BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Petition for Arbitration of Unresolved Issues in a Section 251(b)(5) Agreement with T-Mobile USA, Inc.	)))	Case No. TO-2006-0147 Consolidated

APPENDIX TO RESPONDENTS' JOINT POST-HEARING BRIEF

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TAB A

IN THE UNITED STATES DISTRICT COURT FOR THE

DISTRICT OF NEBRASKA

WWC LICENSE, L.L.C., Plaintiff, v. ANNE C. BOYLE, Chairman, FRANK E. LANDIS, JR., Commissioner, LOWELL JOHNSON, Commissioner, ROD JOHNSON, JR., Commissioner) GERALD L. VAP, Commissioner, and GREAT PLAINS COMMUNICATIONS, INC., Defendants.	4:03CV3393 MEMORANDUM OPINION

This matter is before the Court on plaintiff's complaint for declaratory and injunctive relief (Filing No. 1), defendant Great Plains Communications' answer, counterclaim and cross-claim (Filing No. 19) and defendant Nebraska Public Service Commission's answer to plaintiff's complaint and defendant Great Plains' cross-claims (Filing Nos. 21 and 26). The plaintiff and the defendants jointly stipulated to the record on appeal (Filing No. 27). The Court has reviewed the pleadings, the supporting briefs, the jointly stipulated record and the applicable law and finds as follows.

I. STANDARD OF REVIEW

In considering appeals of state commission orders, federal courts apply de novo review to questions of law. *Qwest Corp. v. Koppendrayer*, 2004 U.S. Dist. LEXIS 18438, *6-7 (D. Minn. Sept 13, 2004). The arbitrary and capricious standard

applies to district court review of state commissions' factual findings and application of law to fact. *Koppendrayer*, 2004 U.S. Dist. LEXIS at *7. Thus, the Nebraska Public Service Commission's ("Commission") interpretations of 47 U.S.C. § 252 is reviewed de novo while findings of fact, and the Commission's application of the law to those facts, are reviewed under an arbitrary and capricious standard. "Although this inquiry into the facts is to be searching and careful, the ultimate standard of review is a narrow one. The court is not empowered to substitute its judgment for that of the agency." *Bowman Transp. Inc. v. Arkansas-Best Freight Sys., Inc.*, 419 U.S. 281, 285, 95 S. Ct. 438 (1974). Review of the Commission's evidentiary findings is limited to the record developed during the administrative proceeding. *See, e.g., United States v. Carlo Bianchi & Co.*, 373 U.S. 709, 714-15, 83 S. Ct. 1409 (1963).

II. BACKGROUND

This case is an appeal from two Nebraska Public Service Commission ("Commission") Orders which established an interconnection agreement between WWC License L.L.C., a wholly-owned subsidiary of Western Wireless Corporation ("Western Wireless"), and Great Plains Communications, Inc. ("Great Plains"). Western Wireless is a wireless provider licensed by the Federal Communication Commission ("FCC") to offer commercial mobile radio service ("CMRS") throughout much of Nebraska, including areas served by Great Plains. Great Plains is an incumbent local exchange carrier ("ILEC") certificated by the

Commission to provide local exchange and other telecommunications services in specific local exchange service areas in Nebraska.

On August 26, 2002, Western Wireless made a bona fide request to commence negotiations with Great Plains under 47 U.S.C. §§ 251-252 (the "Act"), to establish an interconnection agreement. The agreement would set forth the parties' obligations regarding interconnection, the payment of reciprocal compensation and the exchange of telecommunications traffic. Subsequently, Western Wireless and Great Plains negotiated under the Act resolving many, but not all open issues.

On January 23, 2003, Great Plains filed a Petition with the Commission seeking to arbitrate four unresolved issues pursuant to § 252(b) of the Act. Western Wireless filed a response identifying five additional issues. The Commission appointed an independent third party, Dr. Marlon Griffing, to serve as arbitrator. After discovery was conducted, the arbitration hearing took place on May 13-14, 2003. After the hearing, Griffing directed each party to submit a final offer on each open issue. Griffing then would select one final offer for each of the open issues.

Of the original nine issues, seven were submitted to Griffing for decision. The submitted issues were:

Issue 1: What should the definition of Great Plains' "Local Service Area" be for the purposes of the parties' interconnection agreement?

Issue 2: What traffic should be subject to reciprocal compensation in accordance with applicable FCC rules?

Issue 3: Is Great Plains' proposed reciprocal compensation rate appropriate pursuant to 47 U.S.C. § 252(d)(2)?

Issue 4: What is the appropriate effective date and term of the interconnection agreement, and what rate and total compensation for transport and termination of Western Wireless' telecommunications traffic on Great Plains' network is payable for the period prior to the effective date of the interconnection agreement pursuant to 47 C.F.R. § 51.715(d)?

Issue 6: How should interconnection facilities be priced and how should charges be shared?

Issue 7: How should Great Plains deliver land-to-mobile telecommunications traffic to Western Wireless?

Issue 8: Recognition of Western Wireless' NPA-NXXs with separate rating and routing points.[1]

On July 8, 2003, Griffing filed his decision. Great Plains and Western Wireless jointly prepared and filed an interconnection agreement with the Commission, incorporating jointly agreed to terms as well as the arbitrated terms. Oral argument was held before the Commission on August 19, 2003, and the Commission issued its Order on September 23, 2003. The Order rejected the filed agreement, reversed the arbitrator's decision on every issue and ordered the parties to amend and refile their agreement.

Great Plains filed an interconnection agreement incorporating the Commission's resolutions of the open issues on October 7, 2003. Western Wireless objected to certain terms it believed went beyond those resolved by the Commission. The

[1] Issue 5 was withdrawn prior to hearing and Issue 9 was resolved by agreement of the parties.

Commission approved the final agreement on October 21, 2003, as submitted by Great Plains.

On November 7, 2003, this complaint seeking declaratory and injunctive relief was filed by Western Wireless pursuant to § 252(e)(6) (Filing No. 1). The appeal challenges the Commission's Order and its approval of the final agreement.

On December 30, 2003, the defendant Great Plains filed its answer, counterclaim and cross-claim (Filing No. 19). In its counterclaim and cross-claim, Great Plains seeks retroactive compensation going back to March, 1998.

III. DISCUSSION

A. ISSUES 1 and 2: Application of Reciprocal Compensation

Issues 1 and 2 relate to the parties disagreement as to what calls are subject to reciprocal compensation under FCC rules. Plaintiff Western Wireless asserts that all calls between a local exchange carrier ("LEC") and a CMRS, originating and terminating within a single major trading area ("MTA") are subject to reciprocal compensation under FCC rules. 47 C.F.R. § 51.701(b)(2). The FCC did not create an exemption for these calls similar to one that exists for LEC to LEC calls that specifically limits reciprocal compensation obligations to calls within the landline local calling areas. *Atlas Telephone Co. v. Oklahoma Corp. Comm'n*, 309 F. Supp. 2d 1299, 1310 (W.D. Okla. 2004)("Atlas I"). Instead, the FCC adopted a different rule for LEC to CMRS access calls where the call originates and terminates within the same MTA. *Id. (citing* 47 C.F.R. 51.701(b)(2)). Under

this rule, reciprocal compensation obligations apply to all calls originated by Great Plains and terminated by Western Wireless within the same MTA, regardless of whether the calls are delivered via an intermediate carrier such as Qwest. *Id.* Thus, as a matter of federal law, the Commission erred in ruling that Great Plains owed no reciprocal compensation to Western Wireless for calls originated by Great Plains and terminated by Western Wireless within the same MTA, whether or not the call was delivered via an intermediate carrier. Therefore, this Court directs that the agreement between Great Plains and Western Wireless be modified to reflect that reciprocal compensation obligations apply to all calls originated by Great Plains and terminated by Western Wireless within the same MTA.

B. ISSUE 3: Reciprocal Compensation Rate

Issue 3 involves whether the appropriate rate for reciprocal compensation is the rate agreed to in the July agreement between Western Wireless and Great Plains or the higher rate determined by the Commission. This is an issue that is reviewed under the arbitrary and capricious standard. *Koppendrayer*, 2004 U.S. Dist. LEXIS at *7. As such, "this court should hold unlawful and set aside agency action if it is arbitrary, capricious, an abuse of discretion, contrary to constitutional right, or without observance of procedure required by law." *United States v. Massey*, 380 F.3d 437, 440 (8th Cir. 2004)(*citing Moore v. Custis*, 736 F.2d 1260, 1262 (8th Cir. 1984)). This standard of review is a narrow one and the Court is

not permitted to substitute its judgment for that of the agency. *Sierra Club v. Davies*, 955 F.2d 1188, 1192-93 (8th Cir. 1992). Here, the Commission's action did not raise constitutional implications. In addition, all applicable procedural requirements were met. As such, the Court concludes that the Commission did not err in its rate determination because its review and reasoning was neither arbitrary nor capricious. Therefore, this Court declines to modify or reverse the Commission's decision as to the reciprocal compensation rate.

C. ISSUE 4: Retroactive Compensation

Issue 4 addresses whether or not Great Plains is entitled to any retroactive compensation for calls originating on Western Wireless' network. In its cross-claim and counterclaim Great Plains seeks retroactive compensation going back to March, 1998, when it asserts that the first Western Wireless calls were terminated on Great Plains' network. The Commission determined retroactive compensation was owed from August 26, 2002, up until the date the Commission approved the Western Wireless and Great Plains agreement because August 26, 2002, is the date when Western Wireless made its bona fide request to commence negotiations with Great Plains under 47 U.S.C. §§ 251-252 (the "Act"), to establish an interconnection agreement. The Commission also determined that only Western Wireless owed retroactive compensation because it ruled that no Great Plains calls were terminated on the Western Wireless network.

Title 47, C.F.R. § 51.715(a) states that "upon request from a telecommunications carrier without an existing interconnection arrangement with an incumbent LEC, the incumbent LEC shall provide transport and termination of telecommunications traffic immediately under an interim arrangement."

In reviewing the Commission's retroactive compensation decision, this Court should not disturb the decision of the Commission absent a finding that the Commission's decision was arbitrary and capricious because the Commission's decision involved the application of law to the facts of the case. *Koppendrayer*, 2004 U.S. Dist. LEXIS at *7. Thus, this Court will not disturb the Commission's finding that retroactive compensation under 47 C.F.R. § 51.715 is called for from the date when Western Wireless transmitted a bona fide request for negotiations to Great Plains under § 252 -- August 26, 2002 -- because the Commission's decision was neither arbitrary nor capricious.

Having previously determined that reciprocal compensation obligations apply to all calls originated by Great Plains and terminated by Western Wireless within the same MTA, regardless of whether the calls are delivered via an intermediate carrier such as Qwest, reciprocal retroactive compensation, dating back to August 26, 2002, will apply to both Great Plains and Western Wireless.

D. ISSUE 6: Interconnection Facilities Pricing

Issue 6 concerns the appropriate pricing of interconnection facilities. Under the July Agreement, Western Wireless and Great Plains agreed that Western was to pay the lowest rate from among Great Plains inter-state and intra-state rates. The Commission rejected this portion of the July Agreement. Western Wireless asserts that the Commission erred in rejecting this portion of the negotiated agreement between Western Wireless and Great Plains under 47 U.S.C. § 252 and 47 C.F.R. § 51.709.

Any interconnection agreement adopted via arbitration must be submitted to the Commission for approval. 47 U.S.C. § 252(e)(1). Section 252(e)(2) specifies that the only grounds upon which the Commission may reject an agreement are §§ 251 and 252(d). Here, the Commission rejected the pricing agreement that was reached via arbitration. Thus, the rejection is appropriate only if it is based on either § 251 or § 252(d).

Section 252(d) requires that rates be just, reasonable and nondiscriminatory based on the cost of providing the interconnection facility. The Commission rejected the pricing agreement because it could violate Great Plains' filed tariff agreements. This appropriately falls under § 252(d). The Commission's decision must be upheld unless it is arbitrary and capricious. *Koppendrayer*, 2004 U.S. Dist. LEXIS at *7. Here, the decision to reject the pricing agreement was not arbitrary and capricious because it was grounded in assuring that the

pricing offered to Western Wireless was proper under Great Plains' filed tariffs. Therefore, the Court will not modify or overturn the decision of the Commission as to the pricing of interconnection facilities.

E. ISSUES 7 and 8: Local Dialing Parity and Tandem Routed Local Calling

Issues 7 and 8 are the final issues raised by Western Wireless. Here Western Wireless asserts that it must be given local dialing parity and tandem routed local calling. This issue was addressed in *Atlas v. Oklahoma Corp. Comm'n*, 309 F. Supp. 2d 1313 (W.D. Okla. 2004) ("Atlas II"). In *Atlas II*, the Oklahoma district court held that local dialing parity and tandem routed local calling were essential to allow a competitor to compete on a level playing field with an ILEC. *Atlas II*, 309 F. Supp. 2d at 1317. Western Wireless is not proposing that all calls within an MTA be provided local treatment, but only that calls from a Great Plains customer to a Western Wireless customer with a locally rated number would have local dialing. Thus, Great Plains is asked only to treat locally rated Western Wireless calls in the same manner that it treats its own locally rated calls. The Court adopts the reasoning of the *Atlas II* court and finds that local dialing parity and tandem routed local calling are consistent with the 1996 Telecommunications Act's general purposes without placing an undue burden on Great Plains.

F. Cross-claim - Unconstitutional Taking

Great Plains cross-claim against the Commission asserts that the Commission's failure to award Great Plains retroactive compensation back to March, 1998, constituted an unconstitutional taking of Great Plains property without compensation. The Commission asserts that the issue presented by Great Plains and Western Wireless to the Commission was raised pursuant to 47 C.F.R. § 51.715. Section 51.715 only provides for interim compensation after a request for negotiation is presented to an ILEC. In this case Western Wireless request for negotiation was presented to Great Plains on August 26, 2002. Thus, the Commission's Order was based on the issue presented.

State Commissions are limited to arbitrating open issues raised by the parties. *U.S. West Communications v. Minnesota Public Utilities Comm'n*, 55 F. Supp. 2d 968, 976-77 (D. Minn. 1999). Thus, the Commission lacked authority to arbitrate any issue beyond the scope of § 51.715, which specifically limited the compensation to the date when Western Wireless requested negotiations from Great Plains. Therefore, this Court must reject Great Plains' cross-claim asserting that the Commission's refusal to order compensation beyond that contemplated by § 51.715 constituted an unconstitutional taking.

IV. CONCLUSION

The Court will reverse the decision of the Nebraska Public Service Commission ("Commission") as to Issues 1 and 2 and direct that the agreement between Great Plains and Western

Wireless be modified to reflect that reciprocal compensation obligations apply to all calls originated by Great Plains and terminated by Western Wireless within the same MTA, in accordance with this Order. The Court will affirm the decision of the Commission as to Issues 3 and 6. The Court will affirm the decision of the Commission as to Issue 4 that retroactive compensation is appropriate going back to August 6, 2002 but, in accordance with the Court's decision as to Issues 1 and 2, will direct that retroactive compensation should apply to both Great Plains and Western Wireless. This resolution of Issue 4 also resolves Great Plains' counterclaim. Finally, as to Issues 7 and 8 the Court finds that local dialing parity and tandem routed local calling are consistent with the 1996 Telecommunications Act's general purposes without placing an undue burden on Great Plains. Thus, Great Plains will be ordered to treat locally rated Western Wireless calls in the same manner that it treats its own locally rated calls. Finally, Great Plains' cross-claim against the Commission will be denied because the Commission's decision limiting retroactive compensation did not constitute an unconstitutional taking of Great Plains' property without compensation. A separate order will be entered in accordance with this memorandum opinion.

