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Decision 99-11-050 November 18, 1999

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Rulemaking on the Commission's Own Motion To Govern Open Access to Bottleneck Services and Establish A Framework for Network Architecture Development of Dominant Carrier Networks	Rulemaking 93-04-003 (Filed April 7, 1993)
Investigation of the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks.	Investigation 93-04-002 (Filed April 7, 1993)

(See Appendix E for list of appearances.)

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INTERIM DECISION SETTING FINAL PRICES FOR NETWORK ELEMENTS OFFERED BY PACIFIC BELL

I. INTRODUCTION

A. Summary of Pricing Rulings

In today's decision, we complete the costing and pricing for unbundled network elements (UNEs) that we began in December of 1996. In summary, we conclude that the price for each UNE currently being offered by Pacific Bell (Pacific) should be equal to the Total Element Long Run Incremental Costs (TELRICs) that we adopted for such elements in Decision (D.) 98-02-106, plus a markup of nineteen percent (19%) to recover shared and common costs. We reject Pacific's argument that the alleged risk associated with *future* stranded investment arising from its obligation to provide UNEs justifies higher network element prices than are produced by the TELRIC + 19% formula.

We also reject arguments made by AT&T Communications of California, Inc. (AT&T) and MCI Telecommunications Corporation (MCI) that the price of loops used by residential customers should be priced substantially *below* the adopted TELRIC by (1) not imposing a 19% markup on residential loops to cover shared and common costs, but assuming instead that Pacific will recover these costs through its net revenues from Yellow Pages, and (2) applying a surcredit of $2.64 on residential loops financed through the Universal Service fund on which Pacific is entitled to draw. In our opinion, neither of these proposals is fair or can be reconciled with the requirement of the Telecommunications Act that prices for UNEs must be based on their costs.

This decision also adopts price floors for certain access line and other local exchange services specified in D.96-03-020. We have decided that the price floors for these services should be set at the volume-sensitive portion of the

Total Service Long Run Incremental Costs (TSLRIC) adopted for these services in D.96-08-021, plus the contribution that must, under our prior decisions, be imputed into these price floors for the three UNEs that constitute monopoly building blocks (MBBs): the loop, switching, and white page listings. We reject Pacific's proposal to adopt variable price floors for loops depending on whether the loop is essential for a particular customer group in a particular geographic area.

Finally, we adopt a methodology for determining the prices of various types of UNE combinations specified in the interconnection agreements that we have approved since 1996. While the Supreme Court's decision in *AT&T Corp. v. Iowa Utilities Bd.*, 119 S.Ct. 721 (1999) (*AT&T-Iowa*) makes clear that incumbent local exchange carriers (ILECs) such as Pacific are not entitled to impose "wasteful reconnection charges" for providing these combinations, there are some costs involved in providing them. We have decided that Pacific should receive compensation based on the non-recurring costs we adopted in D.98-12-079 for providing these combinations.

B. Procedural Background

The present phase of this complex, long-running docket began on December 18, 1996, when the assigned Administrative Law Judge (ALJ) issued a ruling[1] that directed Pacific to modify the cost studies it had prepared pursuant to TSLRIC methodology, studies that were approved by us (with significant modifications) in Decision (D.) 96-08-021.

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[1] Administrative Law Judge's Ruling Concerning Impact of the August 8, 1996 First Report and Order of the Federal Communications Commission in CC Docket No. 96-98 on the Scope of This Proceeding (12/18/96 Ruling), issued December 18, 1996.

In his December 18, 1996 ruling, the ALJ stated that Pacific should modify the TSLRIC studies to conform to a somewhat different costing methodology, the TELRIC methodology, that the Federal Communications Commission (FCC) had prescribed for costing and pricing UNEs in its First Report and Order implementing the local competition provisions of the Telecommunications Act of 1996.[2] The ALJ noted that even though the United States Court of Appeals for the Eighth Circuit had stayed significant portions of the FCC's costing and pricing rules in *Iowa Utilities Board v. FCC*,[3] it was possible that the FCC's rules might eventually be reinstated, that the TELRIC methodology appeared to have several advantages over TSLRIC, and that "TELRIC refinements to the existing TSLRIC cost studies . . . combined with new TELRIC studies for the additional network elements prescribed by the FCC, would be very useful in developing prices for wholesale network elements . . ." (*Mimeo.* at 12.)

Consistent with this conclusion, the ALJ instructed Pacific to submit TELRIC cost studies in January 1997, established a comment schedule for the new studies, and stated that the Commission would choose between TSLRIC and TELRIC after reviewing the comments. Once this choice of methodology was made, the Commission would then hold supplementary pricing hearings to determine how the adopted costs should be translated into prices. (*Id.* at 13-14, 22-24.)

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[2] *In re Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rcd 15499 (FCC 96-325) (1996). This document is hereinafter referred to as the "First Report and Order."

[3] 109 F.3d 1418 (8th Cir.), *motion to vacate stay denied*, 117 S.Ct. 429 (1996).

After reviewing the parties' extensive comments and taking into account the Eighth Circuit's decision on the merits in *Iowa Utilities Board v. FCC*,[4] we decided in D.98-02-106 to use the TELRIC methodology for pricing UNEs. (*Mimeo.* at 17-23.) We also approved the TELRIC studies submitted by Pacific, although not without ordering significant modifications to them. (*Id.* at 40-94.) We also stated that we would reserve judgment on a number of pricing issues raised by the TELRIC methodology until after completion of the supplementary pricing hearings. (*Id.* at 18-19.)

On March 16, 1998, a prehearing conference (PHC) was held to discuss various issues that the ALJ expected to arise during the supplementary pricing hearings, including the issue of whether the Commission should attempt to devise a "gluing charge" to overcome the arbitrage problem associated with purchasing combinations of network elements, a problem that had caused the Eighth Circuit to set aside the FCC's rule on UNE combinations. (120 F.3d at 813.)

On March 28, 1998, the ALJ issued a ruling memorializing the discussions and agreements reached at the March 16 PHC.[5] A substantial portion of the ALJ's ruling concerned the nature of testimony he wanted the parties to file on the issue of UNE combinations. First, the ALJ concluded that the Commission had independent authority under the Public Utilities (Pub. Util.) Code to order Pacific and other ILECs to make combinations of network elements available. (*Mimeo.* at 4-8.) Next, the ALJ instructed Pacific to file testimony indicating which UNE combinations it was willing to make available

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[4] 120 F.3d 753 (8th Cir. 1997), *cert. granted*, 118 S.Ct. 879 (1998).

[5] Administrative Law Judge's Ruling Concerning Issues Raised at March 16, 1998 Prehearing Conference (March 28, 1998 Ruling), issued March 28, 1998.

without charge, a list of all combinations that had been requested by two or more competitive local exchange carriers (CLECs), and proposals for appropriate compensation (or "gluing charges") for the work (if any) involved in combining these elements. (*Id.* at 8-11.) Other parties were invited to comment on Pacific's list of UNE combinations and to offer their own compensation proposals in their reply testimony.

In addition to the UNE combinations issue, the ALJ instructed parties to file testimony on how the costs for Operations Support Systems (OSS) and non-recurring costs (NRCs) being developed in the separate OSS/NRC phase of this proceeding should be translated into prices, and whether the UNE prices to be determined following the hearings should be set forth in tariffs. (*Id.* at 2-3, 11-13.) The ALJ also concluded that the issues of local competition implementation costs and local transport restructuring should not be considered in the hearings. (*Id.* at 13-14.)

Pursuant to the revised procedural schedule set forth in the March 28, 1998 ruling, all parties filed their opening supplementary testimony addressing all issues in the case on April 8, 1998,[6] and their reply testimony on April 28, 1998. Extensive motions to strike portions of this testimony were filed on May 4, 1998 by Pacific, GTE California Incorporated (GTEC), the California

[6] After an extensive discussion at the March 16, 1998 PHC, the ALJ ruled that parties would be expected to submit new testimony on all issues in the 1998 "supplementary" pricing hearings, because the risk of confusion if parties referred back to the prefiled testimony and cross-examination from the 1996 pricing hearings was too great. (March 16 Tr. 858-873, 877-882.) This ruling represented a reversal of the viewpoint expressed by the ALJ in his ruling convening the March 16 PHC. *See* Administrative Law Judge's Ruling Convening Prehearing Conference To Discuss Issues For Supplementary Pricing Hearings, issued March 4, 1998, *mimeo.* at 9-10.

Cable Television Association (CCTA), and jointly by AT&T and MCI.[7] Responses to the motions to strike were filed by many parties on May 11, 1998.

On May 15, 1998, the ALJ issued a ruling setting forth the order in which witnesses would be cross-examined, and ruling on the motions to strike directed at the testimony of Pacific's first witness, Dr. Jerry Hausman, and the rebuttal to Dr. Hausman offered by AT&T/MCI witness Dr. Lee Selwyn.[8] The motions to strike portions of other witnesses' testimony were ruled on during the hearings.

The supplementary pricing hearings began on May 18, 1998 and continued for three and one-half weeks, ending on June 10. Pursuant to a procedural discussion held on the last day of the hearings, opening briefs were filed on July 10, and reply briefs on July 31, 1998.

Opening briefs were filed by Pacific, GTEC, AT&T/MCI, Sprint Communications Company L.P. (Sprint), the California Payphone Association (CPA), The Utility Reform Network (TURN), Cox California Telcom II, L.L.C. (Cox), Covad Communications Company (Covad), and the Facilities-Based Coalition (FBC), which is comprised of CCTA, Teleport Communications Group, Inc., MGC Communications, Inc., ICG Telecom Group, Inc. (ICG) and NEXTLINK of California, L.L.C. (NEXTLINK).

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[7] Many filings in this phase were made jointly by AT&T and MCI. Where the acronym "AT&T/MCI" appears, it indicates a joint filing by these two parties.

[8] Administrative Law Judge's Ruling Concerning Schedule for First Week of Pacific Bell Supplementary Pricing Hearings and Motions to Strike Portions of the Testimony of Dr. Jerry Hausman and Dr. Lee Selwyn (May 15, 1998 Ruling), issued May 15, 1998.

