AT&T, adjusted to use the input determinations for cost of capital, depreciation, and fill factors discussed in this

¹⁹First Report and Order, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (rel. August 1, 1996).

order. This resolution is an exception to the Commission's general determinations regarding NRCs.

Resale Avoided Cost Study

SBC argues that the Commission should approve its updated resale avoided cost study as consistent with federal and state law. It points out that the Commission approved without revision the company's discounts for tariff services and individual case basis (ICB) contracts in Case No. U-11831. In the present proceeding, SBC updated the previous study using 2001 data and applied a methodology consistent with the one approved in U-11831. The results are set out in Exhibit TJM-2.

SBC points out that although the study approved in Case No. U-11831 assumes all uncollectibles are avoided, the present study assumes that not all uncollectibles are avoided, in keeping with SBC's experience with wholesale uncollectibles. Thus, the study now assumes that only the retail portion of uncollectibles is avoided.

For ICB discounts, the analysis for new and assumed contract discount analyzes the activities associated with presale, sale, implementation, and ongoing management of these new ICB and assumed ICB contracts.

The Commission finds that it should approve the avoided cost discount projected by SBC.

Retail Basic Local Exchange Service (BLES)

In its final reply comments, SBC argues that the Commission should approve SBC's BLES TSLRIC recurring cost study set out in Exhibit JRS-14. It states that the study contains the cost support for SBC's various call plans for Michigan residential service, business services, and

PBX²⁰ ground start universal loops. It states that the costs for BLES have increased significantly over those previously approved by the Commission.

SBC argues that the UNE loop is the most significant cost component in the BLES study, and most of the cost increase associated with this service is explained by increases in the loop costs associated with fill factors, cost of capital, depreciation lives, and a different assumption concerning DLC investments. For certain elements, some of the increase is explained by changes in the cost of capital, fill factors, and depreciation lives associated with the switch port and usage on the network, as well as reciprocal compensation costs.

SBC points out that the CLECs' objections to the BLES recurring cost study relate to those general factors. Contrary to AT&T's assumption, SBC argues that it did use the same fill factor for its UNE and retail cost studies.

Consistent with the Commission's earlier statement concerning the applicability of the determinations in this order, SBC should adjust its BLES cost studies to reflect those determinations. With those adjustments, the Commission approves the retail BLES TSLRIC study.

OS/DA, DAL, and DA/NDA/ICC

The OS/DA UNE study develops TELRIC costs for operator-assisted calls, directory-assistance calls, and CLEC-branding rate elements.²¹ The DAL UNE study establishes costs for access to SBC's directory assistance listings. The Directory Assistance/National Directory Assistance/Information Call Completion (DA/NDA/ICC) study develops retail TSLRIC costs associated with directory-assistance calls, national directory-assistance calls and information call

²⁰PBX stands for private branch exchange.

²¹CLEC branding is a service that identifies the local service provider of each OS/DA call and then brands that call with the specific provider's name.

completion. SBC presented rates for all of the related services based on these studies. AT&T and MCI present alternatives and revisions. The following discussion concerns all of these studies inasmuch as the studies and inputs to those studies are interrelated.

AT&T argues that SBC's OS/DA UNE cost study, DAL cost study, and DA/NDA/ICC cost study each must be revised to include: 1) a flow-through of revised ACFs and EF&I²² factors; 2) a revised CLEC call volume to determine CLEC-branding costs per call; 3) a flow-through of revised investment inputs from SBC's SICAT model and Network Usage Cost Analysis Tool (NUCAT) model; 4) elimination of SBC's investment input for trunk-termination equipment because of lack of support data; and 5) incorporation of revised labor rates.

MCI joins the arguments listed above for AT&T, and stresses that SBC understates CLEC call volumes through use of stale data. MCI also argues that much of the input information for the DAL study is not supported by SBC, including time estimates for various activities and the quantities of support personnel required in specific job roles. (AT&T also notes the lack of documentation for these inputs.)

SBC agrees that the additional loadings for items such as power, land, building, labor, and engineering, etc., must be removed from the ACFs for Account 2220, FRC 117C (Operator Systems) and Account 2212, FRC 377C (Digital Electronic Switching) used in the OS/DA UNE cost study. These loadings are separately accounted for in the cost study itself and should not have been included within the ACFs used in the OS/DA UNE cost study. Similarly, AT&T and MCI take issue with the other components of the ACFs and EF&I factors used within the cost studies.