DATED this 20th day of January, 2005.

BY THE COURT:

/s/ Lyle E. Strom

LYLE E. STROM, Senior Judge
United States District Court

TAB B

Westlaw.

--- S.W.3d ----, 2006 WL 44350 (Mo.)

(Cite as: 2006 WL 44350 (Mo.))

H

Briefs and Other Related Documents

Only the Westlaw citation is currently available.

NOTICE: THIS OPINION HAS NOT BEEN RELEASED FOR PUBLICATION IN THE PERMANENT LAW REPORTS. UNTIL RELEASED, IT IS SUBJECT TO REVISION OR WITHDRAWAL.

Supreme Court of Missouri,
En Banc.
STATE ex rel. **ALMA** TELEPHONE COMPANY, et al., Respondents,
v.
PUBLIC SERVICE COMMISSION OF the STATE OF MISSOURI, Appellant,
State ex rel. BPS Telephone Company, et al., Respondents,
AT & T Wireless Services, Inc., et al., Appellants.
No. SC 86529.

Jan. 10, 2006.

Background: Rural local exchange (LEC) carriers sought to amend tariffs to collect for traffic that originated with wireless telephone service providers in the same local service area. The Public Service Commission (PSC) disallowed the proposal. LECs sought review. The Circuit Court, Cole County, Thomas J. Brown, J., reversed. PSC and providers of commercial mobile radio service appealed, and case was transferred.

Holding: The Supreme Court, Stephen N. Limbaugh, Jr., J., held that the access tariffs were unlawful.
Trial court reversed; PSC affirmed.

[1] Telecommunications ⇨866

372k866 Most Cited Cases
Access tariffs proposed by rural local exchange (LEC) carriers to collect for traffic that originated with wireless telephone service providers in same major trading area (MTA) were unlawful; Local Competition Order by the Federal Communications Commission (FCC) treated wireless calls made within the MTA as local and wireless calls made outside the MTA as long-distance, the FCC determined that traffic to or from a commercial mobile radio service network was subject to transport and termination rates, rather than interstate and intrastate access charges, if it originated and terminated within the same MTA, and, thus, tariffs pertaining to interstate and intrastate access charges could not be imposed. Communications Act of 1934, § 251, as amended, 47 U.S.C.A. § 251(b)(5).

[2] Telecommunications ⇨866

372k866 Most Cited Cases
Safe harbor in Federal Telecommunications Act of 1996(FTA) which entitled local exchange carriers (LECs) to the same state tariffs applicable to wireless traffic before the FTA was enacted, until reciprocal compensation agreements were entered into, did not entitle LECs to access tariffs to collect for traffic that originated with wireless telephone service providers in same major trading area (MTA); the access tariffs available to the LECs at that time did not purport to cover intra-MTA wireless traffic, and the safe harbor applied only to the existing access tariffs on long-distance calls, rather than calls placed within the MTA. Communications Act of 1934, § 251, as amended, 47 U.S.C.A. § 251(g).
Appeal from the Circuit Court of Cole County, Thomas J. Brown, Judge.

STEPHEN N. LIMBAUGH, JR., Judge.

***1** In these two consolidated cases, the Missouri Public Service Commission disallowed a proposal by certain rural telephone companies to amend

"access tariffs" to be imposed on several wireless telephone service providers. [FN1] On petition for writ of review, the circuit court reversed the PSC's decision, and thereafter, the PSC and the wireless service providers appealed. After opinion by the Court of Appeals, Western District, this Court granted transfer. Mo. Const. art. V, sec. 10. The judgment of the trial court is reversed, and the PSC's decision is affirmed.

I. Facts and Procedural History

This litigation involves a dispute concerning the method by which the rural telephone companies should be compensated for delivering calls that originated from wireless telephones and terminated in the rural companies' local exchanges during February 1998 through January 2001. The telephone traffic at issue involves wireless calls that occurred within one of Missouri's two "Major Trading Areas" (MTA) for telecommunications. Thus, the traffic was intrastate, as well as intraMTA.

Prior to 1998, Southwestern Bell Telephone Company (SBTC), operating as a large interexchange carrier, transported and terminated calls for wireless carriers, or commercial mobile radio service providers (CMRS providers). SBTC charged the CMRS providers a tariff for this service. However, this tariff did not compensate rural local exchange carriers (LECs)--the respondents herein-- for completing wireless calls that terminated on their systems. During the early 1990s, the PSC found SBTC liable to the LECs under the LECs' own existing access tariffs. Then in 1998, SBTC was permitted to revise its wireless termination tariffs to eliminate its obligation to pay the LECs, and instead the CMRS providers were to compensate the LECs directly. In this regard, the PSC ordered the CMRS providers to seek reciprocal compensation arrangements with the LECs for the termination of the wireless traffic or, otherwise, to cease delivering wireless traffic to the LECs. Despite this order, few reciprocal arrangements were entered, and CMRS providers continued to transmit wireless originated traffic to the LECs, which were unable to block the wireless calls. In an effort to obtain compensation, the LECs then billed the CMRS providers under existing access tariffs, which established the rates that the LECs could charge for completing long distance or toll calls on their local exchanges. However, the CMRS providers refused to pay on the ground that the tariffs did not apply to wireless originated traffic, which the Federal Communications Commission (FCC) deemed to be intraMTA, or local traffic. During that time, though, the LECs did not seek enforcement of the PSC's order requiring the CMRS providers to enter reciprocal compensation arrangements or cease delivering traffic to the LECs. [FN2]

In 1999, the LECs filed proposed amended access tariffs with the PSC to clarify the tariffs' applicability to wireless originated traffic. Under the proposal, each tariff would be amended as follows:

> ***2** The provisions of this tariff apply to all traffic regardless of type or origin, transmitted to or from the facilities of the Telephone Company, by another carrier, directly or indirectly, until and unless superseded by an agreement approved pursuant to 47 U.S.C. 252, as may be amended.

The CMRS providers and SBTC intervened and objected to the tariffs, and after a hearing, the PSC rejected the proposed amended tariffs. The LECs then filed a writ of review with the circuit court, which reversed the decision of the PSC. After an initial appeal to the court of appeals, which reversed and remanded for failure of the PSC to make adequate findings of fact, the PSC again ruled against the LECs, relying on federal regulatory rulings in determining that intraMTA calls are local calls and not subject to access tariffs. The LECs again sought a writ of review in the circuit court, the court again reversed the PSC, and the PSC and CMRS providers then appealed. Both sides agree that the facts are not in dispute and only a question of law remains to be resolved.

II. Analysis

This case is controlled by the Federal Telecommunications Act of 1996(FTA), 47 U.S.C. sec. 251 et seq. (2000). The FCC is charged with implementing and enforcing the provisions of the FTA, 47 U.S.C. sec. 201(b) (2000), and FCC regulations and decisions are binding on the

industry and state commissions, *AT & T Corp. v. Iowa Utilities Bd.,* 525 U.S. 366, 37-79, --- S.Ct. ----, ---- - ----, --- L.Ed.2d ----, ---- - ---- (1999).

The FTA requires interconnection, directly or indirectly, between telecommunications carriers. 47 U.S.C. at sec. 251(a). To allow for the recapture of costs for interconnection, the FTA provides for "reciprocal compensation arrangements for the transport and termination of telecommunications," *id.* at sec. 251(b)(5), and implementing regulations place a duty on LECs and wireless carriers to negotiate and enter in to those arrangements, 47 C.F.R. 51.301. In this case, as noted, no such arrangements were completed.

[1] The FCC has recently confirmed that in the absence of a reciprocal compensation arrangement, "CMRS providers accept the terms of otherwise applicable state tariffs." *In the Matter of Developing a Unified Intercarrier Compensation Regime; T-Mobile et al. Petition for Declaratory Ruling Regarding Incumbent LEC Wireless Termination Tariffs,* 2005 FCC LEXIS 1212, para. 12 (2005). The access tariffs that the LECs now seek, however, are not "otherwise applicable state tariffs." That question was settled in a FCC ruling known as the "Local Competition Order," issued when the FTA first became effective. *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* First Report and Order, 11 F.C.C.R. 15299 (1996). In pertinent part, the Order first makes a critical distinction between transport and termination tariffs, which are applicable to local traffic, and access tariffs, which are applicable to long-distance traffic. Specifically, the Order states: "Transport and termination of local traffic are different services than access service for long-distance telecommunications," and "The Act preserves the legal distinctions between charges for transport and termination of local traffic and interstate and intrastate charges for terminating long-distance traffic." *Id.* at para. 1033. To then distinguish between local calls and long-distance calls, the Order provides that the "local service area" for wireless calls is the same as the Major Trading Area. *Id.* at paras. 1035-1036. The import is that wireless calls made within the MTA are local, and wireless calls made outside of the MTA are long-distance. *Id.* at para. 1036. The Order then concludes that "traffic to or from a CMRS network that originates and terminates within the same MTA is subject to transport and termination rates under section 251(b)(5), rather than interstate and intrastate access charges." *Id.* Because in this case all parties agree that the traffic in question originates and terminates within the same MTA, only tariffs pertaining to transport and termination rates may be imposed, and conversely, tariffs pertaining to interstate and intrastate access charges may not be imposed. Thus, the proposed tariffs, which the LECs concede are interstate and intrastate access charges, are unlawful, and the PSC was correct in disallowing them.

***3** [2] The LECs contention that the FTA does not prohibit state access tariffs in the absence of a reciprocal compensation flies in the face of the FCC's Local Competition Order, and it appears that the LECs are simply unwilling to acknowledge the clear distinction made between intraMTA calls and all other calls. They also rely on *State ex rel. Sprint Spectrum, L. P., et al. v. Missouri Public Service Comm'n,* 112 S.W.3d 20 (Mo.App.2003), for the proposition that access tariffs are lawful even as applied to intraMTA traffic. However, the tariffs in question in Sprint were not access tariffs but were instead intraMTA transportation and termination tariffs--tariffs that are explicitly approved under the Local Competition Order. Finally, the LECs argue that the access tariffs are allowable under the FTA's "safe harbor" provision in sec. 251(g), which states that until reciprocal compensation agreements are entered in to, LECs are to be afforded the same state tariffs that applied to wireless traffic before the FTA was enacted. The access tariffs available to the LECs at that time, however, did not purport to cover intraMTA wireless traffic, and it was for that reason that the LECs sought to enlarge the scope of those access tariffs in the first place. The safe harbor, in other words, applies only to the existing access tariffs on long-distance calls, rather than calls placed within the MTA.

III. Conclusion

The PSC was correct in holding that the proposed access tariffs are unlawful. Accordingly, the judgment of the circuit court is reversed, and the decision of the PSC is affirmed.

WOLFF, C.J., STITH, TEITELMAN, RUSSELL and WHITE, JJ., and ROMINES, Sp.J., concur.

PRICE, J., not participating.

FN1. In the first case, the rural telephone companies are: **Alma** Telephone Company, MoKan Dial Inc., Mid-Missouri Telephone Company, Choctaw Telephone Company, Chariton Telephone Company, Peace Valley Telephone Company, Mid-Missouri Telephone Group, and Small Telephone Exchange Group.
In the second case, the rural telephone companies are: BPS Telephone Company, Citizens Telephone Company of Higginsville, Mo., Inc., Craw-Kan Telephone Cooperative, Inc., Elington Telephone Company, Farber Telephone Company, Goodman Telephone Company, Granby Telephone Company, Grand River Mutual Telephone Corporation, Green Hills Telephone Corporation, Holway Telephone Company, Iamo Telephone Company, Kingdom Telephone Company, KLM Telephone Company, Lathrop Telephone Company, Le-Ru Telephone Company, McDonald County Telephone Company, Mark Twain Rural Telephone Company, Miller Telephone Company, New London Telephone Company, Orchard Farm Telephone Company, Oregon Farmers Mutual Telephone Company, Ozark Telephone Company, Seneca Telephone Company, Steelville Telephone Exchange, Inc., and Stoutland Telephone Company.
In both cases, the wireless services providers are: AT & T Wireless Services, Inc., GTE Midwest Incorporated, Southwestern Bell Telephone Company, Southwestern Bell Wireless, Inc., and Sprint Spectrum L.P. d/b/a Sprint PCS.

FN2. However, during oral argument, counsel for the LECs advised the Court that "complaint proceedings" against the CMRS providers for failure to enter into the reciprocal compensation arrangements are now pending before the PSC.

--- S.W.3d ----, 2006 WL 44350 (Mo.)

Briefs and Other Related Documents (Back to top)

- 2005 WL 2213919 (Appellate Brief) Substitute Brief of the Missouri Public Service Commission (Jun. 01, 2005)Original Image of this Document (PDF)

- 2005 WL 2213923 (Appellate Brief) Substitute Brief of Appellant Wireless Carriers (May. 31, 2005)Original Image of this Document (PDF)

- 2005 WL 2213920 (Appellate Brief) Substitute Brief of Respondents Alma Telephone Company et al. and BPS Telephone Company et al. (Apr. 11, 2005)Original Image of this Document (PDF)

- 2005 WL 2213922 (Appellate Brief) Substitute Brief of Respondents Alma Telephone Company et al. and BPS Telephone Company et al. (Apr. 11, 2005)Original Image of this Document (PDF)

END OF DOCUMENT

TAB C

LEXSEE 2003 US DIST LEXIS 24871

3 RIVERS TELEPHONE COOPERATIVE, INC.; RANGE TELEPHONE COOPERATIVE, INC.; BLACKFOOT TELEPHONE COOPERATIVE, INC.; NORTHERN TELEPHONE COOPERATIVE, INC.; INTERBEL TELEPHONE COOPERATIVE, INC.; CLARK FORK TELECOMMUNICATIONS, INC.; LINCOLN TELEPHONE COMPANY; RONAN TELEPHONE COMPANY; and HOT SPRINGS TELEPHONE COMPANY, Plaintiffs, vs. U.S. WEST COMMUNICATIONS, INC., Defendant.

CV 99-80-GF-CSO

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA, GREAT FALLS DIVISION

2003 U.S. Dist. LEXIS 24871

August 22, 2003, Decided
August 22, 2003, Filed

PRIOR HISTORY: 3 Rivers Tel. Coop. Inc. v. U.S. West Communs., Inc., 45 Fed. Appx. 698, 2002 U.S. App. LEXIS 18196 (2002)

DISPOSITION: Motions ruled upon.

CASE SUMMARY:

PROCEDURAL POSTURE: Plaintiff local exchange carriers (LECs) filed an action against defendant long-distance carrier (LDC), seeking to recover damages for, inter alia, breach of tariff. The LDC moved for summary judgment. The LECs moved for summary judgment as to counts I, II, and III. The LDC move to strike affidavits.