All of these parties except for CPA filed reply briefs. In addition, the Office of Ratepayer Advocates (ORA) was given leave by the ALJ to file a late reply brief on August 3, 1998, even though ORA had not filed an opening brief.

The Proposed Decision (PD) of the assigned Administrative Law Judge (ALJ) was mailed to the parties on May 10, 1999. Opening comments concerning the PD were filed on June 4, 1999 by Pacific, GTEC, AT&T/MCI, Sprint, CCTA, Covad, TURN, and the Telecommunications Resellers Association (TRA). On the same day, ICG, and NEXTLINK filed joint opening comments.[9] On June 9, 1999, reply comments were filed by all of these parties except TURN, ICG, NEXTLINK and TRA. Reply comments on the PD were also filed by ORA and Northpoint Communications, Inc. (Northpoint), neither of which had filed opening comments.[10]

C. The Supreme Court's Decision in *AT&T Corp. v. Iowa Utilities Bd.*

As we indicated in D.98-02-106, a major cloud of uncertainty was hanging over the costing and pricing of Pacific's unbundled network elements. That cloud was, of course, how the United States Supreme Court would rule on the appeal from the Eighth Circuit's decision in *Iowa Utilities Board v. FCC*. This uncertainty affected many issues in the proceeding, including (1) whether this Commission had a choice or was obliged to apply the strict form of TELRIC prescribed by the FCC, (2) whether the list of UNEs prescribed by the FCC was valid, (3) whether CLECs that sought to purchase UNEs were required to own

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[9] Unless otherwise stated, all references in this decision to "opening comments" or "reply comments" are to these comments on the PD.

[10] ORA did not submit a motion seeking leave to file its reply comments, because it had obtained such leave from the ALJ in advance of the filing date. Northpoint has submitted a motion seeking leave to file, however, which we will grant.

facilities of their own, (4) whether the Eighth Circuit's concern about the potential for arbitrage between resale rates and UNE combinations – the basis for setting aside 47 C.F.R. § 51.315 -- was valid, and (5) whether the UNE prices to be developed in the hearings could or should be set forth in tariffs. D.98-02-106 noted that the Supreme Court's decision could have a significant impact on the resolution of these questions, and said simply that "in the event the Supreme Court reverses the Eighth Circuit on any material issue, we will make appropriate changes to the course of action we are pursuing in this docket." (*Mimeo.* at 17.)

On January 25, 1999, the Supreme Court issued its decision under the name of *AT&T Corp. v. Iowa Utilities Bd.*, __ U.S. __, 119 S.Ct. 721 (1999). On the key jurisdictional issue, the Supreme Court reversed the Eighth Circuit and held that the Telecommunications Act of 1996 conferred jurisdiction on the FCC to implement the local competition provisions of the act. In particular, the Court concluded that the authority granted to the FCC in § 201(b) of the Telecommunications Act of 1934 -- which states that the FCC "may prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act" -- extended to the local competition provisions set forth in §§ 251 and 252 of the Act. (119 S.Ct. at 729-30.)[11] The Supreme Court

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[11] In rejecting the respondents' argument that the grant of jurisdiction in § 201(b) is limited to interstate and foreign matters, the Court said:

> "It is impossible to understand how this use of the qualifier 'interstate or foreign' in § 201(a), which limits the class of common carriers with the duty of providing communication service, reaches forward into the last sentence of § 201(b) to limit the class of provisions that the Commission has the authority to implement. The FCC has rulemaking authority to carry out the 'provisions of this Act,' which include §§ 251 and 252, added by the Telecommunications Act of 1996." (*Id.* at 730.)

rejected the Eighth Circuit's reasoning that § 2(b) of the 1934 Act, which limits the FCC's jurisdiction with respect to "intrastate communication service," precluded the FCC from promulgating regulations implementing the local competition provisions merely because Congress did not in the 1996 Act explicitly grant the FCC jurisdiction over the intrastate matters included within the local competition provisions. (*Id.* at 730-31.)[12]

The Supreme Court also set aside a critical rule that the Eighth Circuit had upheld – Rule 319 (47 C.F.R. § 51.319), which sets forth the list of network elements that ILECs must offer on an unbundled basis – on the ground that the FCC had failed to give any meaningful consideration to the so-called "necessary and impair" standard of § 251(d)(2). § 251(d)(2) of the 1996 Act provides that access to UNEs considered proprietary must be "necessary," and that failure to give access to a particular UNE must be found to "impair," competing local exchange carriers from offering service. In light of the FCC's failure to consider whether particular UNEs were available through self-provision or from another supplier, the Supreme Court remanded Rule 319 for further consideration. (*Id.* at 734-36.)

However, on other issues relating to the unbundling rules, the Supreme Court upheld the FCC. First, it agreed with the Eighth Circuit that the

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[12] Indeed, the Supreme Court stated that its decision in *Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355 (1986) – on which the Eighth Circuit had relied heavily for its analysis of § 2(b) -- was an illustration of the principle that FCC "ancillary" jurisdiction can apply to an intrastate matter even when Congress has not explicitly granted the FCC jurisdiction to regulate that matter, and that § 2(b) of the 1934 Act acts as a limitation on FCC authority in such situations. (*Id.* at 731.) In the case of the 1996 Act, the Court concluded – as noted in the text – that § 201(b) of the 1934 Act expressly conferred jurisdiction on the FCC to "make rules governing matters to which the 1996 Act applies." (*Id.* at 730).

definition of "network element" in the 1996 Act – which "includes features, functions, and capabilities that are provided by means of such facility or equipment" – was broad enough to justify including Operations Support Systems (OSS), operator services, directory assistance and vertical switching functions within Rule 319 (assuming the "necessary and impair" standard could be met). (*Id.* at 733-34.) Second, the Court held that the FCC had acted properly in promulgating what the Court called the "all elements" rule – *i.e.*, requiring ILECs to make all UNEs available to competing carriers without any requirement that these competing carriers own facilities of their own. (*Id.* at 736.)

Third, the Supreme Court reinstated FCC Rule 315(b) (47 C.F.R. § 51.319(b)), which prohibits ILECs from tearing apart any combination of UNEs that the ILEC uses itself. The Supreme Court held that the concern about "regulatory arbitrage" that had caused the Eighth Circuit to set Rule 315(b) aside[13] – a concern based on the fear that allowing CLECs to purchase pre-assembled platforms of UNEs at a cost-based price would render the resale provisions of the 1996 Act a dead letter, because resale rates include universal service subsidies -- was unjustified, because § 254's requirement that "that universal service subsidies be phased out" rendered the "possibility" of arbitrage "only temporary." (*Id.* at 737.) Moreover, the Supreme Court continued, Rule 315(b) was a reasonable construction of § 251(c)(3) of the 1996 Act, and so entitled to deference. (*Id.* at 736-38.)

Finally, the Supreme Court reversed the Eighth Circuit and reinstated the so-called "pick and choose" rule, 47 C.F.R. § 51.809, which allows any competing carrier to request from an ILEC:

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[13] *See* 120 F.3d at 813.

> " . . . any individual interconnection, service, or network element arrangement contained in any agreement to which [the ILEC] is a party that is approved by a state commission pursuant to section 252 of the Act, upon the same rates, terms and conditions as those provided in the agreement."

The Supreme Court concluded that although the argument the Eighth Circuit found convincing – that this FCC approval of contractual cherry picking "threatens the give-and-take of negotiations," *id.* at 738 – was "eminently fair," the fact that the FCC rule tracked the statutory language of § 252(i) almost exactly meant that "it is hard to declare the FCC's rule unlawful," because the FCC's interpretation of the statute is "the most readily apparent," and contained certain exceptions that are "more generous to incumbent LECs than § 252(i) itself." (*Id.*)

D. Implications of the Supreme Court's Decision

It is becoming apparent that the full impact of the Supreme Court's decision in *AT&T-Iowa* will take some time to work its way through the nationwide system of interconnection agreements and UNE prices that has grown up since passage of the 1996 Telecommunications Act. It is also evident that the Supreme Court's decision has mooted or changed a number of the issues that we had originally intended to decide in this phase of this proceeding.

One obvious example is the "pick and choose" rule. In the series of arbitrations that began under § 252 of the Act in mid-1996, the pattern that quickly emerged was that interconnection agreements between ILECs and major CLECs (*e.g.*, Pacific and AT&T) were adjudicated first, and then other CLECs opted into these agreements. It seems clear that under the Supreme Court's decision, that will not necessarily be the pattern when the first generation of arbitrated agreements begins to expire in late 1999. It also seems clear that in view of the reinstatement of the "pick and choose" rule, the debate in this docket between Pacific and virtually all of the CLECs about whether UNE prices should be incorporated into tariffs has now been rendered largely moot. Although the document setting forth the rates, terms and conditions for each "individual interconnection, service or network element arrangement" may not technically be a "tariff," its character will certainly partake of a traditional tariff.

Similarly, as explained in Section VI.D.1., *infra*, the Supreme Court's decision has changed the nature of what we must decide with respect to the "combination" issue. Since the Supreme Court's decision clearly reinstates FCC Rule 315(b) – and does so with reasoning that seems to apply to FCC Rules 315(c)-(f) as well – it seems clear that an ILEC must now provide requesting carriers with *any* platform of network elements that the ILEC uses itself, and is not entitled to any extra compensation (beyond a service order charge) for doing so. In Section VI.D.2., *infra*, we set forth these service order charges, as well as a methodology for determining the non-recurring charges that we think are appropriate compensation when an ILEC combines additional UNEs with its preexisting platforms.