²²Vendor engineered, furnished, and installed (EF&I) costs include material costs, vendor engineering and labor charges, and other charges for the design, construction, and installation of switches and additions to switch capacity.

The Commission separately reviews and decides the ACF-related questions within this order. SBC's cost studies are to be revised in conformance with that discussion.

AT&T and MCI take issue with SBC's labor rates, times, and personnel usage. The Commission finds that AT&T has presented a more reasonable analysis of labor rates, times, and personnel usage for purposes of these issues. Therefore, in the compliance run, SBC should use those inputs proposed by AT&T.

A significant issue for all of the related OS/DA cost studies is the appropriate level of call volume utilized to arrive at the per-call rate. The call-volume level is important because SBC's Network Application Vehicle (NAV) investment to provide OS/DA branding is not sensitive to call volume. Dividing the relatively fixed NAV investment by a call-volume measurement, such as the number of CLEC OS/DA calls, determines the appropriate per-call CLEC rate, which then permits SBC to recover its fixed costs. To the extent that the call-volume is under-estimated, SBC's fixed costs may be overcollected. The reverse is also true: to the extent that the call-volume is over-estimated, SBC's fixed costs may be underrecovered. AT&T also questions the capital inflation factor utilized by SBC for its NAV investment, stating that the company's capital costs already incorporate an inflation element.

In its studies, SBC uses a CLEC call volume estimate based on an annualized six months of actual call data. The Commission adopted this approach in its most recent directory assistance cost-review proceeding in its June 21, 2002 order in Case No. U-13347. SBC utilized that same Case No. U-13347 call volume data in this filing.

In its replies, SBC acknowledges that recent actual call volumes are larger than those estimated and utilized in its filed studies, but the company argues that AT&T's assumptions are simplistic and flawed. SBC states that its data shows that call volume growth has fluctuated, has

leveled off, and may not continue at past growth rates. SBC would continue to annualize call volume based on the most recent six months of CLEC branded call volume data, following the Commission's methodology from Case No. U-13347. Using such data significantly increases the call volume assumed for the filed cost studies, thus reducing the per-call rate. SBC states that the capital-investment inflation factor used for its NAV investment is appropriate because the cost of capital does not account for inflation of the NAV investment itself.

While noting that a more recent, annualized six-month period could be used, AT&T proposes to trend call volumes for each month in 2004 based upon SBC's actual call volumes from December 2001 through September 2003, a total of 22 months. AT&T responds that whether either SBC's more recent CLEC call volume data or AT&T's projections are used, both call volume estimates are significantly greater than those SBC used within its filed cost study, which has a large effect on the per-call rate. AT&T notes that SBC's April 23, 2004 rebuttal testimony *errata* changed many of its call volume calculations and the related supporting assumptions. Through discovery, AT&T determined that directory assistance call completion (DACC) call volumes were excluded from the revised call volume calculation, which now only includes DA, NDA, and Reverse Directory Assistance (RDA) calls within the call volume. AT&T states that a significant data inconsistency has been introduced because the SBC call volume amounts listed are now SBC's actual CLEC call volumes for the four months prior to its filing (adjusted for the removal of DACC calls). In AT&T's view, an appropriate comparison between SBC's filed data and AT&T's filed data is now not possible. AT&T states that the April 23, 2004 *errata* is a major and fundamental shift from SBC's initial filed position; moreover, AT&T notes, SBC restates five of the six months of call volume data that the Commission relied upon in approving SBC's currently effective cost study in Case No. U-13347. AT&T continues that the shift occurred a

month after SBC filed its rebuttal testimony and with insufficient time for AT&T to reassess its prior filings, to issue discovery requests regarding the reasons for the change, and to provide other information to the Commission.

If the Commission chooses not to use AT&T's initial call-volume projection, then AT&T argues that the Commission should require SBC to determine the per-call branding cost using the company's most current 12 months of CLEC call volumes available at the time the company's compliance runs are due; in AT&T's view, relying upon an annualized six months of data does not account for seasonal trends that may be present in the data.

The Commission is concerned with the late-term shift in calculation methodology and the lack of time for review concerning the exclusion of DACC calls from the branded call volume numbers. In the Commission's view, the change in position has not been fully explained and should not be utilized until a full explanation has been set forth by SBC and subject to comment by other interested parties and the Staff. Accordingly, DACC calls should not be excluded as proposed by SBC.