OVERVIEW: Count I was for breach of tariff and switched access agreements, count II for unjust enrichment, and count III for estoppel. The LECs provided local telephone service to subscribers. The LDC carried calls from originating LECs to terminating LECs in the same local access and transport area (LATA). Prior to this action, the LDC, as the designated intra-LATA carrier for the LECs' subscribers, paid the LECs terminating carrier access charges. The LECs alleged that the LDC breached filed tariffs by refusing to pay terminating carrier access charges for all interexchange calls to the LECs for delivery to the LECs' subscribers. The court concluded that 47 U.S.C.S. § 251(b), as implemented by the Federal Communication Commission's 1996 Local Competition Order, preempted the tariffs in this case to the extent that the reciprocal compensation scheme applied to wireless service traffic that originated and terminated in the same major trading area (MTA), regardless of whether it flowed over the facilities of other carriers along the way to termination. Thus, the LDC was not liable for terminating access charges on wireless traffic that both originated and terminated in the same MTA.

OUTCOME: The LECs' motions for summary judgment were granted as to count I, except as to terminating access charges on wireless traffic that originated and terminated in the same MTA. The motions were denied as moot at to counts II and III. The LDC's motion for summary judgment was granted as to charges on wireless traffic. The LDC's motions to strike were denied, except to the extent one motion related to an individual's supplemental affidavit.

LexisNexis(R) Headnotes

Energy & Utilities Law > Utility Companies > Utility Rates

2002 WL 31296324 (S.D. Iowa Oct. 9, 2002), the court rejected Iowa LECs' claim that Qwest owed access charges for intra-MTA wireless calls. The court held that such claims were precluded by the Iowa Utilities Board's prior decision that "the FCC had previously deemed intraMTA traffic as being local, and, therefore, access charges could not apply." 2002 U.S. Dist. LEXIS 19830, 2002 WL 31296324, *8.

[*66]

This conclusion is further bolstered by language in paragraph 1043 of the *1996 Local Competition Order,* which provides, in relevant part:

> 1043. As noted above, CMRS providers' license areas are established under federal, rules, and in many cases are larger than the local exchange service areas that state commissions have established for incumbent LECs' local service areas. We reiterate that traffic between an incumbent LEC and a CMRS network that originates and terminates within the same MTA (defined based on the parties' locations at the beginning of the call) is subject to transport and termination rates under section 251(b)(5), rather than interstate or intrastate access charges. Under our existing practice, most traffic between LECs and CMRS providers is not subject to interstate access charges unless it is carried by an IXC; with the exception of certain interstate interexchange service provided by CMRS carriers, such as some "roaming" traffic that transits incumbent LECs' switching facilities, which is subject to interstate access charges. Based on our authority under section 251(g) to preserve the current interstate access charge regime, we conclude that the [*67] new transport and termination rules should be applied to LECs and CMRS providers so that CMRS providers continue not to pay interstate access charges for traffic that currently is not subject to such charges, and are assessed such charges for traffic that is currently subject to interstate access charges. n130

n130 *Id.* at P 1043 (emphasis added) (footnotes omitted).

In this Court's opinion, the underlined text further supports the conclusion that traffic between an LEC and CMRS network that originates and terminates in the same MTA is local and, therefore, subject to reciprocal compensation rather than access charges. The FCC order makes no distinction between such traffic and traffic that flows between a CMRS carrier and LEC in the same MTA that also happens to transit another carrier's facilities prior to termination.

Further, the Court is not persuaded by Plaintiffs' argument that the last sentence of paragraph 1043 "carved out an exception" "that preserves the access charge system for wireless [*68] calls that were subject to access charges prior to the 1996 Act (such as the calls at issue). n131 The referenced language in the last sentence of paragraph 1043 pertains to "interstate access charges" and does not specifically reference "local" calls, i.e. CMRS traffic that originates and terminates in the same MTA, as defined in paragraphs 1035 and 1036. In other words, the Court does not find these provisions inconsistent.

n131 *Ronan et al.'s Resp. Brief* at 15.

Based on the foregoing discussion, the Court concludes that 47 U.S.C. § 251(b), as implemented by the FCC's *1996 Local Competition Order,* preempts the tariffs in this case to the extent that the reciprocal compensation scheme applies to CMRS traffic that originates and terminates in the same MTA, regardless of whether it flows over the facilities of other carriers along the way to termination. Accordingly, Qwest is not liable to Plaintiffs for terminating access charges on CMRS (wireless) traffic that both originates [*69] and terminates in the same MTA. n132

> n132 The Court is mindful that, because FGC traffic is commingled, Plaintiffs cannot identify what portion of Qwest incoming traffic is CMRS originated. Nonetheless, in deciding the issues raised by the pending motions, the Court is constrained to interpret and apply governing laws and regulations as they currently exist.

IV. MOTIONS TO STRIKE AFFIDAVITS

Qwest's Motion to Strike Affidavit of Jan Reimers will be denied. As the Plaintiffs note, the Ninth Circuit contemplated that the District Court may need to consider technology and practice in the telecommunications industry. n133 The Reimers affidavit does contain such

TAB D

LEXSEE 1996 MINN. PUC LEXIS 171

In the Matter of AT&T Communications of the Midwest, Inc.'s Petition for Arbitration with Contel of Minnesota, Inc. d/b/a GTE Minnesota under Section 252(b) of the Federal Telecommunications Act of 1996

DOCKET NO. P442,407/M-96-939

Minnesota Public Utilities Commission

1996 Minn. PUC LEXIS 171

December 12, 1996

PANEL: [*1]

Joel Jacobs, Chair; Marshall Johnson, Commissioner; Dee Knaak, Commissioner; Mac McCollar, Commissioner, Don Storm, Commissioner

OPINION: ORDER RESOLVING ARBITRATION ISSUES AND OPENING COST PROCEEDING

PROCEDURAL HISTORY

I. THE STATUTORY AND REGULATORY FRAMEWORK FOR THE DEVELOPMENT OF LOCAL COMPETITION

In 1995, the Minnesota legislature enacted sweeping legislation opening the local telephone market to competition. Minn. Stat. § 237.16 imposed a number of obligations on providers of telephone service to facilitate the development of a competitive market and to protect the public interest.

On February 8, 1996, the President signed into law the Telecommunications Act of 1996 (the Federal Act or Act). The Act's stated purpose is to provide the benefits of competition to U.S. citizens by opening all telecommunications markets to competition. (Conference Report to accompany S. 652). Markets will be opened to competition in three ways:

> (1) by requiring incumbent local exchange carriers to permit new entrants to purchase their services wholesale and resell them to customers;
>
> (2) by requiring incumbent local exchange carriers to permit competing providers of local service [*2] to interconnect with their networks on competitive terms; and
>
> (3) by requiring incumbent local exchange carriers to unbundle the elements of their networks and make them available to competitors on just, reasonable, and nondiscriminatory terms.
>
> 47 U.S.C. § 251(c).

Under the terms of the Act, a competitive local exchange carrier (CLEC or new entrant) desiring to provide local exchange service can seek agreements with an incumbent local exchange carrier (ILEC or incumbent) related to interconnection with the ILEC's network, the purchase of finished services for resale and the purchase of the incumbent's unbundled network elements. 47 U.S.C. § § 251 (c) and 252 (a).

The Commission may also establish or enforce other requirements of State law when addressing issues related to inter-company agreements under § 252. 47 U.S.C. § 252(e)(3).

In short, the Commission must impose terms and conditions in this proceeding that are just, reasonable, nondiscriminatory and fair to both the new entrant and the incumbent, [*8] consistent with the specific requirements set forth in federal and state law.

III. IMPACT OF 8TH CIRCUIT STAY OF CERTAIN FCC RULES

On October 15, 1996, the 8th Circuit Court of Appeals, in Iowa Utilities Board. et al, v. FCC, No. 96-3406, issued an order staying the following portions of the FCC's Interconnection Order, Appendix B-Final Rules:

(1) sections 51.501-51.515, relating to pricing network elements, and interconnection;

(2) sections 51.601-51.611, relating to avoided cost discount rates for resale;

(3) sections 51.701-51.717, relating to pricing reciprocal transport and termination; and

(4) section 51.809, relating to the availability of contract terms to other requesting carriers under § 252(1) of the Federal Act.

The Court also stayed a portion of the FCC's September 29, 1996 Order on Reconsideration, which established ranges of default proxy rates for various services and service elements.

On November 1, 1996, the Court issued an Order lifting the stay with respect to § 51.701 (scope of transport and termination pricing rules); § 51.703 (reciprocal compensation obligation of LECs for transportation and termination of traffic); and § [*9] 51.717 (renegotiation of existing non-reciprocal agreements).

The Commission has no legal obligation to apply the prices, methodologies or other directives in the stayed portions of the FCC Interconnection Order. The Commission, however, has examined the Order in its entirety and has considered the stayed portions of the FCC Order as it has other evidence in the case. Furthermore, the Commission notes that most of the FCC Order has not been stayed and that the Commission is bound by the requirements set forth therein.

IV. BURDEN OF PROOF

The Commission's September 10, 1996 Order initiating this proceeding placed the burden of proof on GTE "with respect to all issues of material fact." GTE Procedural Order, p. 15. It required proof "by a preponderance of the evidence." Id. The Order further provided that the ALJ could "shift the burden of production as appropriate, based on which party has control of the critical information regarding the issue in dispute," or reallocate the burden of proof to comply with any applicable FCC regulations.

Consistent with the Commission's decision on this issue, the FCC Interconnection Order places the burden on the incumbent to demonstrate [*10] the technical infeasibility of a CLEC's request for interconnection or unbundled access. 47 CFR § 51.321(d). The FCC Order specifically requires the incumbent to prove by clear and convincing evidence any claim that it cannot satisfy such a request because of adverse network reliability impacts. 47 CFR § 51.5.

The Commission reaffirms its decision to place the burden of proof on GTE with respect to the issues of material fact in this arbitration, subject to the caveats set forth in the Commission's procedural Order.

The Federal Act attempts to introduce competition into the monopoly markets of incumbent providers. It does this by imposing a number of specific duties on incumbent LECs, all aimed at giving new entrants reasonable and nondiscriminatory access to the networks of incumbents. The Act, in effect, puts the onus on incumbent LECs to open their markets

TAB E

1 of 2 DOCUMENTS

In the matter of the Commission's own motion, to review the costs of telecommunications services provided by SBC MICHIGAN

Case No. U-13531

MICHIGAN PUBLIC SERVICE COMMISSION

2004 Mich. PSC LEXIS 318; 237 P.U.R.4th 1

September 21, 2004

PANEL: [*1] PRESENT: Hon. J. Peter Lark, Chair; Hon. Robert B. Nelson, Commissioner; Hon. Laura Chappelle, Commissioner

OPINIONBY: LARK; NELSON; CHAPPELLE

OPINION: OPINION AND ORDER

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

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 [*2] 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) n1, 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.

n1 On April 7, and May 6, 2004, respectively, Sage and Comcast filed notice of withdrawal from this case.

[*3]

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.

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). n2 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 [*4] was given until July 3, 2003 to submit its comments on the issue.

n2 Review 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.

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 [*5] 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 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, [*6] 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 04-179 n3, 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 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.

n3 Order 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.

[*7]

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 [*8] 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 [*9] 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 [*10] 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 P 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 [*11] 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 [*12] 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 [*13] 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. n4 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 [*14] 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.

n4 TRO, P 680.

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 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 [*15] 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 Bonds Online. 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 [*16] 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 [*17] 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 [*18] 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 [*19] 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:

	Capital Structure	Cost	Weighted Average
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 [*20] 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 [*21] 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 [*22] 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 [*23] 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. [*24] 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 [*25] 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, [*26] 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 [*27] 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 [*28] 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, [*29] 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 [*30] 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 [*31] 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 [*32] 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 [*33] 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, AFAM n5, SBC states, was not Y2K compliant. n6 SBC used a successor program called LFAM. n7 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.

n5 AFAM is the acronym for Ameritech Facility Analysis Model, the model used in SBC's previous cost case.

n6 Y2K compliant refers to resolving problems that many software programs had or were expected to experience when the year 2000 arrived.

n7 LFAM, or Loop Facilities Analysis Model, is a modified version of AFAM. MCI referred to its proposed model as AFAM/LFAM.

[*34]

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.

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 [*35] 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 [*36] 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 recog-

nize 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 [*37] 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 [*38] 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 [*39] 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 [*40] 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 DeBaene testifies that AT&T's arguments are inconsistent with telecommunications network reality. For example, Ms. DeBaene 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. DeBaene 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 dis-

bursements, 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. DeBaene states that the JAMS data does not include all of the costs for installation. Such excluded costs would include [*41] 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. DeBaene 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 [*42] 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 [*43] 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 [*44] 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 POTS n8 line). Nevertheless, SBC asserts, there is a cost associated with the DS1 line card that is required for IDLC.

n8 POTS refers to plain old telephone service.

[*45]

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 [*46] integrated mode. However, they state that this should not mean that the COT is always in a universal configuration. 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 Mutiple Dwelling Units

In its initial testimony, AT&T complains that SBC's cost study increases costs [*47] 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 [*48] 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. [*49] 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% [*50] 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 it its DLC-remote terminal mix that reflects SBC's embedded equipment rather than forward-looking design from [*51] 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 [*52] 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 [*53]

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 [*54] 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, n9 in which Verizon was required to use a blend of 88% replacement and 12% growth.

n9 DA 03-2738, CC Docket Nos. 00-218 and 00251, issued August 29, 2003.

AT&T witness, August H. Ankum, [*55] 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 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 [*56] 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 [*57] 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&Ts 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 [*58] foreseeable demand. n10 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.

n10 FCC 96-325, P 685.

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 [*59] costs vary with usage, 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, [*60] 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 considerations. 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 [*61] 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 [*62] 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 [*63] 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 [*64] 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 [*65] 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 [*66] of the art switches.

MCFs 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 SIC AT 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 [*67] 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 [*68] 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, [*69] 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 [*70] 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 [*71] 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 [*72] 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 antici-

pated 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 [*73] 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 [*74] 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 [*75] 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 [*76] 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 [*77] 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 [*78] 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. [*79] 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 [*80] 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 [*81] 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 [*82] 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 [*83] 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 [*84] 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 [*85] 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 [*86] 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 [*87] 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 [*88] 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 [*89] 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 [*90] 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 [*91] 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 [*92] 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 paralells a revenues approach to determining the percentage of costs that should be considered direct whole-sale. 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 [*93] 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 [*94] 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 [*95] 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 [*96] 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 [*97] 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 [*98] 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 [*99] 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. [*100] 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 [*101] 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), 8XXQuerry, 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 [*102] 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 [*103] 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 [*104] 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, "the 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 [*105] 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) EELs n11, (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.

n11 EEL, SBC explains, is a combination of unbundled loop and dedicated interoffice transport.

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-looking work activities and personnel required to process or provision a UNE order. Next, SBC calculated how often [*106] 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 [*107] 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 [*108] 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 Staffs 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 [*109] 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 rates n12 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 rates n13. MCI objects to the proliferation of check, validation, and review activities, [*110] 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.

n12 A flow-through is the percentage of electronic orders that are processed without manual intervention.

n13 A fall-out rate measures the frequency that an order that is normally processed by an automated system "falls out" and requires manual handling.

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 rates n14 reflected in [*111] 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 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 hour n15, break time or tour length, paid absences, special payments, social security, relief, and pensions, other benefits and [*112] expenses, and support asset expenses n16. 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).

n14 In 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.

n15 For 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.

n16 Support 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.