The greatest uncertainty created by the Supreme Court's decision is, of course, the identity of the network elements that ILECs will ultimately be required to offer to competing carriers on an unbundled basis. All of the existing interconnection agreements – in California and elsewhere – are based on the list of UNEs set forth in the original version of 47 C.F.R. § 51.319. In April of 1999, the FCC launched a rulemaking to reconsider Rule 319 in the light of the Supreme Court's discussion of the "necessary and impair" standard.[14] On September 15, the FCC voted to adopt a revised list of UNEs, and on November 5, 1999, the full text of the order adopting this list became available.[15]

After *AT&T-Iowa*, many parties (including this Commission) recognized the need to clarify which network elements the ILECs would be obliged to sell while Rule 319 was being reconsidered. In an effort to answer this question, the FCC Chairman asked GTE Corporation, Pacific, and the other Regional Bell Operating Companies (RBOCs) in early February of 1999 to agree to honor their existing interconnection agreements while Rule 319 was being reconsidered. In response to the FCC Chairman's request, SBC Telecommunications, Inc. (SBC), the parent corporation of Pacific, agreed (with certain qualifications) to honor its existing interconnection agreements.[16]

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[14] *See Second Further Notice of Proposed Rulemaking*, CC Docket Nos. 96-98 and 95-185 (FCC 99-70), released April 16, 1999.

[15] *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, CC Docket No. 96-98 (FCC 99-238), released November 5, 1999. This order, which we will hereinafter refer to as the "Revised UNE List Order", is not yet final. The FCC has asked for opening comments concerning the order on January 12, 2000, and reply comments on February 11, 2000. Once the Revised UNE List Order becomes final, petitions seeking judicial review seem likely.

[16] SBC's undertaking to honor existing interconnection agreements was made in a February 9, 1999 letter from Dale Robertson and Sandy Kinney of SBC to Lawrence E. Strickling, the Chief of the FCC's Common Carrier Bureau. The letter stated in pertinent part:

> "Notwithstanding the Supreme Court's vacation of Rule 319, . . . SBC will continue to provide network elements in accordance with its existing local interconnection agreements until the parties mutually agree to alternative provisions or alternative provisions are approved through the regulatory and judicial process. However, in the event other parties to our existing interconnection agreements attempt to invalidate these agreements based

Footnote continued on next page

SBC's commitment is relevant here, because the prices we are setting in this decision are the final, cost-based prices for the UNEs set forth in the original version of Rule 319. Pursuant to Resolution ALJ-174, these final prices will apply to the current generation of interconnection agreements, which were negotiated in the light of the original list of UNEs.

A major issue we are *not* dealing with in this decision is geographic deaveraging. In view of our determination in D.98-02-106 that the deaveraged cost studies that had been submitted to us by Pacific contained significant flaws, and that the potential for doing more harm than good was high if we attempted to set geographically-deaveraged prices based on such a record, we came into the

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on *Iowa Utilities Board*, we reserve the right to respond as appropriate without regard to this commitment."

This letter was attached as Appendix B to Pacific's June 4, 1999 Opening Comments on the Proposed Decision (PD) herein. Although the letter does not expressly state that the commitment made therein will apply to interconnection agreements signed by SBC's subsidiaries, Pacific cites the letter as evidence that it "has voluntarily agreed to honor interconnection agreements providing for combinations during the pendency of the remand proceeding." (June 4 Pacific Opening Comments, p. 13.) Thus, Pacific is apparently interpreting the commitments made in the February 9 SBC letter as applying to it, and we will accept that interpretation.

It should be noted that under some of its interconnection agreements in California, Pacific was obliged to seek renegotiation within 30 days after a final court order that "allows but does not require discontinuance" if Pacific wished to discontinue providing "any [UNE], Ancillary Service or Combination thereof" provided for in the interconnection agreement. *See, e.g.*, Pacific-AT&T Interconnection Agreement, ¶¶ 2.4, 9.3, *filed pursuant to* D.96-12-034. To our knowledge, Pacific made no such request for renegotiation within 30 days after *AT&T-Iowa* became final. Thus, Pacific continues to be obliged to provide network elements in accordance with the terms of these interconnection agreements.

pricing hearings strongly inclined to adopt statewide-average UNE prices. (*Mimeo.* at 93-94.)

We acknowledge that this decision is at odds with the geographic deaveraging requirement in the First Report and Order (47 C.F.R. § 51.507(f)), a requirement that was formally reinstated in June of 1999.[17] However, because it is widely recognized that implementing geographic deaveraging in the manner required by the First Report and Order will be time-consuming and difficult, several states (including California) have asked the FCC for and been granted an extension of time until the Spring of 2000 to comply with the geographic deaveraging rule for UNEs.[18]

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[17] A ruling by the Eighth Circuit in its proceedings on remand from *AT&T-Iowa* reinstated the geographic deaveraging rule. In Ordering Paragraph 1 of its June 10, 1999 Order in Nos. 96-3321 *et al.*, the Eighth Circuit expressly reinstated 47 C.F.R. § 51.507, and amended its mandate accordingly.

[18] On May 7, 1999, the FCC issued a Stay Order of 47 C.F.R. § 51.507(f) in CC Docket No. 96-98 (FCC 99-86). Paragraph 1 of the Stay Order stated that it would "remain in effect until six months after the Commission issues its order in CC Docket No. 96-45 finalizing and ordering implementation of high-cost universal service support for non-rural local exchange carriers (LECs) under section 254 of the Communication Act . . ." The FCC gave the following reasons for granting a 6-month stay:

> "Because of the Eighth Circuit's decisions, the section 251 pricing rules were not in effect for approximately two-and-a-half years. During that time, not all states established at least three deaveraged rate zones for [UNEs] and interconnection. Some have taken no action regarding deaveraging; others have affirmatively decided to adopt less than three zones. A temporary stay will ameliorate the disruption that would otherwise occur, and will afford the states an opportunity to bring their rules into compliance with section 51.507(f)." (*Id.* at ¶ 3; footnotes omitted.)

On November 2, 1999, the FCC released its order finalizing the high-cost universal service support mechanism for non-rural LECs. *Ninth Report and Order and Eighteenth Order on Reconsideration,* CC Docket No. 96-45 (FCC 99-306). Paragraph 120 of the

Footnote continued on next page

Although we expect to commence proceedings in the near future to bring our UNE prices into conformance with the FCC's geographic deaveraging requirement, the current lack of an adequate record on deaveraged costs for Pacific has led us to conclude that the most appropriate course of action in this decision is to stick with the pricing approach we announced in D.98-02-106. Accordingly, the UNE prices set forth herein are statewide-average prices, and -- as discussed in Sections IV.B.5. and VIII.G.7. -- we are rejecting proposals by both Pacific and AT&T/MCI that would have introduced incomplete, *ad hoc* forms of geographic deaveraging into UNE prices.

II. SHOULD PRICES FOR UNEs REFLECT THE ALLEGED RISK THAT THE INVESTMENT TO PROVIDE THEM MAY BECOME STRANDED, OR SHOULD UNE PRICES BE BASED ON TELRIC PLUS A MARKUP FOR SHARED AND COMMON COSTS?

Although the supplementary pricing hearings considered many issues, the most important of these was what basic formula should be used to price UNEs. As discussed below, nearly all parties agreed that UNE prices should be set so that Pacific can recover the TELRIC costs adjudicated in D.98-02-106 plus a markup for shared and common costs, although the parties differed sharply over what the shared-and-common-cost markup should be.

As we shall see, Pacific's pricing proposals went considerably beyond this basic formula. Several of Pacific's witnesses, led by Dr. Jerry Hausman, argued that in addition to TELRIC and a markup for shared and common costs, Pacific should receive an "adder" to compensate it for the risk that building UNEs will lead to stranded, unrecoverable investment.

November 2 order provides that the stay granted in the Stay Order will be lifted on May 1, 2000.

A. Pacific's Pricing Proposal

1. Summary of Pacific's Overall Pricing Approach

Pacific's pricing proposal begins with a uniform markup over the TELRIC costs adjudicated in D.98-02-106. The markup, which was calculated at 22% in Pacific's pre-filed testimony,[19] is designed to recover the shared and common costs, which reflect "the economies of scope which Pacific creates as a multi-product firm." (Pacific Opening Brief, p. 2.) After repeating the observation of Dr. Hausman that "almost all economists and the FCC agree that shared and common costs must be included in prices set for [UNEs] so that an ILEC can recover its costs of investment," Pacific explains the rationale for a uniform markup as follows:

> "In proposing a uniform markup, Pacific seeks a middle ground. Economists typically encourage firms to use Ramsey pricing[[20]] for efficiency reasons. In contrast, those seeking the lowest UNE prices advocate a sort of 'reverse-Ramsey' approach, such that price increases are assigned to the most elastic goods. Pacific's proposal – a uniform markup which ignores demand elasticities – falls somewhere in-between. It is a middle ground the Commission itself has employed: The Commission approved a uniform markup in its decisions approving

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[19] As explained in Section III.E. of this decision, the adjustments that were ordered to Pacific's shared and common costs in D.98-02-106, plus our decision that non-recurring costs (NRCs) should be included in the denominator of the markup fraction, have the effect of reducing the markup (when rounded) to 19%.

[20] The First Report and Order describes Ramsey pricing as an allocation methodology "that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services. . ." (¶ 696.) The FCC goes on to explain that the "sensitivity of demand is measured by the elasticity of demand." (*Id.*, fn. 1700.)

> the Interconnection Agreements between Pacific and interconnecting CLECs." (Id. at 3; footnotes omitted.)

Pacific is quick to point out that a price limited to TELRIC plus a markup for shared and common costs is insufficient for most UNEs. Ronald Sawyer draws on his own testimony and that of several other Pacific witnesses to demonstrate why this is allegedly so. First, relying on the testimony of Dr. Hausman, Mr. Sawyer argues that the obligation to sell UNEs creates a risk for Pacific that it may not be able to recover its "sunk and irreversible" investments in UNEs – *i.e.*, that this investment may become stranded -- if a CLEC purchasing UNEs suddenly decides it is time to switch customers served through those UNEs over to facilities owned by the CLEC. (Ex. 114, p. 10.) Second, Mr. Sawyer argues that pricing UNEs at TELRIC plus a markup for shared-and-common-costs raises potential arbitrage problems, since such prices will be less than Pacific's comparable resale rate. (*Id. at 11.*) Third, Mr. Sawyer argues that excessively low UNE prices will discourage investment by CLECs in their own facilities, even though this Commission and most economists recognize that consumer welfare is best promoted through the construction of new facilities rather than resale service. (*Id.*) Finally, Mr. Sawyer argues that setting prices based on the forward-looking, incremental costs reflected in TELRIC will not allow Pacific to recover all of the costs it has incurred to provide service today, a situation that can eventually force a firm such as Pacific to go out of business.