The Commission is also concerned about the substantial difference between SBC's initial projected call volumes and the actual data that has been presented for periods later than that from which the initial estimates were drawn. Call volume has a significant bearing on SBC's ability to recover its costs, and must be a reasonably accurate estimate. Consequently, we find appropriate AT&T's suggestion to use a very recent 12-month period to establish the call volume. Thus, SBC should determine its branding costs per call using the actual call volumes for the most recent available 12-month period. SBC shall utilize that call level in its compliance run, which will establish appropriate OS/DA, DAL, and DA/NDA/ICC cost rates that will contain all of the revisions necessitated by this order's determinations and directions.

AT&T questions the amount listed by SBC for its investment in the Enhanced Dynamic Random Access Memory (EDRAM) used in the OS/DA equipment; it proposes to reduce SBC's investment consistent with the current installed costs quoted by Nortel as of November 13, 2003. AT&T reduces the National Directory Database per-query charge to reflect the rate in the then current SBC/LSSi Corporation agreement, which is lower than that listed by SBC. AT&T eliminates SBC's trunk-termination investment arguing that SBC cannot support the values listed because it did not retain any supporting documentation nor support the investment assumption in any other manner, although requested to do so. In AT&T's view, a zero input value is appropriate until supporting documentation or data is provided and reviewed. Additionally, AT&T argues that the cost for the 3-Port Conference Circuit is already included within the UNE study's switching cost and should not be separately listed.

SBC replies that the 3-Port Conference Circuit is not included within the per-line price used in SICAT and, therefore, the cost for this circuit is not included within the UNE switching costs. Moreover, SBC notes, the models used to develop costs for Manual Cost Assistance,²³ with and without Line Information Database (LIDB), which validates credit card information for collect or third-number billed calls, uses the same investments and ACFs as the primary OS/DA cost study; whatever revisions are made in the primary study need to be made in these models. SBC uses two subsidiary cost studies to calculate the manual-assistance costs-per-occurrence for the various types of operator-assisted calls on a weighted average basis. The final cost results from the secondary models are then used as inputs in the primary OS/DA UNE cost model.

²³Manual Call Assistance provides a telecommunications carrier's end-users with operator-involved, manual call processing for these services: Calling Card, Collect, Third-Number Billed, Operator Assistance, and Alternately Billed Calls that require validation from a line information database.

SBC states that the national directory assistance investment costs stated within its studies reflect the information that was available at the time that the cost study was run. SBC states that the EDRAM investment value listed in the filed studies was the value available for year 2000; the value was reduced by AT&T to reflect a projected value for year 2003. However, SBC states that more recent data is available: a contract effective December 2003 increases that EDRAM investment value and the cost for the 3-Port Conference Circuit bridge. In SBC's view, these newer, higher values could be used for the cost studies and thus make those studies more current as proposed by AT&T. While acknowledging AT&T's argument to eliminate the listed input values, SBC contends that all trunk-termination investment values should be retained as originally proposed because they are the same as those used for trunk termination in its SICAT model, but SBC does not answer arguments regarding the lack of documentation. Rather, SBC indicates that its trunk termination investment value represents the SICAT investment for a Remote TOPS switch and that this is appropriate because an operator centralization trunk may be needed for the Remote TOPS to access a Host TOPS to connect to an operator—an operator may be needed as part of the DA process and the trunk is necessary to bridge that operator into the call.

The Commission has reviewed the testimony, comments, and arguments of the parties regarding the EDRAM investment, the NDA inquiry rate, and the trunk-termination investment. As indicated in our discussion of the more appropriate data to use to establish branded call volumes, more recent data provides increased assurance that the involved costs reflect a reasonable approximation of forward-looking costs. Thus, the Commission finds appropriate SBC's argument that the most recent December 2003 costs for EDRAM should be utilized in SBC's compliance runs, and that the most recent National Directory Database per-query charge from the SBC/LSSi Corporation agreement should also be used. Moreover, the Commission agrees with

SBC that the 3-Port Conference Circuit is not included within the per-line price used in SICAT and that the cost for that circuit is not part of the UNE switching cost; it should be separately listed. While the Commission is sympathetic to SBC's statement that the trunk termination investments within the OS/DA UNE study should be the same as that used in SICAT for trunks, we are persuaded by AT&T's argument that these separate, OS/DA UNE costs should be removed. To do otherwise, leaves unanswered questions about the reasonableness and propriety of these separate trunk costs and their relation to DA services. Accordingly, when SBC performs its compliance run it should utilize a zero trunk termination investment value as proposed by AT&T's witnesses.