[*113]

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 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 [*114] 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 [*115] 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 expenses n17 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.

n17 This 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.

[*116]

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 it 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 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 [*117] 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 "there 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. [*118] 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 [*119] 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 [*120] 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. 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 [*121] 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 [*122] 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 [*123] 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 states n18 for this collocation prototype. The table shows that the collocation rate for this prototype [*124] 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.

n18 Texas, Kansas, Missouri, Oklahoma, Nevada, Wisconsin, and California.

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 [*125] 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 collation rates in this application, if the Commission were to use the 50% model, SBC's new 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 [*126] 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 unsubstanti-

ated 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 [*127] 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." n19 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.

n19 First 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).

The Commission is not persuaded that it should retreat [*128] 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 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 [*129] 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 [*130] that the study contains the cost support for SBC's various call plans for Michigan residential service, business services, and PBX n20 ground start universal loops. It states that the costs for BLES have increased significantly over those previously approved by the Commission.

n20 PBX stands for private branch exchange.

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 [*131] 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. n21 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 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.

n21 CLEC 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.

[*132]

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&I n22 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.

n22 Vendor 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.

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 [*133] 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. 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 [*134] 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 [*135] 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 [*136] 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 [*137] 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 [*138] 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 [*139] 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, n23 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 [*140] 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.

> n23 Manual 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 [*141] 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 [*142] 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 [*143] 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 [*144] 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 OUTWATS n24 services, cellular services, and virtual-private-network functions.

n24 OUTWATS refers to outbound wide-area telephone service.

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 [*145] 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 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 [*146] 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 [*147] 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 mainte-

nance 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 [*148] 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(R) format, with all [*149] 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 [*150] 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 [*151] 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 [*152] 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 [*153] 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 [*154] 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 [*155] 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. [*156]

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

J. Peter Lark

Chair

Robert B. Nelson

Commissioner

Laura Chappelle

Commissioner

By its action of September 21, 2004.

TAB F

LEXSEE 2001 ILL. PUC LEXIS 1249

Illinois Commerce Commission, On Its Own Motion
Investigation into the compliance of Illinois Bell Telephone Company with the order in Docket 96-0486/0569 Consolidated regarding the filing of tariffs and the accompanying cost studies for interconnection, unbundled network elements and local transport and termination and regarding end to end bundling issues

98-0396

ILLINOIS COMMERCE COMMISSION

2001 Ill. PUC LEXIS 1249

October 16, 2001, Dated

PANEL: [*1] RICHARD L. MATHIAS, Chairman

OPINIONBY: MATHIAS

OPINION: ORDER

By the Commission:

I. INTRODUCTION AND PROCEDURAL BACKGROUND

On September 25, 1996, the Commission initiated Docket No. 96-0486 to investigate Ameritech Illinois' ("Ameritech") forward-looking cost studies and to establish rates for Ameritech Illinois' provision of unbundled network elements ("UNEs"). On September 27, 1996, Ameritech Illinois filed a tariff setting forth the rates for UNEs available to requesting carriers. On November 7, 1996, the Commission initiated Docket No. 96-0569 to investigate Ameritech Illinois' September 27, 1996 tariff filing. The Commission subsequently consolidated Docket Nos. 96-0569 and 96-0486. On February 17, 1998, the Commission entered a Second Interim Order in Docket Nos. 96-0486/0569 ("TELRIC Order" or "Second Interim Order"), which required Ameritech Illinois to file revised UNE tariffs in accordance with certain adjustments. On April 6, 1988, Staff of the Illinois Commerce Commission ("Staff") filed a Staff Report stating that, based on its interpretation of the TELRIC Order, Ameritech Illinois needed to revise its tariffs and/or cost studies to:

1. Include the fill factor and cost [*2] of capital assumptions recommended by Staff and the economic lives and net salvage percentages recommended by AT&T/MCI witness Mojoros. TELRIC Order at 28.

2. Make various revisions to the shared and common cost pools. *Id.* at 50-54.

3. Amortize non-volume sensitive costs ("NVS") over a three-year period and eliminate these costs after the three-year period had expired. *Id.* at 56.

4. File a new unbundled local switching ("ULS") cost study primarily based on a flat-rate structure. *Id.* at 59.

5. Recalculate its service ordering ("SO") costs assuming the use of an electronic interface and recalculate the line connection ("LC") cost based on a 50% reduction in the labor estimate. *Id.* at 89-90.

6. Remove duplicative expenses that were included in both the loop and port billing expenses and the service coordination fee. *Id.* at 90.

7. Resubmit tariff language that is clear and specific as to when nonrecurring charges apply. *Id.*

8. Recalculate collocation costs based on a more reasonable assumption of the median square foot charges published by *RS Means Building Construction Cost Data Guide. Id.* at 97.

9. Recalculate power consumption charges based [*3] on Staff's methodology. *Id.* at 99.

10. Include transiting language in its compliance tariff and provide supporting cost studies. *Id.* at 107.

11. File a tariff and supporting cost study for shared transport. *Id.*

12. Recalculate the Usage Development and Implementation Charge in accordance with Staff's proposal. *Id.* at 120.

13. Address end-to-end bundling issues. *Id.* at 125.

On June 3, 1998, the Commission entered an Order ("June 3, 1998 Initiating Order") opening the instant proceeding to examine Ameritech Illinois' compliance with the requirements of the TELRIC Order. Following the inception of this docket, Ameritech and SBC Communications ("SBC") filed a petition indicating their intention to seek Commission approval of a merger of the two companies. That matter was docketed as Docket No. 98-0555 (the "merger proceeding"). Hearings in the merger proceeding commenced August 18, 1998, a final order was entered Setpember 23, 1999 and an amendatory order entered November 23, 1999.

At a status hearing held in the instant proceeding on April 26, 1999, Ameritech Illinois announced its intention to file a motion for a general continuance of this proceeding. [*4] Ameritech Illinois filed this Motion on May 11, 1999, contending that (1) the Hearing Examiner's Proposed Order in the merger proceeding contemplated using updated TELRIC studies in the instant proceeding; (2) pending proceedings before the FCC in CC Docket 96-98 had not yet determined the specific network elements that the FCC would require, and (3) a pending proceeding before the Eighth Circuit to review the FCC's pricing rules all made a general continuance advisable. On May 25, 1999, the Hearing Examiner granted Ameritech Illinois' Motion and continued the proceeding until August 3, 1999. On June 8, 1999, the Commission denied MCI Worldcom's Petition for interlocutory review of the Hearing Examiner's ruling.

During the pendency of Docket 98-0555, the Hearing Examiner held status hearings on August 3, September 22, October 12, and November 18, 1999. After the entry of the amendatory order, an additional status hearing was held November 24, 1999. At the November 24 status hearing, Ameritech Illinois summarized the list of issues it planned to address and stated that it did not plan to file a new ULS cost study in this proceeding. The Hearing Examiner concurred that such a study could [*5] be addressed at a future time, in this or another docket.

Ameritech Illinois submitted its Direct Testimony on January 28, 2000. On March 3, 2000, Staff filed a Motion to Strike those portions of Ameritech Illinois' testimony addressing the inclusion of complex dispatch costs in its nonrecurring costs. On March 3, 2000, Ameritech Illinois filed its response and on March 14, Staff filed its reply. The Hearing Examiner denied Staff's Motion on March 14, 2000.

Staff and all other active parties filed their direct testimony on March 29, 2000. On May 5, 2000 all active parties filed simultaneous rebuttal testimony. On July 12, 2000, the parties filed simultaneous surrebuttal testimony.

Status hearings were held on July 26 and August 11, 2000. At the August 11 status hearing, the Hearing Examiner directed the parties to file briefs addressing the Eighth Circuit's holdings in *Iowa Utilities Board v. FCC, 219 F.3d 744 (8th Cir. 2000)* ("*IUB III*") and its impact on TELRIC pricing. Ameritech Illinois submitted its brief on September 1, 2000 and Staff and CLECs submitted their briefs on September 8, 2000. Ameritech Illinois filed its reply brief on September [*6] 15, 2000. On September 29, 2000 Ameritech Illinois filed its sur-surrebuttal testimony.

On October 19, 2000, Ameritech Illinois filed its Motion to Strike Testimony Regarding ULS-IST and Remove the Issue from Proceeding as Moot. ("ULS-IST" stands for Unbundled Local Switching with Interim Shared Transport.) Evidentiary hearings were held on October 23, 24, and 25, 2000. The Hearing Examiner denied Ameritech Illinois' Motion at the October 23, 2000 hearing. On October 25, 2000, the Hearing Examiner marked the record "Heard and Taken." On December 15, 2000 Ameritech Illinois, CLECs and Staff filed their Initial Briefs, and on January 16, 2001 parties filed Reply Briefs.

A Hearing Examiner's Proposed Order was served on the parties. Exceptions and Replies as received have been considered by the Commission in reaching the results herein.

II. DISCUSSION

The discussion that follows is divided into two main topics, cost or pricing issues and non-cost or policy issues. Under each topic, the positions of Ameritech, Staff and Intervenors are summarized, followed by the Commission's Analysis and Conclusion. While numerous parties intervened in this docket, of the intervenors, only MCI [*7] WorldCom and AT&T (jointly), Rhythms Links and Covad Communications (jointly), Z-Tel Communications and McLeod USA filed post hearing briefs. While not all intervenors addressed the numerous issues before the Commission in their briefs, their positions on the issues were generally congruent throughout the proceeding. To that end, at some points in the discussion the term "intervenors" is used generically to describe an argument or position that may not have been fully argued on brief by all interested parties.

A. Cost/Pricing Issues

1. Nonrecurring Costs

a. Ameritech Illinois Position

The TELRIC Order adopted a service order nonrecurring charge for loops of $ 13.17 and directed Ameritech Illinois to "recalculate its service ordering costs based on a primarily automated process, which assumes the use of an Electronic Data Interchange ('EDI'), and resubmit those service ordering costs for further review and approval." TELRIC Order, p. 89. In addition, the TELRIC Order directed Ameritech Illinois to revise its line connection cost studies to reflect a 50% reduction in the time estimate "for manual intervention in the coordination activity." TELRIC Order, p. 90. The reduction was to [*8] remain in effect "until such time as Ameritech Illinois provides more support for a different [line connection] rate." *Id.*

In response to the TELRIC Order, Ameritech Illinois did the following. First, it submitted service order and line connection rates which, it asserts, conformed with the interim rate levels prescribed by the Commission. Those rates became effective April 18, 1998. Second, Ameritech Illinois undertook new forward-looking cost studies to identify service ordering and line connection nonrecurring costs when CLECs order analog loops, digital loops, or ULS line or trunk ports. These cost studies assume that CLECs transmit all orders electronically to Ameritech Illinois' service center utilizing an EDI interface. TELRIC Order, p. 89. Ameritech Illinois utilized both time and motion studies and subject matter experts ("SMEs") to identify and document its forward-looking costs. TELRIC Order, p. 89.

Ameritech Illinois conducted its studies in the fourth quarter of 1997 and updated those studies in December 1999 through January 2000. The studies capture both ordering and provisioning nonrecurring costs for seven work centers (in case of analog loops), and an additional [*9] four work centers (in the case of digital loops). Ameritech Illinois asserts that these studies develop both a current state and forward-looking analysis of its costs per order for service ordering and line connection activities. Under the current state analysis, Ameritech Illinois' costs experts undertook the following tasks: identified the process centers and work groups; collected existing documentation of work flow; directly observed work and conducted interviews of individuals knowledgeable about the work flows; developed process maps or narratives; developed validations; summarized the average time duration and percentage of probability of occurrence by order type and network elements; and identified the flow-through rate for each work group. This identification of the probability of occurrence and the flow-through rate were important because not every activity takes place on every order. As a result, the duration for conducting a particular activity is weighted based on the probability of occurrence factor.

Ameritech Illinois witness Mr. Richard Florence testified that, after identifying Ameritech Illinois' actual costs, he evaluated, on a forward-looking basis, what service [*10] ordering or line connection activities would be minimized or eliminated in a forward-looking environment over the next 3 years. For each activity, Mr. Florence evaluated an average duration time; a probability of occurrence; a weighted average activity duration (based on the probability of the occurrence); a forward-looking factor; and a forward-looking activity duration. For example, Schedule RJF-1 shows that the actual, average time to review work lists and select ASR is 1.24 minutes. This activity occurs 100% of the time. However, in evaluating the amount of time this activity takes, the cost experts applied a "Forward-Looking Factor" of 25%. The application of this factor resulted in a "Forward-Looking Activity Duration" of 0.31 minutes. On Schedule RFJ-1, the forward-looking factors range from 0% (indicating the activity will be eliminated in a forward-looking environment) to 100% (indicating the activity will continue with its current average duration time in a forward-looking environment).

On Schedule RJF-1 alone, the weighted average forward-looking factor is approximately 25%. Other work papers developed by Mr. Florence and his team reflected similar reductions.

By breaking [*11] down the service center process flow for loops into multiple activity steps, Mr. Florence's work papers also enabled the cost reviewer to conduct a side-by-side comparison of work process flows in a current versus a forward-looking environment. For example, Mr. Florence's work papers describe how a telecommunications carrier sends an ASR (service request) to Ameritech Illinois; how they are processed; and the actions a service representative must take. Based on a forward-looking overlay, Mr. Florence's work papers also showed how the same function would be performed in a forward-looking environment.

In addition, in order to achieve a more accurate representation of its costs, Ameritech Illinois divided its service ordering costs on the basis of whether they involve simple or complex line ports and an analog or digital unbundled loop. For instance, Mr. Florence testified that service representatives spend considerably more time processing digital loop and complex line port orders in comparison to analog loop orders and basic line port orders. Thus, in order to avoid increasing the charges to CLECs which order simple UNEs, Ameritech Illinois developed separate charges to support more [*12] complex UNE orders.

Mr. Florence's nonrecurring cost studies also included "complex dispatch costs." Ameritech Illinois proposed to recover these costs in the Company's line connection charge, because the Company proposed in Docket No. 99-0593 to eliminate these types of complex dispatch costs from so-called "special construction" rates. Specifically, the types of complex dispatch costs that the Company seeks to recover are as follows: (1) line and station transfer costs; (2) clearing defective pairs costs; (3) wire out of limits costs; and (4) break and connect through costs.

b. Staff Position

As an initial matter, Staff notes that it appears that Ameritech's filing goes well beyond the scope of the recalculation that the Second Interim Order directed. There, the Commission directed Ameritech to "recalculate its service ordering costs based on a primarily automated process, and resubmit those service ordering costs for further review and approval." Second Interim Order at 89. The Commission stated that Ameritech could comply with this direction by either conducting a time and motion study, or by relying upon labor estimates of subject matter experts ("SMEs") in developing [*13] the new cost study. Id.

Rather than undertake either of these steps, Ameritech submitted entirely revised service ordering ("SO") cost studies for unbundled analog loops and unbundled digital loops, as well as ULS line ports and ULS trunk ports. Staff Exhibit No. 1.0 at 11. While these studies purport to show significant reductions in SO costs associated with unbundled analog loops, Staff Exhibit No. 1.0 at 12-13, the studies also indicate very substantially increased costs associated with SO costs for digital loops, and proposes an entire new rate structure for digital loop SO functions. Staff Exhibit No. 1.0 at 13-14. This new rate structure adds three new charges, and results in an increase in digital loops SO charges which is greater than 24 times the original charge. Id.