Mr. Sawyer continues that the best approach to UNE pricing is to set the price of the network elements slightly below Pacific's comparable "wholesale" prices (*i.e.*, the resale rate), and slightly above the price charged by other suppliers of non-essential network elements. Pacific explains this approach as follows:

". . . Mr. Sawyer's testimony explores the boundaries for UNE prices. He compares Pacific's UNE pricing proposals to prices currently being charged in adjacent markets. First, he compares our UNE prices with our wholesale prices for bundled services. As he explains, UNE prices should be near the wholesale prices, so as to avoid arbitrage. At the same time, UNE prices should not exceed those wholesale prices, so as not to disadvantage UNE-based competition relative to competition through resale of Pacific's bundled services.

"Second, Mr. Sawyer compares Pacific's UNE prices to the wholesale prices of comparable offerings from CLECs. Mr. Sawyer reasons that allowing Pacific's UNEs to be priced below CLEC offerings would undermine facility-based local competition which has developed to date.

* * *

"Mr. Sawyer's Attachment [1 to Ex. 113-S] indicates that Pacific's UNE prices are reasonable relative to both Pacific's wholesale rates and the CLECs' wholesale rates. 'The results,' he testified, 'show that Pacific's proposed prices for UNEs will result in prices that are below Pacific's wholesale prices.' This maintains the viability of UNEs as an entry vehicle for CLECs relative to resale of Pacific's retail services. In addition, Mr. Sawyer noted in his testimony that the UNE prices 'generally fall into the range of facility-based CLEC wholesale prices.' 'Indeed,' he added, 'as the amount of usage by customer increases, Pacific's proposed UNE prices fall to the low-end of the facility-based CLEC wholesale prices.' While these UNE prices are low enough that Pacific may encounter an arbitrage problem going forward, Mr. Sawyer testified that they are reasonable to Pacific . . ." (Pacific Opening Brief, pp. 9-11; footnotes omitted.)

The proposed prices for which Mr. Sawyer made the comparisons summarized above were actually developed by another Pacific witness, Curtis Hopfinger. In deriving his proposed recurring prices, Mr. Hopfinger began with the TELRIC costs adopted in D.98-02-106, plus the 22% markup that Mr. Scholl calculated was necessary to cover shared and common costs. (Ex. 109-S, p. 5.) Beyond this point, however, the markup over TELRIC costs recommended by Mr. Hopfinger varied widely from element to element. For 2- and 4-wire loops, for example, Mr. Hopfinger recommended a markup over adopted TELRIC costs of approximately 35%. For switching, he recommended about a markup of about 45% for ports, and about 50% for features. (*Id.*, Schedule B.)

Mr. Hopfinger's highest proposed markups were for interoffice transmission facilities. For voice-grade dedicated transport, the proposed markup for fixed mileage exceeded one thousand per cent (1000%), and for variable mileage was nearly *ten thousand* per cent (10000%). On the other hand, the proposed markup for operator services, directory assistance and cross connects was 22%; *i.e.*, for each of these elements, Pacific proposed to recover only the uniform markup that it asserted was necessary to recover its shared and common costs. (*Id.*)

2. Dr. Hausman's Advocacy of a "Risk Adder" For Sunk and Irreversible Investment

One of the principal pillars supporting Pacific's pricing proposal is the testimony of Dr. Hausman. Dr. Hausman advocated that a "risk adder" be included in the price of UNEs to compensate Pacific for the possibility that significant amounts of the investment needed to provide UNEs may become stranded. Because Dr. Hausman maintained that his proposed adder was based on well-established investment principles, and because he claimed that it could be quantified with considerable precision, it is appropriate that we examine his testimony in some detail.

Dr. Hausman began his analysis by noting that the TELRIC methodology assumes "perfect contestability," which is the assumption "that all capital costs are fixed and that no capital costs are sunk. Thus, it assumes the ability of firms to enter and exit an industry costlessly." (Ex. 101, p. 9, n. 8.) However, Dr. Hausman continues, TELRIC fails to recognize the sunk and irreversible nature of much telecommunications investment, with the result that it provides incorrect economic incentives for investment:

> "TELRIC calculations provide the incorrect economic incentives for efficient investment once technological and economic uncertainty exist in the presence of sunk and irreversible investment. Fixed assets may become unredeployable, violating the costless exit assumptions of TELRIC models, which depend on the perfect contestability assumption." (*Id.* at 9.)[21]

Dr. Hausman continues that the large amount of sunk investment in telecommunications creates substantial uncertainty, for which

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[21] Dr. Hausman also emphasizes that in analyzing TELRIC, it is important to bear in mind the difference between "fixed" and "sunk" costs, which he describes as follows:

> "A fixed cost is a cost which must be incurred in a given period to produce a good service. However, in the next period if the service is not produced, the fixed cost is not incurred. [In contrast,] a sunk cost cannot be avoided in the next period; indeed, the sunk component of the investment cannot be recovered. Thus, investment which is fixed but not sunk can be costlessly redeployed [during] the next period to another production process. An example is a PC which can be reused. However, specialized software which is written for the particular project would be an example of a sunk cost. In telecommunications much network investment is sunk[,] such as investment in fiber optic networks or additional residential loops." (*Id.* at 9, n.8.)

rational investors will demand a premium. This premium, in turn, should increase the cost of capital assumed in TELRIC studies. After deriving an equation to account for "the fundamental decision rule for investment" under these circumstances, Dr. Hausman states:

> "Using parameters for LECs and taking into account the decrease in capital prices due to technological progress and because the expected change in (real) prices of most telecommunications services is also negative given the decreasing capital prices, I calculate the value of [the appropriate markup factor] to be approximately 3.2-3.4. Thus, a markup factor must be applied to the investment cost component of TELRIC to account for the interaction of uncertainty with sunk and irreversible costs of investment. Depending on the ratio of sunk costs to fixed and variable costs[,] the overall markup on TELRIC will vary, but the markup will be significant given the importance of sunk costs in most telecommunications investments." (*Id.* at 12-13; footnotes omitted.)

Because his proposed markup of 3.2 to 3.4 applies only to the investment component of UNEs that can be considered sunk, Dr. Hausman relied on computations by Mr. Scholl establishing the percentage of sunk investment for each UNE.[22] He gave the following summary of how the calculation is performed, using links (*i.e.*, loops) as an example:

> "For links Pacific has estimated that sunk costs represent [59%] of the TELRIC estimated cost. The correct markup to TELRIC would then be 0.41 + 3.3 * 0.59 = 2.35 * TELRIC where I use the 3.3 markup factor

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[22] Mr. Scholl discusses the stranded investment issue at pages 18-22 of his direct testimony (Ex. 129-S), and his calculations of the sunk portion of TELRIC costs for the four network elements discussed by Professor Hausman are set forth in Attachment D to that testimony.

> that I calculated above. The first term in the equation is the variable costs and fixed (but not sunk) costs[,] and the second term is the sunk costs of investment. Thus, for links I calculate a markup factor on TELRIC of 135% to take account of the sunk and irreversible investment in the unbundled element." (*Id.* at 15.)[23]

The markups that Dr. Hausman calculates in this manner should, he says, be *added* to the markup that is appropriate to recover shared and common costs.

Dr. Hausman also presents an alternative method of compensating Pacific for the alleged risk of unrecoverable sunk costs. If a CLEC is willing to sign a contract committing it to purchase UNEs for a fixed term rather than month-to-month,[24] then the 3.3 factor can be reduced proportionately. Using 8.25 years (100 months) as a reasonable approximation of the average economic lifetime of sunk investment, Dr. Hausman calculates (for contracts of various lengths) prorated multipliers that would account for the risk of

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[23] Using Mr. Scholl's calculation of sunk investment, Dr. Hausman calculated the following markups for representative UNEs:

<u>UNE</u>	<u>Proportion Sunk Costs</u>	<u>Markup Factor for TELRIC</u>
Link	0.59	2.35
Port	0.10	1.23
Local Switching, Originating Setup	0.26	1.60
Local Switching, Orig. Duration	0.65	2.49

[24] Since the purpose of the contract is to reduce risk, Dr. Hausman notes that the contract should be freely assignable, *i.e.*, "the CLEC can sell the use of the unbundled element to another CLEC at a market determined price." (*Id.* at 16.)

unrecoverable sunk investment.[25] These prorated multipliers are then applied to the proportion of sunk investment calculated by Mr. Scholl to arrive at the markups appropriate for certain UNEs for contracts of varying lengths. (*Id.* at 17-18.)[26]

Dr. Hausman argues that the case for a risk adder to account for unrecoverable sunk investment is especially strong for UNEs such as tandem switches and loops that provide multiple lines for residential customers, because CLECs can quickly give up these UNEs once investment in their own facilities becomes justified. Dr. Hausman quotes a November 1997 statement by John Zeglis, AT&T's Vice-Chairman, that the final step for a CLEC is to replace UNEs such as "switches, trunks, even loops (someday)" with its own facilities, "but only as your growing volumes allow you to prove in the new investment." (*Id.* at 20, n. 17.) From this statement, Dr. Hausman concludes:

> "AT&T's strategy is to have Pacific take the risk of the sunk investments and to have a (free) option to switch to AT&T's facilities when its volumes are sufficient. The sunk investment will then likely become stranded so that Pacific shareholders will not have been rewarded sufficiently for the risk of the sunk investment. Mr. Zeglis' remarks demonstrate explicitly why the markup for sunk investment by ILECs is

[25] Once again, the prorated adder for "sunk costs" would be in addition to the uniform markup necessary to recover shared and common costs.