As regards the DAL UNE study, AT&T would break out the costs for production and distribution of tapes containing directory assistance listings. In AT&T's view, the cost study assumes that fewer than all customers require this service, but the study includes the cost when developing rates that will apply to all customers. AT&T acknowledges that separating the cost would have a negligible impact on the total costs involved, but nevertheless, AT&T argues, the costs should be used to establish a separate, optional rate element. SBC does not counter the argument, and the Commission is persuaded that the costs should be parsed, and that a separate, optional rate element should be established for UNE customers that desire the production and distribution of tapes containing directory assistance listings.

Flexible Automatic Number Identification (FLEX-ANI)

Issues concerning the provision of Flex-ANI to CLECs first appeared before the Commission in Case No. U-13892, an arbitration case in which the arbitration panel concluded that Flex-ANI is a feature of the port that must be provided to TruComm. The Commission adopted the arbitration

panel's decision, which also determined that the issue of cost recovery should be determined in this case.

Flex-ANI is a switch feature that allows a CLEC to insert additional pre-defined digits into the automatic number-identification stream accompanying each call, which then instruct the network regarding unique routing, rating, or handling instructions associated with the call. When used to support pay telephone service, the additional coding digits may be used by an interexchange carrier (IXC) to identify a call as coming from a pay telephone. Without the feature, independent pay telephone providers may lose the FCC-ordered compensation from IXCs for toll-free and long-distance access-code calls originated from a pay telephone. In addition to pay telephone services, Flex-ANI supports certain OUTWATS²⁴ services, cellular services, and virtual-private-network functions.

At present, SBC's switches do not provide a Flex-ANI feature for unbundled ports purchased by CLECs for pay telephones. SBC notes that its Lucent 5ESS switches are currently capable of supporting Flex-ANI for its own retail pay telephone customers, but that those same switches cannot support service to a UNE-P pay telephone customer that requires use of SBC's AIN-based shared transport platform. The AIN platform in effect turns the feature off. To remedy the problem, the switches must have two software secure feature identification (SFID) patches.

The dispute in this case centers on the appropriate method for SBC to recover costs associated with providing Flex-ANI to a CLEC using UNE-P. SBC proposes a substantial initial payment from TruComm to cover the cost of the software patches before they are incurred. It commits that, if other CLECs later request the service, it will refund a portion of the initial payment to

²⁴ OUTWATS refers to outbound wide-area telephone service.

TruComm. SBC states that to date it has not purchased the necessary software patches, nor has it recovered the costs of that software product.

SBC argues that the entire CLEC community should not be required to bear the costs associated with activating the UNE-P pay telephone port functionality. Rather, SBC argues, because TruComm is the only CLEC that has actively pursued unbundled pay telephone ports with unbundled shared transport, it should bear the entire cost of obtaining that functionality. SBC states that the one CLEC requesting activation of the UNE-P pay telephone Flex-ANI functionality did not follow through after it received SBC's substantial up-front price quote for activation.

TruComm argues that a one-time, up-front fee for activation of the Flex-ANI feature is not appropriate. TruComm further argues that investments in software, like network elements, should be recovered over time in monthly recurring charges from all entities that will enjoy their benefits. TruComm argues that the two SFID patches are nothing more than routine software upgrades necessary to resolve software incompatibilities and maintain the switch port in a fully featured and working state, which should already be recovered in the existing unbundled switch port rate.

TruComm states that the cost of the needed software patch is a small fraction of SBC's total yearly investment costs as listed in its ARMIS data from 1999 through 2002. Further, it argues, yearly costs decreased during the same period. Thus, TruComm contends, the yearly software maintenance cost included within SBC's existing analog port rate more than adequately provides cost-recovery for SBC, and approving an additional up-front charge would allow SBC to over-recover those costs.

To SBC's argument that costs for software use (such as the right-to-use fees for the two SFID patches) are booked as intangible assets, not maintenance costs, TruComm responds that re-running SBC's SICAT with the two additional SFIDs included (the SICAT is then captured in

SBC's unbundled local switching [ULS] port studies) has only a *de minimis* effect on the ULS port rate developed in this case. Therefore, TruComm argues, whether viewed as a maintenance cost or an intangible asset cost, SBC's forward-looking rate calculations contain appropriate cost levels to allow SBC's recovery of the software expense.