Staff finds it extraordinarily difficult to reconcile this with the Commission's injunction to Ameritech to "recalculate its service ordering costs based on a primarily automated process[.]" Second Interim Order at 89. According to Staff, what Ameritech submitted is not a "recalculation of its service ordering costs[,]" but rather a wholesale revision of its SO rate structure. Moreover, the Commission [*14] and Staff, in the TELRIC dockets, clearly believed that Ameritech's SO costs reflected significantly more manual intervention than was necessary; in other words, they were excessively labor intensive. Second Interim Order at 88-89. Ameritech's response to this has been to propose a rate structure for digital loops, which adds several processes, several work groups, and hours of labor time to the process. Staff Exhibit No. 1.0 at 13-17. Staff concludes that Ameritech's submission with respect to SO for digital loops accordingly does not comply with the Second Interim Order, and it urges the Commission to so find. The Staff recommends that digital loop SO charges should remain at the levels at which they were set prior to this revision, adjusting for increased efficiencies associated with a lesser degree of manual intervention. *See* Staff Exhibit No. 1.0 at 14.

Assuming for the sake of argument that the Commission finds Ameritech's wholesale revision of its SO rate structure for digital loops to comply as to form with the Second Interim Order, Staff argues it still contains significant flaws. The labor estimates in Ameritech's proposed cost study appear to be excessive. Staff [*15] Exhibit No. 1.0 at 15. While the record is replete with evidence of this, *see, e.g.,* Staff Exhibit No. 1.0 at 14-17; MCI WorldCom Exhibit No. 2.0 *generally,* perhaps the clearest evidence of this is the fact that the costs for the identical service charged by Ameritech to its retail customers is less than one-half of what it charges CLECs. Staff Exhibit No. 1.0 at 16-17. This is particularly incongruous, inasmuch as the workgroups and work activities associated with provisioning a digital line to a retail cus-

tomer ought logically to be the same as those associated with provisioning a digital line to a CLEC for resale. Staff Exhibit No. 1.0 at 17. The costs associated with such provisioning should therefore be the same or similar, but are not. Id. Accordingly, the Commission should not accept Ameritech's labor estimates for SO associated with digital loops.

In addition, Ameritech has developed a separate SO charge for an unbundled loop when it is ordered as part of the UNE-P, consisting of two elements: (1) UNE-P SO and (2) ULS port SO charge. Staff Exhibit No. 1.0 at 19. These charges appear to recover the same computer-ordering costs twice. Id. To the extent that this [*16] is true, the Commission should permit recovery of these costs only once.

In terms of line connection ("LC") charges, in the Second Interim Order, the Commission stated:

> AT&T/MCI argued that Ameritech Illinois' line connection charge is inflated due to excessive labor costs. Dr. Ankum therefore proposes a 50 percent reduction in Ameritech Illinois' labor costs, and Mr. Henson calls for the formal time-motion studies. Essentially, the focus of disagreement is the time estimate for manual intervention in the coordination activity. As we indicated in our discussion of the service order charge, we are dissatisfied with the backup support for Ameritech Illinois' calculations. Accordingly, we shall adopt Dr. Ankum's suggestion that the labor estimate be reduced by 50% until such time as Ameritech Illinois provides more support for a different rate (emphasis added).
>
> Second Interim Order at 90.

Again, Ameritech has elected to "comply" with this requirement by substantially revising the rate structure as well as the cost elements that it recovers through its LC charge. Staff Exhibit No. 1.0 at 21. The revisions in question are similar to, but rather more egregious than, the [*17] revisions Ameritech proposes for SO. Ameritech's revisions include a significant (in excess of 50%) *increase* in labor estimates associated with LC for analog loops, including the addition of several work groups to the process. Staff Exhibit No. 1.0 at 22. This increase is coupled with a *nearly 16-fold increase* in the labor estimates associated with LC charges for digital loops. Id. In addition, Ameritech has included so-called "complex dispatch" costs in its LC charges. Id.

"Complex dispatch" includes line and station transfer, clear defective pairs, wire out of limits, and break connect through, cost elements for which Ameritech previously recovered its "costs" through special construction charges. Staff Exhibit No. 1.0 at 23. Ameritech now proposes to recover additional cost elements pertaining to "complex dispatch" activities through the LC charge, having previously attempted to recover the "costs" for these activities through special construction charges, Id.

According to Staff, Ameritech's tactic here is brazen but futile. In Illinois Commerce Commission on Its Own Motion v. Illinois Bell Telephone Company: Investigation into Special Construction Charges, [*18] ICC Docket No. 99-0593, the Commission prohibited Ameritech from recovering costs for *these very same rate elements* -- line and station transfer, clear defective pairs, wire out of limits, and break connect through -- stating that Ameritech was already recovering these costs through its TELRIC rates. The Commission further indicated that these costs were not assessed retail customers and could not be assessed against purchasers of UNEs, unless and until retail customers paid the same charges. ICC Docket No. 99-0593, Final Order at 61-2 (August 15, 2000). The Commission admonished Ameritech that it could not "avoid scrutiny of these costs by relabeling them and attempting to recover [them] in a different manner." Id. at 60. Because, according to Staff, Ameritech is attempting to do in this proceeding precisely what the Commission, in Docket No. 99-0593, directed it to refrain from doing, the Commission should prohibit recovery of "complex dispatch" charges in this proceeding, just as it has already dome in Docket No. 99-0593.

Ameritech's proposed LC charges also present problems similar to those identified with respect to SO charges. First, there is the issue of labor estimates. [*19] Ameritech's labor estimates in this proceeding indicate that it takes over four times as long to run a jumper as it did in 1998. Staff Exhibit No. 1.0 at 22. Likewise, the work group responsible for disconnect activities now takes six times as long to carry out this operation as it did in 1998. Id. at 22-3. These routine activities do not appear to be such as would become more complex and time-consuming over time. The labor estimates for LC associated with digital loops appear to be similarly inflated, including extraordinarily long time estimates for such mundane activities as contacting customers. Id. at 27-30. Accordingly, the labor estimates proffered by Ameritech in this proceeding must be viewed with suspicion. The Staff recommends that the Commission reject them.

MCI WorldCom witness Earle Jenkins proposes alternative labor estimates (described in detail more fully below) for the activities described above. MCI WorldCom Exhibit No. 2.0 at 59-60. The Staff recommends that the Commis-

sion adopt these labor estimates, and direct Ameritech to use them in developing the costs in question. Staff Exhibit No. 1.1 at 34.

c. Intervenors' First Alternate Position

AT&T witness [*20] Dr. Selwyn testified that nonrecurring charges (NRCs") are the fees paid by a customer to a telephone company in order to establish service, or to subsequently modify an existing service in some way. In contrast to the monthly recurring charges associated with an ongoing telephone service, Dr. Selwyn noted that NRCs are typically assessed and paid on a one-time basis, i.e., at the time that a service request is made. The instant proceeding concerns Ameritech's NRCs (and supporting cost studies) for activities associated with the provision of UNEs, to new entrants. Dr. Selwyn explained that the general categories for these wholesale NRCs include pre-ordering, UNE ordering, UNE provisioning (installation), and changes to an existing UNE service. Each time a CLEC must obtain one or more UNEs from Ameritech in order to serve an end user customer, Dr. Selwyn points out that the CLEC will have to pay Ameritech's NRCs, even before the CLEC collects any revenue from that end user. Selwyn Direct, AT&T Ex. 2.0, p. 4.

As a general matter, Dr. Selwyn testified that nonrecurring charges for Incumbent Local Exchange Carrier ("ILEC") bundled services and UNEs should be based upon the forward-looking [*21] economic cost of executing these transactions, assuming the most efficient use of currently available integrated operations support systems ("OSS"). The economic standard that ILECs are required to apply when calculating nonrecurring charges for providing services and unbundled network elements to CLECs is set forth at Section 252(d)(1) of the Telecommunications Act of 1996 ("Act"), which states that these costs should be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element." This requirement, Dr. Selwyn asserts, has been interpreted by the FCC and various state utility commissions to mean that the basis of these costs must be those elements' total long-run incremental cost. Dr. Selwyn testified that this methodology appropriately captures the true economic cost of such elements and is embodied in the Non-Recurring Cost Model ("NRCM") jointly preferred by MCI WorldCom and AT&T.

i. NRCs Should Be Least Cost and Forward Looking

AT&T witness Mr. Turner testified that, based upon his understanding that the study should reflect forward-looking, efficient costs, a major assumption is [*22] to understand and utilize forward-looking network element technologies of the network architecture supporting recurring rate development. Nonrecurring costs should be based on a network architecture that takes advantage of intelligent, processor-controlled network elements that can communicate over standard interfaces to the OSS systems in such a manner that little or no manual intervention is required for provisioning or maintenance activities. These technologies, Mr. Turner stated, work hand in hand with the OSS to minimize cost and improve customer service. Turner Direct, AT&T Ex. 1.0, p 8.

In addition, Mr. Turner noted that any work functions that do occur must be consistent with efficient processes. For example, he explained that technicians are capable of handling multiple tasks so there should be no assumption that each order requires a separate trip by the technician. Some central offices are staffed 24 hours a day, while others are not. When work is required in these non-staffed offices, the employees are dispatched with several jobs at one time. Cost estimates, Mr. Turner asserted, should not be based on the assumption that employees perform work on one order on each trip. [*23] Factors such as "quantity of orders per dispatched trip" and "ratio of lines served by non-staffed central offices" affect the costs to be assigned to any one order. Turner Direct, AT&T Ex. 1.0, p 8.

ii. Fully Integrated OSSs

AT&T emphasized that it is crucial that any nonrecurring cost study or model assume the use of the most efficient, fully integrated Operational Support Systems, or OSSs, between the CLECs and Ameritech, thereby permitting CLECs to transact business with Ameritech via an electronic interface. In fact, AT&T points out that this Commission rejected Ameritech's proposed nonrecurring charges in its Ameritech TELRIC Order (p. 89) due to the fact that its cost studies were not based on the use of "fully automated interfaces." AT&T/MCI WorldCom Initial Brief, pp. 18-19.

Mr. Turner explained that Operational Support Systems, or OSSs, are computer programs and databases that telephone companies use to manage the functions of preordering, ordering, provisioning, repair, maintenance, and billing processes for both their retail and wholesale operations. Mr. Turner noted that software programs and databases, if properly maintained, can and do operate in a highly automated, [*24] accurate, and rapid manner with little to no human intervention. OSSs can be run efficiently by employing systems on current releases, providing proper hardware and software maintenance, and maintaining accurate data in the databases. Mr. Turner explained that OSSs replace and integrate myriad separate, often manual, activities, instead providing electronic interfaces ("gateways") between service

ordering and service provisioning functions, integration and coordination of multiple customer and operations databases, fault identification, maintenance tracking, and resolution; and ongoing network performance monitoring and reporting.

Mr. Turner testified that OSSs have a very significant impact on nonrecurring costs since the major drivers of nonrecurring costs are labor times and labor rates. In terms of "system solutions," significant advances have been implemented over the last several years that minimize the need for manual labor (and nonrecurring costs) when these systems and their databases are efficiently operated and maintained. Not so long ago, Mr. Turner pointed out, functions such as processing a service order were very labor intensive, requiring constant human intervention [*25] to update manual inventories and physically complete each and every order. Today, however, the combination of newer plant installation practices (such as dedicated facilities) and databases existing within an ILEC's OSS architecture allow ordering and provisioning to occur with almost no need for human intervention. Turner Direct, AT&T Ex. 1.0, p. 12. Thus, according to Mr. Turner, the NRCs that are charged to CLECs should reflect these facts. Turner Direct, AT&T Ex. 1.0, pp. 14-15.

More broadly, Mr. Turner testified that OSSs permit increased utilization of plant resources through improved inventory management; reduce, and often eliminate, opportunities for error and "fallout;" improve the rapidity and accuracy with which network faults can be identified and corrected; reduce and in many cases eliminate the need for on-site inspections and repairs; improve labor productivity overall; and improve demand forecasting and construction planning, and postpone or even eliminate some relief jobs through application of "just in time" inventory management techniques. Turner Direct, AT&T Ex. 1.0, pp. 12-13.

iii. NRCs can be Barriers to Market Entry

AT&T witness Dr. Selwyn testified that [*26] Ameritech does not incur any nonrecurring costs in order to retain existing customers. Because the competitive era commences with ILECs possessing virtually a 100% market share, Dr. Selwyn explained that, at least initially, any nonrecurring charges imposed upon the carrier obtaining a local service customer from another carrier will fall almost entirely on new entrants. The difference in cost burden associated with nonrecurring charges between incumbents and entrants thus creates a "barrier to entry" in the local exchange market. Thus, Dr. Selwyn emphasized, a barrier to entry occurs whenever an entrant faces a cost that the incumbent does not face. Selwyn Direct, AT&T Ex. 2.0, p. 7.

Dr. Selwyn noted that a barrier to entry also arises whenever a cost that an entrant must incur in order to compete with the incumbent will be "sunk" once it has been incurred. A sunk cost is a cost that is incurred for which the entrant does not acquire an asset with a reuse value at least as great as its cost. Dr. Selwyn explained that the reason that sunk costs create a barrier to entry is that investors, recognizing that the costs once incurred will be sunk, require a higher expected return before [*27] they will make the investment to compensate for the risk that the investment might be unprofitable. By definition, up-front charges, once paid, will be sunk. The incumbent, Dr. Selwyn noted, will not refund these charges if an entrant is not successful in the marketplace. Thus, Dr. Selwyn reasoned, these payments produce no reuse or resale value for the entrant in the event that the specific purpose for which they were incurred fails to materialize. For this reason alone, nonrecurring charges create a barrier to entry. Selwyn Direct, AT&T Ex. 2.0, pp. 7-8.

The higher the nonrecurring charge, Dr. Selwyn testified, the higher the barrier to entry, and the smaller the chance for effective competitive entry by CLECs. Dr. Selwyn pointed out that Ameritech's current Winback Promotion for Business Network Access Lines allows Ameritech to waive its own nonrecurring charge of $ 52.35 in the event a business customer returns from CLEC-provided local service back to Ameritech. Given this competitive reality, Dr. Selwyn urged the Commission to be very careful to ensure that the nonrecurring charges CLECs pay to Ameritech are forward looking and efficient so as not to create an unreasonable barrier [*28] to entry. Nonrecurring charges that overstate costs will only preserve and protect the current retail market share of Ameritech, the incumbent. Selwyn Direct, AT&T Ex. 2.0, pp. 8-11.

Dr. Selwyn testified that the ILEC's goal is to preserve and protect their current retail market share without regard to the economic benefits (evident in other market segments) that may result from the proliferation of resellers and new entrants. One way of achieving this outcome, Dr. Selwyn pointed out, is to set the nonrecurring charges that its rivals must pay at the highest levels it can convince regulators to allow. There are, in fact, a number of means by which an incumbent can overstate the costs that it claims should be recovered through nonrecurring charges. The incumbent can, for example: establish and maintain out-of-date manual procedures for receiving and processing orders that entrants initiate, using these procedures as the basis for calculating costs, thereby raising the per-order cost (to both the ILEC and the entrant); include costs already accounted for in recurring costs into the cost basis for nonrecurring charges; include "competition implementation costs" in the cost basis for [*29] nonrecurring charges imposed on competitors;

and include future "disconnect costs" (some of which may never be incurred at all) in the nonrecurring charge to be imposed at the time that the service is initially provided.