[26] Using Mr. Scholl's data, the alternative method results in the following percentage markups over TELRIC costs for the UNEs and contract lengths indicated:

Years in Contract	Link	Port
1	119%	20%
3	87%	15%
6	38%	6%
8.25	0	0

> needed for efficient investment in network facilities." (*Id.*)

Dr. Hausman also notes that the case for a risk adder is greater where the UNE is non-essential, because it is UNEs that can be supplied by another vendor that are most likely to become stranded.[27]

In the final portion of his testimony, Dr. Hausman makes a forceful argument about the critical role of UNE pricing in encouraging CLECs to invest in their own facilities. First, Dr. Hausman notes, efficiency will be harmed if UNE prices are set too low (while ILEC retail prices remain the same), because such a situation will create a "price umbrella" that benefits inefficient CLECs and deprives consumers of lower prices. (*Id.* at 19-20.)

Second, Dr. Hausman argues that without a properly-calculated risk adder, neither CLECs nor incumbent LECs will have adequate incentives to invest in facilities. He states:

> "First, ILECs would not receive an unbundled element price consistent with the risk created by sunk and irreversible investments. They would not have the correct economic incentive to invest[,] and existing investment[s] would not earn their correct economic return. Especially for investment in new technologies

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[27] Dr. Hausman offers the following justification for a larger risk adder where non-essential facilities are involved:

> "[T]he markup for sunk investments increases with demand uncertainty and price uncertainty. Both demand and price are more uncertain with non-essential elements because of competitive supply. Thus, the markup over TELRIC for the sunk portion of investment would be higher for non-essential elements. At least initially, essential elements will not be competitively supplied to the same extent. Thus, the demand uncertainty and price uncertainty for these elements will be less, and the markup factor will not be as high." (*Id.* at 22.)

> such as ADSL, the decreased economic incentives will lead to a decrease in investment by ILECs below economically efficient levels. Since my academic research has demonstrated that significant amounts of consumer welfare are created by new services, decreased investment by ILECs would likely create hundreds of millions or even billions of dollars of harm to consumers . . .
>
> * * *
>
> "CLECs' economic incentives would also be affected. Since CLECs face a 'make-buy' decision to either invest in their own facilities or to buy unbundled elements from ILECs, an uneconomically low price of unbundled elements will decrease the economic incentives for CLECs to invest in their own facilities. The CLECs will continue to depend on Pacific's network with the outcome that regulation will continue into the indefinite future . . ." (*Id.* at 23-24.)

B. Other Parties' Criticisms of Pacific's Pricing Proposal

All other parties except GTEC were harshly critical of Pacific's pricing proposal. The criticisms took many forms, including extended critiques of how Pacific calculated its proposed markup for shared and common costs, as well as detailed dissections of Dr. Hausman's argument in favor of a "sunk cost" risk adder.

The arguments concerning the proper components of the shared-and-common-cost markup are considered in Section III of this decision. In this section, we deal with the criticisms of Dr. Hausman's testimony.

1. AT&T/MCI's Criticisms of Dr. Hausman's Proposed Risk Adder

The most detailed critique of Dr. Hausman's proposed risk adder for "sunk and irreversible" costs was offered by AT&T and MCI, which dispute virtually every factual and theoretical premise of Dr. Hausman's testimony. In summary, they argue that (1) the risks covered by the proposed adder are already accounted for in the TELRIC studies adopted in D.98-02-106, (2) the risk of stranded investment is nil, because CLECs will not ask Pacific to build UNE plant where Pacific would not otherwise do so, (3) Pacific incurs equal or greater investment risks when it is provides retail service than when it provides UNEs, and (4) Dr. Hausman erroneously assumes that investment risk is uniform across each broad category of plant, even though the risk varies depending on whether the plant is used to provide competitive services or a traditional "monopoly" service.

Before developing these points, AT&T/MCI point out that Dr. Hausman's "quantification of the risk adjustment for 'sunk' investments is inextricably intertwined with [his] quantification of the adjustment for expected changes in the price of capital goods." (AT&T/MCI Reply Brief, p. 44.) This seriously undercut's Dr. Hausman's testimony, AT&T/MCI argue, because the assigned ALJ struck another portion of the Hausman testimony dealing with risk allegedly arising from the change in the price of capital goods. The basis for striking that testimony was that it represented an attempt to reargue issues about depreciation that should have been raised in the UNE costing phase, which culminated in D.98-02-106.[28] Thus, AT&T and MCI conclude, Pacific is seeking to bring in through the back door testimony that was not allowed in through the front.

On the merits, AT&T/MCI begin their critique of Dr. Hausman by arguing that the cost of capital approved for Pacific's TELRIC studies (10.0%) already accounts for the risks covered by the proposed sunk cost

[28] This testimony was stricken in the May 15, 1998 ALJ Ruling. (*Mimeo.* at 4-9.)

adder. AT&T/MCI witness Dr. Glenn Hubbard observes that the 10.0% cost of capital (which was first approved in D.96-08-021 and carried over to D.98-02-106) "likely provides an upper bound on the risk of a hypothetical company leasing unbundled network elements in California." (Ex. 607, p. 17.) Another AT&T/MCI witness, Terry Murray, points out that the 10.0% cost of capital used in the Pacific TELRIC studies was taken from a Commission decision issued in 1989. The low inflation rate and relatively low interest rates since then make it possible, Ms. Murray argues, that the risk premium reflected in the 10.0% cost of capital is much higher today than it was in 1989. Thus, Ms. Murray concludes, the risk premium reflected in this adopted cost of capital may actually *over*compensate Pacific for the risk of providing UNEs. (Ex. 616, pp. 53-55.)[29]

Next, AT&T/MCI argue that it is unlikely, if not impossible, that CLECs would ask Pacific to build facilities in geographic areas where Pacific would not otherwise have built them. Noting that Dr. Hausman's proposed adder "rests on the assumption that [it] applies to future investment, not plant already in the ground," AT&T/MCI claim that Dr. Hausman conceded that "[t]his theory would apply only in the case where new entrants' demand for [UNEs] compels Pacific to place plant that it would not otherwise place." (AT&T/MCI Reply Brief, pp. 48-49.) But, AT&T/MCI continue, Pacific's arguments about its obligations as a carrier of last resort (COLR) "make clear that it is Pacific's obligation to serve *retail* customers, and not any obligation to build

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[29] AT&T and MCI also argue that the depreciation rates and "fill factors" (*i.e.*, utilization rates) in the TELRIC studies reflect the possibility that not all of Pacific's plant will be fully utilized. (AT&T/MCI Reply Brief, p. 47.)

At least on the issue of fill factors, Dr. Hausman disagrees. In his direct testimony he states that one of TELRIC's basic assumptions is that "the investment is always used at the designed capacity." (Ex. 101, p. 10.)

on behalf of purchasers of [UNEs], that causes Pacific to place new plant." (*Id.* at 49.)

AT&T/MCI's third argument, which is related to its second, is that there is no increased risk for Pacific when a new entrant purchases UNEs, because the UNEs are provided through the same plant that Pacific uses to provide bundled retail service. AT&T/MCI witness Dr. Lee Selwyn states:

> "[W]hen a Pacific Bell retail residential customer elects to take service from a competing local carrier who utilizes an unbundled Pacific Bell loop to provide its service, the *very same physical loop* that had previously been used to provide the bundled retail service can now be used by Pacific to supply the unbundled loops to the competitor. If the customer subsequently elects to switch to a different competitor, or return to Pacific, that very same physical loop will still be used. *No plant will be made idle by virtue of Pacific's provision of* [UNEs], and no 'sunk costs' . . . will be created." (Ex. 612, p. 36; emphasis in original.)[30]

Finally, AT&T and MCI argue that the investment risk for Pacific is actually much greater on plant that it installs to provide competitive retail services than on plant that it installs to provide UNEs. Dr. Hausman's markup fails to distinguish between these two situations, AT&T and MCI argue, because he assumes that the proportion of sunk and irreversible investment holds constant across all uses for a particular UNE, and does not vary depending on whether the facilities are used to provide a competitive service.[31] The result of

[30] Dr. Selwyn concedes that stranding of Pacific plant is a possibility where the retail customer takes service from a CLEC that has built its own facilities, especially loops. (Ex. 612, p. 37.)

[31] Dr. Selwyn gives the following example of the risks associated with constructing loops used in competitive business services:

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Dr. Hausman's assumption that, for example, "all loops . . . possess[] common risk attributes," is "to understate risk and the associated mark-up for competitive uses of loops and to overstate risk and the associated mark-up for monopoly uses of loops . . ." (AT&T/MCI Reply Brief, pp. 51-52.)

In addition to the arguments set forth above, AT&T and MCI are critical of Dr. Hausman's suggestion that Pacific could be compensated for the alleged risk of sunk investment by encouraging CLECs to sign long-term contracts for UNEs. AT&T and MCI argue that in the case of a residential customer who moves, such an approach would actually reduce Pacific's risk and increase the CLEC's:

> "[I]f the new entrant that had [previously] provided the retail service were forced to commit to a long-term contract and the new customer elected to take retail service directly from Pacific, the new entrant would nonetheless be forced to fulfill its contractual obligation, while Pacific would be free to serve the customer with another loop from the same cable. Pacific and Pacific alone is thus assured the ability to reuse its plant, thereby vitiating any 'risk' of the type that Professor Hausman posits. On the other hand, by signing a long-term contract, the competitor acquires a level of risk far greater than any Pacific might sustain, because once the

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" . . . Pacific might construct feeder facilities to large downtown office buildings or commercial campus-type locations in anticipation of providing Centrex, which requires one physical copper pair or DS-0 channel per station line. If the customer at such a location doesn't buy Centrex, or replaces it with a customer premises PBX, Pacific would only be required to furnish PBX trunks, involving as few as 6% to 10% of the individual loops or DS-0 channels as had been deployed in anticipation of Centrex-level demand. On the other hand, if Pacific does not deploy facilities sufficient to support a Centrex installation, it will be unable to furnish this service even if the customer would otherwise purchase it." (Ex. 612, pp. 35-36.)

> competitor's retail customer departs, the competitor will have no other use for the unbundled loop." (AT&T/MCI Reply Brief, p. 54.)[32]

If anything, AT&T/MCI continue, Pacific should be required to offer a discount *below* TELRIC-based prices when the CLEC is willing to commit to a contract, because the long-term commitment gives Pacific greater demand certainty than it enjoys today. (*Id.* at 54-55.)