The Staff notes that fully functioning UNE-P ports that will support pay telephone service must be offered to TruComm, and that the cost-recovery method could affect the price of UNE-P by CLECs other than TruComm.

After reviewing the testimony and arguments, the Commission finds that Flex-ANI is a feature of a fully functioning port. Thus, SBC must provide a fully functioning UNE-P pay telephone port including Flex-ANI to requesting CLECs at TELRIC rates, without requiring the CLEC to follow the bona fide request process and bear all of the costs for the software patches in a substantial up-front payment. That functionality once restored will then be available to all future CLECs to provide this same service. Accordingly, the costs related to properly activating a fully functioning UNE-P port for pay telephone service should be recovered by SBC in the same manner as it recovers any other necessary switch software upgrade that benefits the CLEC community, through its ULS port rate structure, not in a separate up-front payment.

Further Proceedings

AT&T and MCI argue that the Commission should establish a compliance phase to this case that would follow the issuance of this order. AT&T recommends that if the Commission commences a compliance phase of this proceeding, it should be consistent with past Commission TSLRIC/TELRIC orders. It suggests that the Commission require SBC to file cost studies that comply with the requirements of the order within a reasonable time. It states that SBC should be required to file and serve these documents consistent with the requirements observed in the case,

and should file all materials in their native electronic format, in addition to the Adobe® format, with all relevant information unlocked and displayed. AT&T requests that the Commission require SBC to identify specifically in writing each change it makes to its cost studies and also to identify certain information concerning those changes.

Thereafter, AT&T argues, the parties should be given 45 days to review and respond to the compliance filings to determine whether SBC has complied with the Commission's order and specific identification of required modifications. Any objections to the compliance filings should be due at the conclusion of the 45-day review period.

MCI proposes a similar process, but requests that comments and reply comments be permitted concerning the compliance filing. After all disputes are settled, MCI proposes, implementation of the studies should occur in two steps. First, MCI states, SBC should be required to file an application pursuant to MCL 484.2304(c) to increase end-user retail rates. Following a Commission order authorizing a rate increase, SBC should implement those rates. On the same date that SBC implements its retail rate increase, MCI says, SBC should file its approved compliance cost studies and UNE and retail tariffs so as to implement the modified TELRIC/TSLRIC findings.

The Commission finds that AT&T's proposed compliance process is the preferable one, when modified to require the compliance filing within 45 days of the date of the Commission order and permitting the parties 45 days from the date the compliance filing is made to file comments objecting to those filings. The compliance cost study filing shall also show the resulting UNE and interconnection prices resulting from those compliance cost studies in summary form as an illustrative interconnection agreement pricing schedule. SBC shall also update its applicable tariffs. The sole issue for objecting comments is whether the compliance filing complies with this

order. Further, the Commission finds that SBC should have an opportunity to respond to any comments within 21 days of the opposing parties' filings.

SBC Michigan shall implement tariffs resulting from the compliance cost studies such that tariffs shall be effective the day after filing of the compliance cost studies. If a subsequent order revises the costs and a new pricing schedule results, the tariffs applied are to be replaced with any revised tariffs, which shall apply retroactively to the effective date of the initial compliance filing. SBC shall perform a true-up of any amounts billed under the tariffs.

Application for Leave to Appeal

On April 3, 2004, SBC and Sage issued a press release stating that SBC had entered into an agreement to provide wholesale local phone services to Sage. On April 8, 2004, MCI submitted discovery request MCISBC-393 to SBC seeking among other things, a copy of the SBC/SAGE agreement following USTA II. After SBC objected to producing the requested material, MCI filed a motion to compel on April 22, 2004. On May 12, 2004, the ALJ denied MCI's motion to compel a response to its discovery request MCISBC-393. Thereafter, on May 21, 2004, MCI filed an application and request for immediate consideration of an appeal of that ruling. On June 2, 2004, SBC filed a response to the application for leave to appeal.

MCI argues that it meets the standard for granting applications for leave to appeal. It argues that the discovery request seeks information directly relevant to the legitimacy of the costs that SBC proposes in this case. MCI argues that the price made public for Sage is below what SBC claims that it costs to provide wholesale services to CLECs. MCI argues that the evidence shows one of two things, either SBC has proposed costs that are much higher than the company knows them to be, or it has entered into an agreement to provide service for less than it costs to provide that service.