Dr. Selwyn testified that because the only long run, forward-looking, economic costs caused by the demand for UNEs that have not been captured in the recurring cost studies are the costs of the actual transactions leading up to the commencement of service (namely, pre-ordering, ordering, and provisioning), these are the only costs that should be included in nonrecurring cost studies. He reasoned that these costs should be limited to costs that are directly caused by efficient processing of these service transactions calculated on a forward-looking basis assuming the use of fully mechanized operations support systems and accurate and synchronized databases designed to achieve maximum flow-through of each service order. Dr. Selwyn emphasized that: these costs should be calculated using appropriate arithmetic and statistical techniques; assumptions about specific tasks must have some rational basis; and individual activities and tasks must be separately analyzed and disaggregated [*30] so as to minimize the possibility of including costs not related to the specific activities appropriately involved. Selwyn Direct, AT&T Ex. 2.0, pp. 11-12.

As a general principle, Dr. Selwyn testified, nonrecurring costs are in some manner sensitive to an ILEC's volume of individual service-related transactions, whereas recurring costs are those that are sensitive to the aggregate volume of service that the ILEC provides. Dr. Selwin explained that rearrangement costs -- i.e., those costs incurred in rearranging existing plant to meet unanticipated demand in a particular location rather than placing new plant in that location are recurring costs because the cause of the cost is the ILEC's inability to anticipate the precise level and location of demand, rather than the particular customer order or transaction that triggered the rearrangement. Dr. Selwyn noted that while these costs might at first blush appear transaction-driven, these costs are more accurately viewed as substitutes for additional capital investment: if the ILEC has made an efficient choice between the overall size of its plant and the incidence of rearrangements, then all of these costs are property viewed as recurring [*31] in nature. Selwyn Direct, AT&T Ex. 2.0, pp. 12-14.

iv. Competition Implementation Costs

Dr. Selwyn defined competition implementation costs as those costs incurred by incumbent LECs (and, for that matter, by all other industry participants) specifically to comply with federal and state legislative and regulatory obligations to accommodate entry and to operate cooperatively in a multi-carrier industry environment. He noted that competition implementation costs incurred (or claimed to be incurred) by the incumbent LEG should not be recovered in nonrecurring charges imposed solely upon new entrants. To the extent that such costs would not otherwise have been incurred in the routine course of doing business (e.g., to generally upgrade and improve the efficiency of the ILEC's operations support systems), competition implementation costs should be recovered in a competitively-neutral manner, first, so as not to disproportionately burden new entrants, and second, in recognition of the fact that all consumers of telecommunications services are expected to benefit from an effectively competitive telecommunications market, whether such customers take service from a new entrant or continue [*32] to be served by the incumbent LEG. Selwyn Direct, AT&T Ex. 2.0, pp. 14.

Dr. Selwyn maintained that to permit the recovery of competition implementation costs solely from new entrants would violate the principle of "cost causation" in incremental costing. The "cost causers" here are regulatory requirements necessary to open the monopoly market to competition, not, Dr. Selwyn noted, individual competitors. He explained that competition implementation costs, to the extent actually incurred, arise because of a need for changes to what in a monopoly environment would be the forward-looking, most-efficient plant and equipment necessary to facilitate the transition to competition. These costs are caused by the transition from monopoly to competition, and not by any particular competitor. The costs that fall into this category are those that the incumbents would incur to permit entry to occur no matter which firm is the first (or second, etc.) to enter. To the extent that an incumbent actually incurs such costs, Dr. Selwyn argued that the amount minimally necessary to efficiently accomplish the required modifications should be recovered in a competitively neutral manner, in order to ensure [*33] that the costs necessary to permit competition are not used to prevent competition. If any of these implementation costs are included in nonrecurring charges imposed upon entrants for their use of UNEs or resold services, Dr. Selwyn asserted, competition would be impeded or prevented as a consequence of the elevated barrier to entry that up-front charges create. Selwyn Direct, AT&T Ex. 2.0, pp. 14-15.

v. OSS Upgrades

Dr. Selwyn testified that costs that Ameritech would expect to incur to support its own efficient, least-cost operation should not be included in a non-recurring cost study. He stated that this is particularly true of costs associated with upgrading and modernizing the incumbent's operations support systems. The investment in making an incumbent's OSS

more efficient would be economically justified and, indeed, would be a veritable requirement of any incumbents seeking to compete in any market. The investments associated with OSS upgrades constitute part of the incumbent's normal and necessary costs of doing business, according to Dr. Selwyn and should not be separately recoverable either as competition implementation costs or as nonrecurring charges applicable to [*34] entrants. Operations support system costs, to the extent that they even require specific ratemaking treatment in the first place, should be recovered in recurring rates, appropriately adjusted to reflect the salutary effects of the new integrated systems in reducing operating expenses overall. Dr. Selwyn pointed out that ILEC investment in integrated OSS improves the efficiency with which the incumbents themselves operate. The incumbents thus should have every incentive to invest in such systems, Dr. Selwyn reasoned, and would be (and indeed, have been) doing so even without the requirement that they offer UNEs and wholesale services to competitors. Selwyn Direct, AT&T Ex. 2.0, pp. 16-17.

Dr. Selwyn testified that while OSSs support both ongoing operations of the incumbent carrier as well as the fulfillment of specific service transactions, the costs of these systems are driven primarily by aggregate retail and wholesale service volumes -- number of access lines, number of interoffice trunks, number of central offices, number of minutes, etc. -- rather than by the volume of service-related transactions. Thus, Dr. Selwyn reasoned, even though OSS resources facilitate service-related [*35] transactions, the aggregate costs of OSS deployment are not themselves materially driven or affected by the total volume of transactions that these systems are expected to accommodate. While the total cost of OSS deployment may, in theory, be slightly affected by the aggregate volume of service initiation/disconnection/ modification transactions and by the incremental costs, if any, of accommodating new entrant access to the incumbent's OSS, it is likely that the actual impact of these latter two cost drivers is extremely small.

vi. Pre-Ordering, Ordering and Provisioning Costs

Dr. Selwyn testified that cost estimates for transaction functions should consist only of the costs of actually performing the tasks required to provide pre-ordering, ordering, and provisioning. To perform the three transaction functions of pre-ordering, ordering, and provisioning, incumbent local exchange carriers use labor, software, computers, and power. Dr. Selwyn opined that the capital costs for equipment used to perform the transaction functions should be treated as recurring costs. Selwyn Direct, AT&T Ex. 2.0, pp. 25-26.

Conceptually, Dr. Selwyn testified, estimating each of these separate transaction [*36] nonrecurring costs -- pre-ordering, ordering, and provisioning -- is fairly straightforward. To arrive at an estimate of each of these costs requires a list of steps necessary to accomplish each function. Dr. Selwyn explained that the nonrecurring cost is the sum, for all of the steps involved in whichever one of the three functions is under study, of the time required to complete a step times the frequency with which that step must be taken times the labor cost of any manual activity required to complete that step. These cost estimates, Dr. Selwyn asserted, must consider only forward-looking incremental costs, must employ the most efficient, least-cost and forward-looking technologies available, must attribute costs on a cost-causative basis, and must define the "long run" as a period long enough so that all costs are treated as variable and avoidable. Selwyn Direct, AT&T Ex. 2.0, pp. 26-27.

vii. Flow Through and Fallout

Dr. Selwyn pointed out that once electronic access to the OSS of the incumbent is established, the incumbent no longer incurs pre-ordering costs on orders initiated by entrants. Sales and service representatives employed by the entrant will capture the required [*37] pre-ordering information through contact with the customer and through on-line access to the customer's existing service record with the incumbent, and will format and electronically submit the service order to the incumbent for processing. Thus, opined Dr. Selwyn, there should be no nonrecurring cost to the incumbent for pre-ordering activities initiated by the entrant. Selwyn Direct, AT&T Ex. 2.0, pp. 28-29.

Dr. Selwyn noted that with electronic access to the OSS of the incumbent in place, the only cost for processing service orders that the incumbent will incur is the cost of transmitting orders electronically to the various functional units of the incumbent where the components of the requested service are assigned and assembled. As with pre-ordering, except for minimal computer processing costs associated with transmitting the ordering transaction, the incumbent will incur very low costs for handling service orders themselves, prior to going on to provisioning. The only nonrecurring service order cost (as opposed to recurring costs of the OSS, which should be recovered elsewhere) that remains, even with forward looking, least-cost OSS, is generated by the few orders containing [*38] errors requiring manual correction. Dr. Selwyn continued that it would not comply with the Commission's Costing Principles to charge entrants for manual activity that is caused by errors in incumbent OSS databases or because databases that are supposed to be synchronized and coordinated are in conflict. Indeed, he noted that the incumbent provider is the primary beneficiary of

correcting database errors because, in subsequent service provisioning activities, the facility is more likely to be used by the incumbent than by a new entrant. Selwyn Direct, AT&T Ex. 2.0, pp. 29-30.

Regarding provisioning, Dr. Selwyn testified that the least-cost, forward-looking, most efficient versions of the OSS available to the incumbent (when managed efficiently) allow a very large percentage of service orders to be provisioned after receipt of the order in electronic form through to completion with no manual activity. Dr. Selwyn identified this situation as "flow-through." He explained that flow-through increases when modern OSS are used in conjunction with forward-looking network element technologies. The orders that do not flow through, i.e., those orders that cannot be automatically processed and/or [*39] provisioned, constitute "fallout" from the otherwise mechanized system. The only costs associated with provisioning are the costs that arise from correcting the conditions that resulted in the fallout. Thus, Dr. Selwyn asserted, nonrecurring costs for provisioning depend upon what the forward-looking percentage of fallout would be. This percentage should be estimated under the assumption that the OSS of the incumbent are the least-cost, most efficient versions and that they are being managed in the most efficient manner, i.e., supported by accurate and synchronized data bases. Selwyn Direct, AT&T Ex. 2.0, pp. 30-31.

Dr. Selwyn asserted that maintaining synchronized databases is the key element for any incumbent carrier to ensure flow-through of service orders and minimize fallout. Ameritech, like all ILECs, has had various OSS in place for a number of years, but the older versions of these systems suffer from a number of problems, chief among them being the lack of synchronization. In the past, Dr. Selwyn explained, the databases that contain all of the relevant information about the location, status, characteristics, and condition of specific network elements were separate, and not [*40] always either accurate or synchronized with the other databases that must also be consulted to provision a service order with complete flow-through. Dr. Selwyn pointed out that the lack of clean or synchronized databases does not complicate matters solely for new entrants: indeed, a considerable number of the incumbent's own retail service orders fall out due to poorly maintained databases. Selwyn Direct, AT&T Ex. 2.0, p. 31.

AT&T witness Turner testified that by cleaning up and maintaining its databases, Ameritech will greatly reduce fallout and will experience significant cost benefits. Moreover, Mr. Turner noted that Ameritech will also be able to reduce the number of its own end user services that fallout due to the unavailability of facilities because cleaning up the databases will give the incumbent more accurate information about its facilities and the rates of growth of use of those facilities in geographic specificity. This will also lower the incumbent's costs because it will enable a higher fill level on facilities. Turner Direct, AT&T Ex. 1.0, p. 17.

AT&T and MCI WorldCom maintain that calculating nonrecurring costs based upon a forward-looking, least-cost methodology [*41] requires that these cost estimates use a fallout percentage that would prevail if Ameritech had cleaned up its databases and implemented the necessary work procedures and additional systems to ensure that they remain clean, even if they have not yet done so. AT&T witness Dr. Selwyn testified that if Ameritech deploys forward-looking OSS with clean and synchronized databases, a very high percentage of CLEC orders could be provisioned electronically, with no manual steps and the percentage of fallout would be very small and almost nonexistent. Selwyn Direct, AT&T Ex. 2.0, p. 34.

AT&T and MCI WorldCom contend that existing ILEC systems with high flow-through capability illustrate the low degree of fallout that is not only possible, but, in fact, achievable using Legacy OSSs when an ILEC makes an effort to control fallout. In fact, AT&T witness Mr. Turner points out that Ameritech affiliate Southwestern Bell Telephone Company ("SWBT") has widely touted the high flow through capability of its Easy Access Sales Environment ("EASE") system. According to SWBT, Mr. Turner noted, the EASE system allows for 99% flow-through of orders for new entrants. This system is used today for resale of the [*42] incumbent's services when an end-user customer migrates from SWBT to the new entrant. As AT&T witness Mr. Turner, testified, SWBT has indicated that in the near future, it expects to achieve the same 99% flow-through for unbundled network elements through similar gateway systems. SWBT expects only 1% of the orders will fallout and require a request for manual assistance for resolution. Likewise, Pacific Bell has reported that its overall fallout rate for all types of retail service orders is only 5 percent. Turner Direct, AT&T Ex. 1.0, p. 21.

Dr. Selwyn urged the Commission to prohibit Ameritech from violating the least-cost, forward-looking method of calculating costs by either claiming as appropriate an excessive fallout rate based upon contaminated and inconsistent databases or by attempting to impose the costs of database clean-up and synchronization on CLECs as competition implementation costs. Dr. Selwyn opined that these costs have no place in a forward-looking cost study. He explained that these clean-up costs are not caused by the arrival of CLECs or competition. Rather, because Ameritech uses these same OSSs to provision its pre-existing retail services and the ongoing operation [*43] of its network, the database clean-up

cost and effort would be and is justified entirely upon efficiency grounds. In addition, Dr. Selwyn noted that CLECs will be deploying modern systems and databases and Ameritech will need to respond in order to compete. Accordingly, Dr. Selwyn emphasized that these costs are not caused by CLECs, and urged this Commission to prohibit Ameritech from charging CLECs for them. Selwyn Direct, AT&T Ex. 2.0, pp. 33-34.

viii. Recurring Cost Study Assumptions

AT&T and MCI WorldCom emphasized that it is crucial that the assumptions and technologies used in Ameritech's nonrecurring cost studies are consistent with those used in its recurring cost studies. AT&T points out that by Ameritech's own admission, they are not because they were done at different times resulting in different Ing run horizons. Tr. 391-392. Dr. Selwyn explained that the assumptions used for recurring cost estimates (e.g., assumptions regarding network architecture and OSSs) should be the same assumptions used when estimating nonrecurring costs for that same architecture and OSSs. This consistency, Dr. Selwyn asserted, contributes to the high rate of flow-through and minimal fallout [*44] rates when calculating nonrecurring costs. Selwyn Direct, AT&T Ex. 2.0, pp. 35, 41-42.

iv. Disconnect Costs

AT&T and MCI WorldCom also emphasized that it is essential that when a CLEC purchases UNEs or wholesale services, the disconnect costs are not included in the connection costs. Dr. Selwyn recognizes that it is a long-standing practice among ILECs to set nonrecurring installation charges for retail services to recover both the costs of connecting the service and disconnecting the service given that it may difficult or impossible for an ILEC to recover disconnect costs from the end user once the customer departs. However, Dr. Selwyn points out that while these connect and disconnect costs have been combined for retail pricing purposes, these activities are separate and distinct from an economic perspective and the costs for disconnecting a service should be captured separate from the costs of connecting service. Selwyn Direct, AT&T Ex. 2.0, p. 36. AT&T contends that any effort to include disconnect costs in the connection charge would only raise the entry barrier even higher.

x. The NRCM

AT&T and MCI WorldCom maintain that only the AT&T/MCI Nonrecurring Cost Model ("NRCM") [*45] complies with this Commission's goal and directive of establishing nonrecurring costs that are least-cost, forward-looking and most efficient and in compliance with the principles of TELRIC costing to Ameritech Illinois. TELRIC Order, pp. 88-90. Dr. Selwyn testified that the NRCM provides costs for all transaction cost categories discussed above, and its results can be substituted for the noncompliant studies submitted by Ameritech in this proceeding. He pointed out that the NRCM assumes that all interactions between CLECs and ILECs, including Ameritech, will use electronic interfaces as required by the FCC. It assumes that the CLEC's service order personnel have access to the ILEC's OSS so that accurate pre-ordering information is available to them to the same extent it is available to the ILEC's service order personnel, thereby eliminating any pre-ordering activity on the ILEC's behalf and the need for the ILEC to retype or manually review the CLEC's order. The NRCM assumes that the electronic interfaces permit the CLEC to identify and correct errors before the order is submitted, and that once submitted, the orders will flow electronically into the ordering systems of the ILEC [*46] and from there on for provisioning. Selwyn Direct, AT&T Ex. 2.0, pp. 42-43.