AT&T/MCI conclude their attack with a rebuttal of some of the broader points made by Dr. Hausman and Mr. Sawyer. First, they argue that UNE prices greater than TELRIC plus a markup for shared-and-common costs cannot be justified on the ground such prices are needed to encourage investment by new entrants in their own facilities. Noting that none of the facilities-based providers is making such an argument, AT&T/MCI state:

> "Pacific attempts to bolster its argument for high markups above TELRIC by citing the increased investment risk that facilities-based entrants will incur to build plant using 'largely unproven wireless and coax technologies' as opposed to traditional copper facilities. To the extent that the investment plans of facilities-based carriers have a cost in excess of Pacific's TELRIC because those carriers intend to use 'unproven' technologies . . . the Commission should not attempt to guarantee the economic viability of such high-risk investments by setting artificially high prices for [UNEs]. The desirability of using such 'unproven' technologies should be submitted to a market test that determines whether the operational cost savings or new . . . services that they make possible justify the costs that

[32] AT&T and MCI do not address Dr. Hausman's suggestion that the contract for the purchase of UNEs should be freely assignable. *See* footnote 21, *supra.*

> the higher risks impose." (AT&T/MCI Reply Brief, p. 57; footnote omitted.)

AT&T/MCI also argue that the language about encouraging new investment that appears in § 709 of the Pub. Util. Code and § 706 of the Telecommunications Act does not override the command in § 252(d)(1) of the 1996 Act that UNE prices must be based on UNE costs. AT&T and MCI argue that "cost-based pricing of [UNEs] will discourage inefficient duplication of facilities and assure the development of economically efficient and sustainable competition for both traditional and advanced telecommunications services." (*Id.* at 59.)

AT&T/MCI also rebut the argument that UNE prices greater than TELRIC plus a markup for shared-and-common costs are necessary to prevent *arbitrage* between UNEs and resale service. They begin by pointing out that Pacific's wholesale rate is equal to its retail rate, less a 17% "avoided cost" discount. The retail rate was taken from the IRD decision, D.94-09-065, a decision that "applied a variety of cost standards, many of which were based on embedded costs." (*Id.* at 61.) Worrying about the possibilities for arbitrage between this IRD-based resale rate and UNE prices would amount to ignoring the costs adopted in D.98-02-106, and would represent an unlawful return to traditional ratemaking, according to AT&T/MCI:

> "The retail price structure [derived from IRD] bears little if any resemblance to the kind of forward-looking economic costs that the Commission has adopted as the basis for pricing [UNEs]. Thus, using bundled wholesale prices as the standard for the reasonableness of prices for [UNEs] divorces the latter prices from forward-looking economic costs and introduces considerations of costs based on a rate-of-return proceeding, in violation of [§ 252(d)(1)(A)(i) of]the Act." (*Id.* at 61.)

AT&T/MCI also argue that claims about the "windfall" that would allegedly result from arbitrage are simply intended to divert attention from the high margins that Pacific enjoys on many of its competitive business services. AT&T/MCI state:

> "If the margin between cost-based prices for [UNEs] and retail revenues from business customers is high, that is because the retail prices that Pacific charges business customers substantially exceed its forward-looking economic costs. Pacific has the freedom to reduce those prices toward cost given the Category II treatment of virtually all of its retail services, but has not voluntarily chosen to do so. Competition from entrants using [UNEs] appropriately will put pressure on Pacific to reduce its above-cost retail prices. The pressure to reduce prices toward forward-looking economic costs is one of the primary consumer benefits of competition that the Act and this Commission's policies are designed to produce." (*Id.* at 62; footnotes omitted.)

2. Sprint's Criticisms of Dr. Hausman's Theory

Sprint is also highly critical of the proposal for a "sunk cost" adder, but its criticisms of Dr. Hausman's theory (and the calculations of Mr. Scholl that support Dr. Hausman) differ somewhat from those of AT&T/MCI.

First, Sprint points out that in arguing for a sunk cost adder, Pacific is, in effect, asking for upfront compensation for stranded investment. Sprint continues that such an approach is contrary to the policy this Commission announced in the "franchise impacts" decision, D.96-09-089 (*mimeo.* at 59-60), which Sprint says "disfavors determination of stranded [telecommunications] costs that bear a speculative nature." (Sprint Opening Brief, p. 24.) According to Sprint:

> "While couched in forward-looking financial terms, [Dr. Hausman's] risk adjustment factor amounts to nothing more than an up-front compensation for potentially stranded costs in TELRIC prices. The proposal violates the Commission's own directive to address stranded costs, if at all, in the context of franchise impact. Moreover, even if the Commission were to adopt any sort of adjustment to address the risk of stranded investment, the Hausman proposal violates fundamental tenets of stranded cost recovery, seeking adjustment for the ***potential*** that ***future*** investment will become stranded, with no consideration of potential mitigation." (*Id.* at 17; footnote omitted, emphasis in original.)

Sprint continues that while Dr. Hausman claims his proposed adder is designed to compensate Pacific for the future investment necessary to provide UNEs, the adder will, in fact, "be recovered for ***all*** investment, whether existing or newly constructed. The adjustment, accordingly, will be attributed to historical, embedded investment." (*Id.* at 19.)

Sprint also criticizes Dr. Hausman for his assumption that the investment risk for Pacific is greater when it is providing UNEs than when it is providing resale service (or bundled services to retail customers). The risk for which Dr. Hausman proposes to compensate Pacific is "the potential that investment may be stranded or unutilized in the future – a risk that stems in large part from the risk of bypass through competitive, facilities-based entry." (*Id.* at 25.) Nonetheless, Sprint points out, "Pacific concedes that both UNEs and wholesale services use the same investment," and Sprint gives examples to show why the method by which service is provided to a particular customer in an ILEC's territory does not by itself determine whether there is a risk of bypass. (*Id.* at 25-26.)

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Sprint is also critical of the calculations by which Mr. Scholl determined the percentage of potentially-stranded investment for each UNE. After noting that Mr. Scholl's calculations were based on a single page of workpapers, Sprint says:

> "Pacific's 'stranded cost' estimation, at best, is a casual guess at the potential future use of its investment and lacks substantive detail. By his own admission, Mr. Scholl looked only at one factor: 'It's whether or not, after a piece of plant is placed, whether it can be removed from that placement location and made available for use elsewhere.' His analysis fails to take into account any of the factors normally employed in analyzing stranded costs, such as vintage and depreciation levels and the market prices through which the utility would recover its costs." (*Id.* at 23; footnotes omitted.)

3. The Facilities-Based Coalition's Criticisms of Dr. Hausman's Theory

The FBC also provided a substantial critique of Dr. Hausman's proposed adder for sunk costs. (FBC Opening Brief, pp. 13-20.) In the main, their arguments are very similar to those of AT&T/MCI and Sprint, but they are especially critical of Dr. Hausman's suggestion that a long-term contract for the purchase of UNEs would obviate the need for a sunk cost adder. The FBC states:

> "The problem with Hausman's suggestion is that (1) Pacific has not specified what discounts would be available, despite prompting from the assigned ALJ that it should supply such details, (2) Pacific has only stated, in an extremely vague manner, that it will negotiate contracts for such discounts, and (3) the record does not indicate that these contracts will materialize as the market for UNEs matures. Pacific's own witnesses clearly testified that they are not proposing volume and term discounts in this proceeding." (*Id.* at 17.)

C. Discussion

1. Dr. Hausman's Proposal For A "Sunk Cost" Adder Is Speculative And Ignores Similar Risks That Pacific Incurs in Providing Retail Service

We have devoted extensive attention to Dr. Hausman's testimony and the critiques thereof because his advocacy of a "risk adder" was central to Pacific's pricing case for UNEs. After careful consideration of Dr. Hausman's theory, we must reject it. In our opinion, the record here not only fails to justify an adder for sunk costs, but lends support to the view that the most appropriate pricing approach for Pacific's UNEs is to price them all at TELRIC plus a uniform markup that permits the recovery of all of Pacific's shared and common costs.

To begin, we must acknowledge that there is merit in the arguments of AT&T/MCI and the FBC that Dr. Hausman's proposal for a "sunk cost" adder is really a collateral attack on the TELRIC methodology. Although we reserved the right in D.98-02-106 to depart in appropriate circumstances from what we characterized as the rigid version of the TELRIC methodology prescribed in the First Report and Order, (*mimeo.* at 18), we nonetheless concluded that for three important reasons, TELRIC was preferable to TSLRIC for setting UNE prices. (*Id.* at 19-23.)

While Dr. Hausman does not directly quarrel with our decision to use TELRIC,[33] his testimony is full of criticisms regarding the

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[33] However, other Pacific witnesses have implicitly taken issue with our conclusion that TELRIC is preferable to TSLRIC. For example, the testimony of Dr. Richard Emmerson (Exhibit 106) attempts to demonstrate that by using a particular series of mathematical tests, cross-subsidization can be easily tested for under the TSLRIC studies approved in D.96-08-021, which studies Dr. Emmerson believes should be used to establish price floors. We had ruled in D.98-02-106 that one of the apparent shortcomings of TSLRIC in

Footnote continued on next page

conceptual basis for this methodology. Most significantly, he introduces his calculations for the proposed "sunk cost" adder by arguing that TELRIC does not adequately distinguish between "fixed" and "sunk" costs:

> "TELRIC calculations recognize the fixed nature of much investment in telecommunications networks, but TELRIC calculations fail to recognize the sunk and irreversible nature of many investments in telecommunications networks. TELRIC makes no allowance for the sunk and irreversible nature of telecommunications investment, so that it adopts incorrectly the perfect contestability standard. The distinction between 'fixed' and 'sunk' is crucial." (Ex. 101, pp. 8-9.)