Moreover, MCI argues, the ALJ erred in determining that the agreement at issue is a private commercial agreement, the disclosure of which would cause competitive harm to the parties to the contract. It argues that the Commission has already disagreed with SBC's characterization of the agreement with Sage as a private commercial agreement in its April 28, 2004 order in Case No. U-14121. It argues that to the extent that the Commission finds that confidentiality should be protected for commercially sensitive information, there is a protective order in place in this case that will sufficiently provide that protection.

SBC responds that the ALJ correctly denied MCI's motion to compel. It argues that the disputed material has nothing to do with any cost study or exhibit or testimony of any witness filed on behalf of any participant in this proceeding. It is, therefore, beyond the scope of rebuttal testimony and is otherwise irrelevant and not calculated to lead to the discovery of admissible evidence.

Moreover, SBC argues, the issue is now largely moot, because SBC has filed a confidential copy of the agreement with the Commission and has filed a public version of the agreement with limited redactions for confidential portions.

SBC further argues that the rate cited by MCI is a 13-state average line rate for a period of 7 years. It says nothing about the Michigan-specific costs that must be addressed in the present case. It says that the price referenced is for a service that replaces the regulatory mandated UNE-P and is not for any UNE offering at issue in this case. SBC points out that this is not a complaint proceeding, but a cost case.

Finally, SBC argues that disclosure of the agreement would harm a non-party. It points to public statements by Sage's president that the agreement contains provisions specific to Sage's

business strategies and technology requirements, and that the agreement must therefore be protected from public disclosure for competitive reasons.

The Commission finds that the ALJ's ruling should be affirmed. In the Commission's view, the contents of the agreement for which disclosure is sought are not relevant to the issues on rebuttal, and disclosure would not likely lead to evidence relevant to those issues. Moreover, the Commission notes that there is already testimony in the record concerning SBC's price reductions for retail basic local exchange service below its proposed TELRIC for the UNE-P. Thus, to the extent that the pricing of the SBC/Sage agreement might have relevance, it is not necessary to the point that the CLECs desire to make. At this late date, the Commission concludes that it should make its determinations concerning SBC's costs on the record as it is currently, and if those costs exceed the amounts for which SBC has agreed to sell services to Sage, any enforcement action would take place in a different proceeding.

The Commission notes that in its August 13, 2004 order in Cases Nos. U-13513 and U-14121, the Commission approved with conditions the Commercial Agreement for Local Wholesale Service and the Eighth Amendment to the SBC and Sage interconnection agreement. The Commission requirements for filing and making public portions of those agreements are detailed in the August 3, 2004 order in those cases.

The Commission FINDS that:

a. Jurisdiction is pursuant to 1991 PA 179, as amended, MCL 484.2101 et seq.; the Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 USC 151 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1999 AC, R 460.17101 et seq.

b. The TELRIC and TSLRIC for SBC should be approved with the modifications required by this order.

c. The application for leave to appeal the ALJ's May 12, 2004 ruling on discovery matters should be denied.

d. SBC should file, within 45 days of the date of this order, cost studies and tariffs that make the modifications required by this order. All cost studies, wholesale and retail, should reflect the determinations made in this order.

e. SBC and the other parties should follow the compliance process as described in this order.

THEREFORE, IT IS ORDERED that:

A. The total service long run incremental costs and total element long run incremental costs as provided in this order are approved.

B. Within 45 days of the date of this order, SBC Michigan shall file its cost studies and resulting tariffs, modified to comply with the requirements of this order and consistent with the process described in this order.

C. The parties shall have 45 days from the date that SBC Michigan files its compliance studies and tariffs, to object to the compliance filing. The only ground for objection is a failure to properly implement the modifications required by this order.

D. SBC Michigan shall have 21 days after the parties file any timely objections, to respond to those objections.

E. The application for leave to appeal the administrative law judge's May 12, 2004 ruling on discovery matters is denied.

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after issuance and notice of this order, pursuant to MCL 462.26.

MICHIGAN PUBLIC SERVICE COMMISSION

/s/ J. Peter Lark

Chair

(S E A L)

/s/ Robert B. Nelson

Commissioner

/s/ Laura Chappelle

Commissioner

By its action of September 21, 2004.

/s/ Mary Jo Kunkle

Its Executive Secretary

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after issuance and notice of this order, pursuant to MCL 462.26.

MICHIGAN PUBLIC SERVICE COMMISSION

Chair

Commissioner

Commissioner

By its action of September 21, 2004.

Its Executive Secretary