Dr. Selwyn noted that the NRCM also assumes that the ILEC is using modern OSS with accurate and synchronized databases, thereby reflecting a much lower and realistic fallout assumption of 2% -- much lower than Ameritech's studies show. The NRCM further assumes that network elements are provided using forward-looking technology, rather than the actual existing network technology Ameritech assumed in its nonrecurring cost studies. Tr. 389, 392. Moreover, the NRCM examines each of the steps that would be necessary to order and provision the UNEs it studies in the most efficient manner. Finally, it studies disconnect costs separately from the costs of ordering and provisioning services. Selwyn Direct, AT&T Ex. 2.0, pp. 43-44.

In developing the NRCM, AT&T and MCI relied upon the judgment of subject matter experts in developing the assumptions about the minimum steps necessary to take a service order from electronic receipt through provisioning. AT&T arranged for its subject matter experts to spend several days at seminars with economists, including AT&T witness Dr. Selwyn, to explore the economic principles that [*47] a proper nonrecurring cost model should reflect, and then discuss the application of those principles to specific examples of activities that various ILECs had included in their own nonrecurring costs estimates. The subject matter experts then took these economic principles and applied them in reaching their decisions about what constitutes forward-looking OSS and what the efficient requirements would be using forward-looking OSS.

AT&T witness Mr. Turner testified that the NRCM correctly applies forward-looking long-run economic principles by assuming a network engineered using forward-looking technologies and efficient processes. More specifically, he explained that the NRCM assumes: (1) a network engineered using forward-looking technologies and efficient processes including: the use of Local Digital Switches, GR-303 IDLC for loops served by a fiber feeder, DCS, SONET rings for transport, and a low profile, punch down block main distributing frame ("MDF") for terminating copper loops in the central office. These technologies are important, Mr. Turner asserted, because they use intelligent processor controlled network elements that can communicate over standard interfaces to the [*48] OSS such that little or no human intervention is required for provisioning and maintenance activities. Turner Direct, AT&T Ex. 1.0, p. 26.; (2) an electronic ordering interface between the CLEC and the ILEC that incorporates frontend edits to minimize service order errors and the ability for those errors to be returned electronically; (3) an efficient OSS environment with unpolluted databases to minimize fallout, which results in a system wide fall out figure of 2%; (4) electronic provisioning where possible; (5) POTS services are non-designed services; and (6) OSS investment and maintenance costs are recovered in recurring rates. Mr. Turner noted that the NRCM develops cost estimates for the different nonrecurring functions by identifying and estimating the associated costs of each activity that will be performed by an ILEC when a CLEC requests an unbundled network element. By identifying and estimating costs associated with each activity, the NRCM develops a "bottoms-up" estimate of non-recurring costs. Turner Direct, AT&T Ex. 1.0, p. 22.

The methodology employed by the NRCM to determine nonrecurring costs is quite simple, Mr. Turner asserted. First, Mr. Turner explained, all of [*49] the activities required to complete a Local Service Request or LSR are identified and listed. Second, for each activity, based on the consensus of the NRCM panel of experts, an estimate is provided of the amount of time (in minutes) required to perform each activity. Third, once the activity time has been determined, the work group associated with that type of labor is consulted to determine what the labor cost would be. Fourth, since some activities may not have to be performed in all instances (for example, some activities that are required when using an unbundled copper loop are not required when using an unbundled fiber loop), the model also incorporates the probability of an activity happening. The same NRCM panel of experts, Mr. Turner noted, each having decades of relevant telecommunications experience, collectively discussed and reached consensus on the activities, probabilities, and work time estimates included in the model. A labor rate expert, Mr. Turner pointed out, working with all the technical experts to determine the appropriate class of labor associated with each activity, helped develop the labor rates. Turner Direct, AT&T Ex. 1.0, p. 23.

Fifth, Mr. Turner testified [*50] that the NRCM calculates the cost of each of the activities comprising a NRC Element Type using the following formula: Activity Cost = Activity Probability * Time (Minutes) * Rate ($ /Hour) / 60. *Id.*

Sixth, Mr. Turner pointed out that the model sums the costs of the activities for each element type and then applies an Illinois-specific variable overhead factor to convert the calculated cost to a price proposal. This input, Mr. Turner explained, represents the loading factor for variable overhead expenses not already captured in the model. As indicated earlier, while the NRCM relies upon the judgment of experts for the activities required to perform each function, the probability that each activity will be performed and the amount of time required to perform each activity, these judgments are based on the consensus of a number of experts with vast industry experience. Mr. Turner noted that the NRCM model currently calculates preordering, ordering, provisioning, and disconnecting nonrecurring costs for 49 Network Element types. Turner Direct, AT&T Ex. 1.0, pp. 23-24.

Mr. Turner pointed out that one of the types of activities for which the NRCM calculates nonrecurring costs are migration [*51] activities. He explained that migration occurs when the CLEC requests that the existing services and facilities for a customer of Ameritech to be moved to the CLEC. AT&T Ex. 1.0, p. 24. The NRCM calculates nonrecurring cost for 11 unique migration element types. AT&T Ex. 1.0, p. 27.

To provide the Commission with an example of how the NRCM establishes nonrecurring costs for migration, Mr. Turner described Type 6 migration -- migration when a customer migrates its service to a CLEC and the CLEC orders a UNE-Loop from Ameritech. In this scenario, Mr. Turner explained that the pre-ordering and ordering processes are reasonably expected to flow through Ameritech's OSSs to disconnect the customer from Ameritech's network and assign the customer to the CLEC's network. The NRCM considers two network configurations to connect this customer to the CLEC's network -- Copper and GR-303 IDLC. The NRCM also assumes that the Outside Plant and Network Interface Device, or NID, are in place, or dedicated, and that the cost associated with constructing these are recovered in the recurring rates. The NRCM accounts for the manual activity to cross-connect a 2-wire copper loop at the Central Office (CO). [*52] If service is to be provisioned using GR-303 IDLC, Mr. Turner noted that the electronic cross-connects will be made at the remote terminal to the CLEC channelized DS1, which has been provisioned from the CLEC's collo-

cated space to the remote terminal. The NRCM also assumes that travel to a non-staffed office may be required. Turner Direct, AT&T Ex. 1.0, p. 28.

Mr. Turner testified that times were established for both of these network architectures, and were weighted to 47% and 53% for copper twisted wire pair and GR-303 IDLC, respectively. He explained that copper is generally used for loop feeder lengths of 9000 feet or less and GR-303 IDLC is used for loop feeder lengths greater than 9000 feet. For copper loops, the NRCM assumes the central office technician will pull and analyze the order. It then assumes placement of a cross connect wire between the customer's cable pair and the CLEC's equipment and a continuity test on the customer's cable pair before and after making his/her connection, insuring the service is correct. The NRCM assumes that once the frame connections are made, the central office technician will have to close out the order in the OSS. Turner Direct, AT&T Ex. [*53] 1.0, pp. 28-29.

Mr. Turner pointed out that the NRCM also recognizes that the CLEC will purchase channelized DS1 capacity (virtual feeder) at the remote terminal for IDLC. In addition, the Model assumes labor rates associated with Non-Designed 2-wire loops. The Model did not assume Circuit Provisioning Center ("CPC") or Special Services Centers ("SSC") because, Mr. Turner noted, these centers are not associated with 2-wire loops. Turner Direct, AT&T Ex. 1.0, p. 29.

If an order falls out in Ameritech's provisioning process, Mr. Turner explained the NRCM estimates the costs associated with the manual time required to resolve fallout problems. He noted that the time to analyze and resolve the problem by a technician is 17.5 minutes, which is an average work time for the activities being performed. *Id.*

Mr. Turner testified that the NRCM calculates costs differently when an end user migrates to a CLEC using unbundled elements purchased in combination. When a CLEC purchases UNEs in combination, e.g., Loop and Port, he explained that the Model assumes Ameritech will assemble the UNEs in the most efficient manner. NRCM Element Type 3: POTS/ISDN BRI Migration (UNE Platform) is used [*54] to calculate these costs. The activities to migrate a customer using the UNE Platform are accomplished electronically through the electronic gateway and the ILEC's OSSs. Thus, Mr. Turner asserted, the cost for a migration order is potentially processing time only. Turner Direct, AT&T Ex. 1.0, pp. 29-30.

Where an order falls out in this scenario, Mr. Turner pointed out that the NRCM assumes that an OSS will clear some problems without manual intervention, again resulting only in the cost for processing time. In addition, he explained that the NRCM estimates the costs associated with 17.5 minutes of manual technician time required to resolve fallout problems which, again, is an average work time for the activities being performed. Turner Direct, AT&T Ex. 1.0, p. 30.

Mr. Turner testified that for a Platform migration, all necessary facilities, including Inside Plant at the Central Office, are assumed to be in place, or dedicated. Therefore, he explained that there is no need for the NRCM to include any cross-connect activities. Nor is there a need in the provisioning process to negotiate for release of the customer's facilities before the migration since the facilities are already in [*55] place. *Id.*

Mr. Turner testified that the non-recurring costs for installing a two-wire loop for basic service (POTS) or for an Integrated Services Digital Network/Basic Rate Interface (ISDN/BRI) loop are the same because virtually the same ILEC activities are required. Using existing systems, he explained that the only difference between provisioning these loops from an OSS standpoint is that the order for a basic two-wire loop flows to the Telcordia Memory Administration Recent Change ("MARCH") system and the order for an ISDN BRI loop flows to the Architel ASAP system. Both MARCH and ASAP are designed to update the switch automatically. Turner Direct, AT&T Ex. 1.0, pp. 30-31.

Mr. Turner explained that to isolate those costs that are appropriately considered non-recurring, the cross connection for the unbundled loop assumes that Dedicated Outside Plant ("DOP") and the NID are in place; thus, there is no incremental cost associated with cross connections at the Feeder Distribution Interface ("FDI") and customer premises. He pointed out that the costs for installing the drop and NID as well as the associated cross connect costs at the FDI are appropriately included in the recurring [*56] rates for unbundled loops, as also discussed by AT&T witness Dr. Selwyn. Hence, the only cross connect costs modeled as non-recurring costs are the ones at the Main Distribution Frame ("MDF"). Turner Direct, AT&T Ex. 1.0, p. 31.

Mr. Turner testified that the NRCM recognizes that travel to a non-staffed office is periodically required. He explained that the NRCM assumes that when a technician travels to non-staffed offices, he or she will perform more than one activity (e.g., general maintenance, routines, additional provisioning activities) during that visit. The NRCM uses a default value of twenty minutes as the average time it takes to travel to a non-staffed office, and also assumes that the

technician will perform four separate tasks while there. A separate user input variable is built into the model to allow for modification of the default values. Turner Direct, AT&T Ex. 1.0, pp. 31-32.

Mr. Turner pointed out that the activities and costs associated with fallout discussed earlier also apply when calculating the nonrecurring costs for installation. Disconnect costs are modeled separately, Mr. Turner explained, to allow the new entrant the ability to either retain the loop or to [*57] completely disconnect the copper connection, and are appropriately excluded from the nonrecurring costs for installation. Turner Direct, AT&T Ex. 1.0, p. 32.

When both copper twisted pair and GR-303 IDLC technologies are used in the loop architecture, Mr. Turner explained that the NRCM weights the cost of each based on an estimate of the number of loops residing on copper feeder and the number of loops residing on a fiber feeder (e.g., GR-303 IDLC). The MDF cross-connects for loops from a copper feeder are performed manually while the loops from an IDLC are cross connected electronically. Turner Direct, AT&T Ex. 1.0, p. 32.

Mr. Turner testified that the NRCM also calculates appropriate nonrecurring costs for interoffice transport and includes DS1, DS3 and DS1 grooming within the DS3. First, he explained that the NRCM assumes that SONET rings for interoffice transport are the proper forward-looking technology, that such rings are in place and active, and that DS1 and DS3 capacity are virtual paths over the SONET ring. Mr. Turner noted that SONET ring technology has consistently proven to be financially advantageous for network planning and operations savings and is widely deployed [*58] by all major ILECs, including Ameritech. In addition, he emphasized that the features provided by SONET products include robust survivability, restoration, remote management, and proactive monitoring. Turner Direct, AT&T Ex. 1.0, p. 33.

Second, Mr. Turner pointed out that the NRCM assumes the use of forward-looking Digital Cross Connect System/Electronic Digital Signal Cross Connect (DCS/EDSX) technology, based on its remote network grooming, reconfiguration and provisioning capabilities, automatic failure restoration, enhanced performance monitoring, built-in testing, and remote test access capabilities. With the use of EDSX/DCS, Mr. Turner explained that M1/3 Multiplexers are unnecessary. DSX panels, manual cross connects, adjunct test equipment or performance monitoring equipment are also unnecessary since they are incorporated in the DCS/EDSX. Finally, he noted that the EDSX/DCS cross connects are performed electronically and will take approximately 50 milliseconds for CPU processing time with an acknowledgment response within 2 seconds per Telcordia specifications. Turner Direct, AT&T Ex. 1.0, pp. 33-34.

Third, Mr. Turner noted that the NRCM assumptions do not reflect special [*59] access/private line service, but rather designed interoffice facilities transport and, therefore, the entire transport process is controlled by the Facilities Maintenance Administration Center ("FMAC") and not the Special Services Center ("SSC"). Thus, this transport cost reflects ordering capacity only. Turner Direct, AT&T Ex. 1.0, p. 34.

Mr. Turner testified that disconnection occurs when a service to a customer is ended. He explained that the NRCM models disconnection nonrecurring charges separately from installation, as required by sound economic principles. Turner Direct, AT&T Ex. 2.0, pp. 36-37. Mr. Turner pointed out that the disconnect time for removal of an existing cross connect at the MDF in the central office is estimated at thirty seconds, half the time it takes to establish the original cross connect. Turner Direct, AT&T Ex. 1.0, p. 32.