Although we do not disagree with the assigned ALJ's ruling to allow many of Dr. Hausman's TELRIC criticisms to remain in the record,[34] it is evident from a full review of Dr. Hausman's testimony that at the most fundamental level, he believes both TELRIC and TSLRIC are deeply flawed

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relation to TELRIC was that the detection of cross-subsidization was more difficult. (*Mimeo.* at 22-23.)

[34] Prior to the start of the pricing hearings, AT&T and MCI moved to strike substantial portions of Dr. Hausman's testimony on the ground that it represented an improper attempt to relitigate costing issues decided in D.98-02-106. In his May 15, 1998 ruling, the assigned ALJ agreed that Dr. Hausman's testimony about the alleged inadequacy of TELRIC depreciation rates was improper relitigation of costing issues and should be stricken. (*Mimeo.* at 7-8.) However, in keeping with the general rule that arguments like those of AT&T and MCI go to the weight of testimony rather than to its admissibility, the ALJ denied the remainder of the motion to strike. Specifically, the ALJ allowed Dr. Hausman's testimony about his proposed adder to remain in the record, because the ALJ concluded that the adder "is forward-looking; [Dr. Hausman] does not appear to be directly advocating recovery of embedded costs . . ." (*Id.* at 8.)

costing methodologies.[35] In view of his fundamental disagreement with our previous decisions that either of these forward-looking methodologies can yield costs adequate for setting Pacific's UNE prices,[36] Dr. Hausman would have had to make a compelling case before we could consider adopting his proposed adder. For several reasons, no such case was made.[37]

First, as several parties have pointed out in their briefs, Pacific is not proposing that the full risk adder advocated by Dr. Hausman be taken on each UNE. The reason for this, Dr. Hausman conceded, was that "it wouldn't

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[35] When asked whether the TSLRIC and TELRIC methodologies correctly capture the long-run costs faced by Pacific, Dr. Hausman replied that they do not, because they "omit three categories of costs which must be taken into account, or Pacific will not be able to cover its costs." (Ex. 101. p. 4.) Dr. Hausman then explained that the three cost categories were shared and common costs, "the change in price of capital goods, which is an element of economic depreciation," and the "sunk and irreversible nature" of many investments in telecommunications networks.

As indicated in footnote 33, *supra,* the assigned ALJ struck the portion of Dr. Hausman's testimony dealing with change in the price of capital goods, because it constituted an improper attempt to relitigate the depreciation rates used in Pacific's cost studies. However, Dr. Hausman was given a full opportunity to develop his other two points about TELRIC's shortcomings.

[36] D.98-02-106, *mimeo.* at 17-18, Conclusion of Law (COL) Nos. 3, 21; D.96-08-021, *mimeo.* at 15, COL No. 2.

[37] In its Opening Comments on the May 10, 1999 Proposed Decision (PD), Pacific criticizes what it calls the PD's use of a "procedural device to sidestep the important policy issues raised by [Dr. Hausman's] testimony." By treating Dr. Hausman's testimony as "merely a collateral attack" on our decision in D.98-02-106 to use TELRIC for UNE pricing, Pacific claims that the PD is "brushing off procedurally in favor of a purely mechanical approach" the important "economic ramifications of the risks allocated by this decision." (Pacific Opening Comments, p. 9.)

This criticism is without merit. As demonstrated by the discussion in the text, we are relying on several substantive reasons for rejecting Dr. Hausman's proposed adder in addition to the "procedural" ground that it represents a collateral attack on our decision to use TELRIC.

surprise me if Pacific . . . realizes that it's unlikely the Commission is going to go along with something that high . . ." (Tr. 40: 5934.)[38] In a similar vein, Pacific's witnesses failed to offer any concrete proposal for discounting UNE prices when a CLEC agrees to purchase UNEs on a long-term basis (Tr. 56:8392-94), even though Dr. Hausman clearly stated that such long-term contracts are an alternative to his proposed adder.

Second, demand for UNEs is only one of the reasons that Pacific will be building new plant in the future, and thus is only one of many reasons why future plant might become stranded. Based on statements in Pacific's briefs, it appears that the investment risks Pacific will incur in the near future are more likely to be attributable to the provision of retail service than to the provision of UNEs. Pacific's Opening Brief states, for example, that AT&T and MCI's arguments about promoting residential competition are designed to "hid[e] the ball," because "the Commission must recognize that *UNEs will be used primarily for business customers*, at least in the near term." (Pacific Opening Brief, p. 46; emphasis supplied.) Furthermore, Pacific acknowledges that whatever competition there is for residential customers in the immediate future is likely to

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[38] Curtis Hopfinger, the witness who actually developed the prices advocated by Pacific, agreed with Dr. Hausman on this point:

> "Dr. Hausman's factor was only one thing considered. I also looked at services that are being provided by other carriers. I also looked at markups that may apply on a wholesale basis, and I also looked at my general knowledge of prices that are being proposed in other areas regarding loops. And I also considered the Commission's concerns about pricing on this and the likelihood of being able to achieve a 135% markup on that loop.
>
> "Q. So 135 percent was too high, right?
>
> "A. In this particular case, I felt it was, yes." (Tr. 42:6288.)

take place in low-cost (*i.e.*, densely settled) areas, with high-volume residential customers being the target.[39] If Pacific is correct in these predictions (which seem reasonable), then the likelihood of stranding *caused solely by demand for UNEs* will be small, since Pacific will be constructing new facilities in these areas mainly to win (or keep) the targeted, highly profitable business and residential customers.[40]

A third reason we are not persuaded by Dr. Hausman's argument for a "risk adder" is that he acknowledged during recross examination that regulatory requirements play at least as important a role as economic incentives in determining where and to what extent an ILEC will build facilities:

> "Q. As to investment in the future, if the [ILEC] is the carrier of last resort, it also has an obligation to make the investment regardless of the economic incentive, true?

[39] This is clear from Pacific's arguments opposing Terry Murray's proposal for a surcredit on residential loops funded from the CHCF-B fund established in D.96-10-066. In opposing this proposal, Pacific argues that Ms. Murray's approach would shift the benefits intended for residential consumers who live in high-cost areas to AT&T and MCI. Pacific continues that if Ms. Murray's proposal were to be accepted, "the likely scenario is that such funding will end up being used to compete for high revenue residential customers in low cost areas, *since that is where competition is expected to occur in the residential market.*" (Pacific Opening Brief, pp. 55-56; emphasis supplied.)

[40] Although Dr. Hausman and Mr. Scholl believe that there is a significant risk that UNEs in less-populated geographic areas will become stranded, the quoted statements from Pacific's briefs suggest that, in fact, there is unlikely to be much demand for such UNEs.

In a similar vein, Dr. Hausman acknowledged on cross-examination that his analysis did not take into account whatever obligation CLECs have to advance the construction costs of new facilities that they order. (Tr. 41:6010-11.) Where such an obligation exists, CLECs would seem unlikely to order UNEs in geographic areas that are not profitable or only marginally profitable.

"A. Only for certain services. I mean, again, there may be legal things here, but my understanding is, for instance they might have to provide local access but they're not required to provide some new service like ADSL. So I could only agree in part.

"Q. Would they be required to provide [UNES]?

"A. Well, some. There may be more in the future as well. I mean, who knows? You know, with a dynamic technology it could well be changing over time.

"Q. But you would agree that there are regulatory requirements imposed on [ILECs] that affect their investment decisions at least as much as the economic incentives you mentioned, true?

"A. For certain investments I would agree. For others I would not." (Tr. 41: 6021-22.)[41]

Fourth, Dr. Hausman argues that an adder for future stranded plant is appropriate because it would be impracticable to conduct an after-the-fact Commission proceeding to determine how much UNE plant has actually become stranded. (Tr. 41:6015-18.) While we do not underestimate the complexities of such a proceeding, Sprint is correct when it points out that Pacific's request for upfront compensation is inconsistent with how we have handled demands for compensation caused by stranding in our franchise impacts decision (D.96-09-089), and in our decisions on electric and gas

[41] In its comments on the PD, Pacific criticizes our reliance on this testimony as a reason for rejecting the proposed adder, because, Pacific claims, "the risk caused by UNEs is in addition to, not coincident with, the risk Pacific incurs under its 'carrier of last resort' obligation." (Pacific Opening Comments, p. 8, n. 16.)

The difficulty with this argument is that nowhere in Pacific's comments or Dr. Hausman's testimony is there an attempt to *measure* the additional risk that Pacific will incur in having to build UNEs in areas where it is the carrier of last resort.

restructuring. Rather than overprice UNEs by including a risk adder for risks that may never materialize -- and thereby discourage entry into the local exchange market -- we think it is preferable to give Pacific an opportunity to prove in the future that investment made solely to provide UNEs has become stranded because new entrants decided to switch from UNEs to their own facilities at the point when providing service through their own facilities became cost-justified.

Finally, we note that Dr. Hausman's proposal for a "risk adder" is inconsistent with the interpretation of the Telecommunications Act set forth in a recent ruling by the United States District Court regarding the interconnection agreement between Pacific and AT&T that we approved in D.96-12-034. In her May 11, 1998 order granting summary judgment in favor of AT&T on various issues, Judge Susan Illston of the Northern District of California held that adders of the kind proposed by Dr. Hausman are inconsistent with the basic pricing standard contained in § 252(d)(1) of the Act.[42] In ruling that this Commission had erred in allowing access charges to be included in the interim prices for UNEs specified in the Pacific-AT&T interconnection agreement, Judge Illston said:

> "The Court concludes that the CPUC improperly allowed Pacific Bell to assess switched access charges that are not based on the 'cost . . . of providing . . . the

[42] *AT&T Communications of California, Inc. v. Pacific Bell, et al.*, Order Granting Plaintiff's Motion for Summary Judgment and Denying Defendants' Motions for Summary Judgment, Case No. C 97-0080 SI *et al.*, Northern District of California, filed May 11, 1998, 1998 U.S. Dist. LEXIS 10103. Although this Commission originally filed an appeal from Judge Illston's ruling, we have decided not to pursue that appeal in light of the Supreme Court's decision in *AT&T-Iowa*. Pacific, however, is pursuing such an appeal.

network element.' 47 U.S.C. § 252(d)(1). The Court is not convinced that the access charges cover 'costs' that Congress intended to provide for when it drafted section 252. Rather, the Court believes that section 252(d)(1) directs state commissions to set prices that account only for the specific costs incurred in providing the network elements, along with a reasonable profit. After reviewing the evidence, the arbitrator in this matter used Pacific Bell's cost model as the basis for setting prices, and determined that the model allowed for Pacific Bell to recoup its costs plus a reasonable profit. The CPUC erred when it allowed for other amounts to be imposed in addition to these costs." (Slip. op. at 15.)