Mr. Turner testified that ILECs, including Ameritech, typically model installation NRC charges to include the cost of disconnection. The NRCM, on the other hand, separates installation and disconnection for costing and pricing purposes. Turner Direct, AT&T Ex. 2.0, pp. 36-37. Mr. Turner explained that this properly reflects cost causation. [*60] Moreover, he noted that the disaggregation of installation and disconnect costs and prices also allows the CLEG the ability to benefit from the long standing and efficient practices with respect to Dedicated Inside Plant ("DIP") and Dedicated Outside Plant ("DOP"). Turner Direct, AT&T Ex. 1.0, pp. 34-35.

Specifically, Mr. Turner testified that the DIP and DOP processes allow for rapid activation or deactivation of services at an end user location without the need for physical disruption of the facility because, with DIP and DOP, physical connections remain in place and only an OSS command to the network element is necessary to activate or deactivate the service. If a new entrant chooses to have service deactivated using only software commands, disconnection NRCs become almost non-existent. Indeed, Mr. Turner noted that Ameritech's current disconnect policy adheres to this practice of DIP and DOP in order to provide immediate service activation to the next customer at that premise. Thus, by modeling the installation separately from disconnection, the CLEC has the same benefits from the DIP and DOP processes as does the ILEC. Turner Direct, AT&T Ex. 1.0, p. 35.

Mr. Turner summarized [*61] that for a competitive environment to exist, CLECs must have nondiscriminatory access to the incumbent's databases and other resources for entering service orders to eliminate the need for costly, in-

termediate customer service contacts. Moreover, he emphasized new entrants must not be required to incur costs any greater that those Ameritech would incur using a forward-looking network architecture and efficient OSSs; otherwise, the nonrecurring charges will constitute an unreasonable barrier to entry and Ameritech will have no incentive to become efficient. Finally, NRCs must be based upon forward-looking long-run economic principles. The NRCM recognizing these requirements, corrects the many faulty assumptions that have been used in ILEC cost studies, including those of Ameritech, and correctly adheres to the following principles: (1) A forward-looking cost model should incorporate the efficiencies of automated OSSs, which provide for maximum electronic flow through of orders; (2) to the extent fallout does occur, it should be no greater than approximately 2% of the total orders processed; (3) manual work times should reflect appropriate intervals based on the use of forward-looking [*62] network technologies; (4) wherever appropriate, service orders should be processed through a non-designed POTS provisioning process as opposed to a more expensive designed services process; (5) a forward-looking cost model should incorporate the efficiencies of automated Intelligent Network Elements (SONET, GR-303 IDLC, DCS/EDSX, LDS, *etc.*) that provide for maximum electronic flow through for provisioning of orders; (6) wherever appropriate, the same work centers, work groups, technicians, and associated labor rates should be modeled at parity with how Ameritech provides similar services to itself; (7) only costs for activities that cannot be reused for future customers should be included as a nonrecurring cost; and (8) installation and disconnection should be calculated separately to account for significant cost differences dependent on a new entrant's disconnect decisions regarding DIP/DOP. Turner Direct, AT&T Ex. 1.0, pp. 36-37.

AT&T and MCI WorldCom maintain that the cost estimates produced by the AT&T/MCI NRCM also conform to the goals and directives established by this Commission to base nonrecurring costs on processes and technologies that are least-cost, forward looking [*63] and most efficient. AT&T urges adoption of the NRCM because it would yield superior results compared to trying to correct the flawed results of Ameritech's studies. In fact, AT&T points out that the NRCM has already been adopted by various state utility commissions, including the Minnesota Public Utility Commission (see AT&T Florence Cross Ex. 1) and the Vermont Department of Public Service (see AT&T Florence Cross Ex. 2) as the correct method for establishing forward looking nonrecurring charges. In addition, other state commissions have used some of the model's basic assumptions (i.e., fallout rate) to better conform the cost studies submitted by the incumbent LEC with TELRIC costing principles. Selwyn Direct, AT&T Ex. 2.0, pp. 44-45. In fact, AT&T notes that the Michigan Public Service Commission has adopted the NRCM's fallout rate of 2% and its UNE-P migration charge of 35 cents. Tr. 564-565, 569-570. AT&T asserted that this is consistent with the success of Ameritech's affiliate, SWBT, which has already achieved a flow through rate of 99%, with a corresponding fallout rate of 1%. Accordingly, AT&T urges this Commission to adopt the results of the AT&T/MCI Nonrecurring Cost Model [*64] as the basis for determining Ameritech's nonrecurring charges for unbundled network elements, both individually and in combination. AT&T/MCI WorldCom Initial Brief, pp. 48-49.

d. Intervenor's Second Alternate Position

In addition to sponsoring the NRCM, AT&T and MCI WorldCom contend that Ameritech's nonrecurring cost studies do not incorporate least cost, forward looking and efficient network technologies and systems. To the contrary, AT&T and MCI WorldCom argue that Ameritech's studies are based on its existing network architecture and the actual technologies Ameritech plans to deploy in the next three years, and do not assume any additional efficiencies resulting from the rollout of Project Pronto. Tr. 388-394, 406-408, 411, 415-417, 548-549, 552-553. Moreover, AT&T and MCI WorldCom note that Ameritech's cost studies fail to incorporate the efficiencies that will invariably arise from the OSS enhancements it has agreed to make in ICC Docket No. 00-0592 (Tr. 434, 451), including its commitment to bill for all UNEs via the CABS billing system by October 2001. Tr. 316. This enhancement alone, according to AT&T and MCI WorldCom, will allow all UNE orders to be submitted via a single [*65] request (Tr. 316, 318), completely undermining the validity and accuracy of Ameritech's studies, which assumed that two local service requests would be required for at least a three year period. Tr. 316-318, 557-558. AT&T notes that Ameritech witness Mr. Florence, the cost study witness, indicate that the ability to submit UNE orders via a single request was "new information to [him]." Tr. 558.

Mr. Earle Jenkins is an expert witness who evaluated Ameritech's proposed nonrecurring cost study on behalf of MCI WorldCom in this case. Mr. Jenkins is a consultant with more than thirty years of operations experience in the telecommunications industry. Mr. Jenkins' testimony in this proceeding addressed Ameritech's nonrecurring cost studies for UNEs and combinations of UNEs. Mr. Jenkins' career with NYNEX spanned all levels of operations responsibility beginning as a central office craft technician and ending as Assistant Vice President responsible for maintenance and workforce management process improvement for the NYNEX region. Mr. Jenkins' employment also involved extensive observation, opportunity assessment, design, cost/benefit analysis and implementation activities focused on improving [*66] service and operations efficiency. Jenkins Direct, MCI WorldCom Ex. 2.0, pp. 1-3.

i. Appropriate Forward-Looking Assumptions

Mr. Jenkins evaluated Ameritech's nonrecurring study in light of the TELRIC Order's findings and directives. In his opinion, the nonrecurring cost study is substantially flawed. As set forth in detail in Mr. Jenkins' testimony, Ameritech's nonrecurring costs studies, in most respects, are not forward looking as required by the TELRIC Order and the FCC's TELRIC methodology. AT&T/MCI WorldCom Initial Brief, p. 67.

Moreover, MCI WorldCom points out that Ameritech's expert cost witness did not know whether the nonrecurring charges reflected enhancements to Ameritech's operation support systems ("OSS") that Ameritech had committed to in seeking approval of its merger with SBC, even though such enhancements were contemplated by Ameritech prior to the Commission conditionally approving the SBC/Ameritech merger in September 1999. Tr. 600; *See also* Merger Order, Docket 98-0555 (Sept. 23, 1999), Condition 29, pp. 185-186; 253-254. Ameritech's merger commitment required it to file with the Commission a Plan of Record within three months of the merger closing date [*67] (Oct. 8, 1999) detailing the companies' plans for developing and deploying application-to-application interfaces for OSS as well as integrating their OSS processes, reflecting a "comprehensive plan for improving the OSS systems and interfaces available to CLECs in Illinois." Merger Order, p. 185.

MCI WorldCom noted that the nonrecurring study Ameritech submitted in this proceeding is dated January 28, 2000 and purportedly took into consideration service center process and network provisioning steps that would be minimized or eliminated over a three year period. Ameritech Ex. 3.0, Schedule RJF-3; Tr. 545. Despite these facts, MCI WorldCom pointed out that Ameritech's cost expert stated that he did not take into consideration increased flow through that would result from the OSS enhancements being implemented pursuant to Ameritech's merger commitments. Tr. 451. Thus, according to MCI WorldCom, the OSS enhancements that were implemented this year and others that will be implemented early in 2001 which are designed improve the flow through of wholesale orders were not accounted for in Ameritech's study. MCI WorldCom Graves Cross Exs. 2 and 3. Similarly, MCI WorldCom points out that Ameritech [*68] failed to account for a change in billing systems for all of its UNEs and UNE combinations that is scheduled to be implemented by October 2001, a change that eliminates the purported need for two service orders to be applied every time a CLEC places a single order for UNE-P. Tr. 315-316.

For the foregoing reasons, MCI WorldCom contends that Ameritech's approach to its nonrecurring costs is directly at odds with the Commission's TELRIC Order and the FCC's TELRIC methodology that require that costs reflect forward-looking, least cost technologies. Moreover, MCI WorldCom notes that the manual fallout approach used by Ameritech compounds the costs associated with the end to end process of provisioning UNEs. AT&T/MCI WorldCom Initial Brief, p. 68.

Ameritech, MCI WorldCom maintains, does not base its cost study on efficient forward looking assumptions, which results in inflated forward-looking costs that CLECs must pay for UNEs. For example, MCI WorldCom explains that Ameritech has no support for the flow through rates it has reported, and does not assume that it proactively edits polluted databases by correcting input mistakes. Ameritech's cost study does not assume that it performs "root [*69] cause analyses," to seek out and resolve problems causing fall out. In addition, Ameritech makes no distinction between planned manual intervention and manual intervention due to fall-out. MCI WorldCom explained that these are all examples of how Ameritech failed to utilize appropriately forward-looking assumptions. Jenkins Direct, MCI WorldCom Ex. 2.0, pp. 14-15.

ii. Single Fall-Out Factor

Mr. Jenkins testified that, in performing nonrecurring cost studies, it is extremely important that historic fall-out rates be adjusted to reflect technological efficiencies and the reduced costs that the efficiencies produce. It is also important to view fallout in the context of the complete connect/disconnect process rather than viewing each process step in isolation, which would in effect compound the overall failure rate of processes that impact customer service. AT&T/MCI WorldCom Initial Brief, p. 69.

To provide context, Mr. Jenkins offered the following example: Two parties may both state that a 10% fallout rate is acceptable for a network element connection. However, applying that 10% to 100 orders at 9 individual work steps creates 90 additional expense item calculations, versus applying [*70] the 10% fallout rate once to the entire connection process which results in only 10 expense item calculations. Jenkins Direct, MCI WorldCom Ex. 2.0, p. 15.

In addition, Mr. Jenkins stressed the importance of differentiating fallout resolution costs and the costs associated with planned manual intervention. Efficient utilization of technology is the difference. An order that falls out of a designed OSS flow-through process and has the potential of generating a significant amount of manual work to resolve the

associated problem over a three year time horizon creates the type of manual work that is a candidate for elimination by applying basic quality improvement procedures or a forward looking technology overlay. Jenkins Direct, MCI WorldCom Ex. 2.0, p. 16.

Indeed, Ameritech witness Mr. Florence provided a good example in his testimony where he stated that "activity durations associated with the coordination between the NECC and the central office technician were significantly reduced in response to a planned future enhancement that will facilitate the reassignment of loop facilities." Florence Direct, Ameritech Ex. 3.0, p. 13.

Manual work that is generated because a trigger is installed [*71] to create fallout to address low volume or other unique situations is part of the process design and should be a portion of nonrecurring costs. Unfortunately, with the exception of Ameritech witness Florence's example and some IISC workgroup adjustments, it is virtually impossible to point toward any evidence of Ameritech utilizing basic quality improvement procedures discussed above to improve the costs or poor quality issues associated with system fallout reflected in their NRC cost studies. This fact was reinforced by Ameritech's statement that "There is no distinction in the flow-through rate between manual resolution of system fallout as compared to planned/designed manual process intervention." Jenkins Direct, MCI WorldCom Ex. 2.0, pp. 16-17.

As Mr. Jenkins noted, Ameritech utilizes historic fallout performance as a portion of the NRC expense calculations for each individual process related system with the exception of those serving the Service Center and NECC and Ameritech acknowledged that no reports are available to support the flow-through percentages used to calculate the NRCs presented in this cost study. Jenkins Direct, MCI WorldCom Ex. 2.0, pp. 16-17.

MCI WorldCom asserts [*72] that Ameritech's approach is flawed for three reasons: (1) there is no incentive for improvement; (2) it accepts multiple quality failures as a standard portion of network element connection and disconnection; and (3) there is no way to determine the statistical validity of the data presented. AT&T/MCI WorldCom Initial Brief, p. 70.

In order to correct the flaws inherent in Ameritech's approach, Mr. Jenkins proposed that an administrative fallout factor be incorporated into each network element NRC calculation to recognize the reality that fallout will occur. This factor should be applied once to the entire end-to-end process in recognition of the basic principle that processes should be viewed in this manner and to avoid the compounding cost effect associated with recognizing fallout at each process step. Mr. Jenkins proposed utilizing a rate of 2% to reflect forward looking quality/cost efficiencies, which in his opinion are reasonable to expect from a progressive company focused on forward looking process improvements. Indeed, as discussed above, that factor is in line with the fall out factor that Ameritech's parent corporation, SBC, reports for its retail operations. Mr. Jenkins [*73] urged the Commission to reject Ameritech's approach since it is unreasonable and leads to inflated NRCs. AT&T/MCI WorldCom Initial Brief, pp. 70-71.

iii. Computer Cost

MCI WorldCom notes that Ameritech includes "computer processing" costs in its nonrecurring service order costs. Ameritech Ex. 3.0, p. 17. Specifically, the computer processing cost is calculated on Tab 8.3 of Ameritech witness Mr. Florence's workpapers (Ameritech Ex. 3.0, Schedule RJF-3, p. 39). The total computer processing costs is applied per service order. AT&T/MCI WorldCom Initial Brief, p. 71.

MCI WorldCom witness Dr. Ankum opined that nonrecurring costs of operational support systems and activities should only be recovered through non-recurring charges (for a network element) if the costs are a direct cost to a CLEC ordering a specific unbundled network element (for example, an unbundled loop for customer X). However, if a non-recurring cost is a common cost to the ordering and provisioning of all network elements, then such costs should be recovered through recurring charges. Ankum Direct, MCI WorldCom Ex. 1.1, p. 2.

MCI World notes that Ameritech witness Mr. Florence testified that Ameritech generally incurs [*74] computer costs as a result of a contract with IBM under which IBM -- for a monthly recurring fee -- provides Ameritech with mainframe and mid-range computer systems. From this MCI WorldCom infers that these costs do not come about as a result of a CLEC ordering a specific unbundled network element, such as a loop or a port. Given that Ameritech computer processing costs are common costs, it would be inappropriate to recover these costs on a non-recurring basis as if they were direct costs, which is the method proposed by Ameritech. Instead, they should be recovered on a recurring basis as part of the recurring costs for all unbundled network elements. Not only is that the appropriate way to recover common costs, it is the same manner in which Ameritech incurs the computer processing costs. *See 47 C.F.R. § 51.507(a); 47 C.F.R. § 51.507(d).*