2. The Hopfinger-Sawyer Pricing Proposal, Which Relies on Dr. Hausman's Analysis, Is Unacceptable Because It Is Not Systematic And Would Confer Too Much Discretion on Pacific In Making Pricing Decisions

Having rejected Dr. Hausman's arguments in favor of a "sunk cost" adder, we turn to Mr. Hopfinger's pricing proposal. Because it is unsystematic and involves the exercise of unacceptably large amounts of discretion by Pacific, we reject it as well.

While Mr. Hopfinger stated that he took Dr. Hausman's analysis into account in developing his recommended UNE prices, it is hard to quarrel with Sprint's assertion that Mr. Hopfinger really used Dr. Hausman's arguments as a "fudge factor."[43] The following summary by Sprint of

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[43] Sprint's Opening Brief, p. 31. Sprint claims that Dr. Hausman's "fudge factor" was used as follows:

> "The risk adjustment multipliers calculated by Dr. Hausman were not used in any formulaic manner to determine the appropriate price level. Mr. Hopfinger 'did not do specific markups on each UNE by using Dr. Hausman's factor.' Instead, Mr. Hopfinger selected a price from his

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Mr. Hopfinger's proposal gives a good idea of the extraordinary amount of subjectivity involved in his pricing recommendations:

> "In the pricing exercise, [Mr. Hopfinger] has mixed and matched prices drawn from a wide range of references. [He] chose, based solely on his own sense of what was reasonable, from a menu of Pacific's interim prices, CLEC offerings, intrastate access rates, external analysis, and a TELRIC plus 22 percent formula in proposing UNE prices. For example,
>
> - *Local loops and analog line port.* Mr. Hopfinger chose to set prices at the current interim rate. He then backed into a 'margin', based on the price and TELRIC cost. He finally extended that same margin to other facilities falling within the same category.
> - *Interoffice transmission prices.* Mr. Hopfinger looked to the prices charged by other competitors for similar services based on the Sawyer analysis, although the rates 'are not set specifically at what competitors are charging today.'
> - *STP port prices.* Mr. Hopfinger looked to Pacific's intrastate access rates.
> - *Cross-connects.* Mr. Hopfinger employed the minimum 22 percent markup, because there was no existing competitive tariff available for comparison.
> - *Interoffice originating/switching.* Mr. Hopfinger relied upon an analysis prepared by Mr. Sawyer and determined that a particular price would be 'reasonable.'" (*Id.* at 29; footnotes omitted.)

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menu of prices and made sure that the gap between TELRIC plus 22 percent and the selected price was within the range of the risk adjustment factor calculated by Dr. Hausman." (*Id.* at 30; footnotes omitted.)

We also find it difficult to disagree with the FBC, which argues that Mr. Hopfinger's elaborate testimony was really designed to justify the prices set forth in current tariffs and interconnection agreements, rather than to develop prices based on the TELRIC costs approved in D.98-02-106. The FBC states:

> "[Mr. Hopfinger's] testimony on cross-examination indicates that his proposed prices are little different than Pacific's current prices for UNEs (as found in existing interconnection agreements), or its current tariff prices for access services which provide essentially the same functionality as the UNE. For the most part, Pacific's proposed UNE prices are either the rates contained in the AT&T interconnection agreement[,] or Pacific's switched and special access tariff rates, whichever is higher for any specific element. Reliance on these existing rates has nothing to do with the cost of the UNEs, irreversible sunk investment, or so-called market prices. As noted by Dr. Selwyn, what makes Pacific's pricing proposal [unreasonable] is that it assumes that the Commission is inclined to ignore the costs adopted in D.98-02-106 now that it has reached the pricing stage of this proceeding." (FBC Opening Brief, p. 21.)

One troubling aspect of the Hopfinger/Sawyer proposal was its reliance on the wholesale prices offered by CLEC competitors. As the FBC effectively demonstrated, this part of Pacific's analysis was built on a pillar of sand, because Pacific did not establish that any customers actually made purchases under the CLEC wholesale tariffs. In fact, ICG – the carrier Pacific relied on for a supposedly representative CLEC wholesale discount -- withdrew its tariff during the pricing hearings. While Pacific attempted to dismiss the ICG withdrawal as a "courtroom antic,"[44] Mr. Hopfinger's reliance on the ICG tariff points up the limited nature of the wholesale competition that now exists between Pacific and CLECs. The FBC states:

> "The basis of Pacific's CLC price comparison analysis is the *former* wholesale tariff of ICG, which contains a 15 and 18 percent discount off ICG's tariffed retail prices. Mr. Sawyer applied the ICG discounts to the other CLCs' retail prices and used the result to estimate CLC wholesale prices . . . Pacific's reasoning for presenting estimated CLC wholesale prices was to include in the pricing phase consideration of ' . . . marketplace prices established by the facility-based CLECs . . .'[[45]] . . . In particular, there is no evidence in the record that any of the six CLCs cited by Pacific have any wholesale customers . . . Significantly, ICG, the only CLC for which Mr. Sawyer used supposedly 'actual' wholesale tariff rates, withdrew its wholesale tariff because no customer had purchased any services from its wholesale tariff since it was filed in August 1996." (*Id.* at 11; citations omitted.)

Sprint is correct when it asserts that the Hopfinger pricing proposal is unsystematic and unpredictable. In the next section of this decision, we therefore turn to the one pricing proposal in the record that is both systemic and predictable: the proposal of several parties to price UNEs by adding a uniform markup (to cover shared and common costs) to the TELRICs that we adopted in D.98-02-106.

[44] Pacific Reply Brief, p. 22.

[45] Ellipsis in original.

Before we turn to this proposal, however, it is appropriate to discuss the strong objections to such a pricing approach that Pacific has raised in its comments on the PD. In its June 4, 1999 comments, Pacific states:

> "The PD rejects Pacific's pricing proposals as unsystematic and giving Pacific too much discretion over prices. It rejects Dr. Hausman's risk analysis as an improper collateral attack on the TELRIC costing methodology. In light of the important policy issues these prices represent, we find the PD rationale unconvincing. Pacific's pricing proposal is not systematic in the sense that it does not follow a uniform mark-up. But this is not a fault – prices in [AT&T/MCI witness] Murray's 'real markets' are set through application of business judgment to data such as costs, demand and risk. That is what Pacific's testimony does, and what the PD fails to do. The Commission is acting arbitrarily where it applies a uniform mark-up without any consideration of what a 'reasonable profit' is for each UNE." (Pacific Opening Comments, pp. 8-9; footnotes omitted.)

Pacific is particularly critical of the PD's decision to price transport and switching by adding a uniform markup to the TELRICs of those elements. Asserting that the PD fails to reflect an awareness of AT&T's recent acquisitions in the cable industry,[46] Pacific argues that the use of a uniform markup approach for setting transport and switching prices will disrupt operating markets for those elements:

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[46] We recently approved AT&T's acquisition of Tele-Communications, Inc. (TCI) in D.99-03-019. AT&T is also seeking to acquire MediaOne, but requests for regulatory approval of that merger are still pending at the federal, state and local levels.

> "The PD errs by failing to take into account these recent developments, and their likely impact on the status of transport and switching as UNEs under the Act. The PD errs also by failing to consider the costs of disrupting these operating markets where, as here, it is unclear whether transport and switching will remain UNEs . . .
>
> "The Commission should recognize that its proposed prices will . . . 'cause more harm than good.' During this period of uncertainty, the Commission should avoid disrupting the transport and usage markets, just as it has attempted to avoid disrupting CLEC expectations on the recombination issue. The Commission should adopt Pacific's proposed prices for transport and switching pending resolution of the current litigation at the federal level." (*Id.* at 10-11; footnotes omitted.)

We have several responses to these arguments. First, despite the assertion in Pacific's comments that the markets for transport and switching have become so competitive that the FCC was unlikely to retain these elements as UNEs, the FCC has recently decided that, with certain exceptions, both transport and switching should remain on the UNE list.[47] Thus, the FCC has

[47] In the Revised UNE List Order released on November 5, 1999, the FCC has concluded that local circuit switching and local tandem switching need not be offered on an unbundled basis (*i.e.*, will not be considered a UNE) only in cases where the requesting carrier (1) is serving customers with four or more lines in density zone 1 (the densest area) in one of the top 50 Metropolitan Statistical Areas within the United States, and (2) the ILEC offers an enhanced extended link within zone 1. ¶¶ 278-299; Appendix C, § 51.319(c)(1)(B). ILECs are also required to offer dedicated interoffice transport and shared transport facilities on an unbundled basis. ¶¶332-33, 374, 379; Appendix C, § 51.319(d)(1)(A)-(C).

apparently concluded that the markets for these elements are not yet sufficiently competitive to justify serious concerns about "disrupting" them.

Second, even if the FCC had not ruled in this way, Pacific's argument fails to take account of recent judicial interpretations of the Telecommunications Act. As noted in Section II.C.1. of this decision, the court in *AT&T Communications of California, Inc. v. Pacific Bell* has held that the 1996 Act does not permit regulators to include factors other than costs (as defined in § 252(d)(1) of the Act) when pricing UNEs, even when such inclusion can be justified on the ground that it helps ILECs to recover their embedded costs. Under this reading of the Telecommunications Act, it would not be permissible to impose higher markups on transport and switching in order to avoid disruption of operating markets for these elements.[48]

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[48] Pacific notes in its comments that the Eighth Circuit's decision in *Iowa Utilities Board* "did not address the substance of the FCC's pricing rules." (June 4 Opening Comments, p. 9, n. 17.) Pacific, along with other Regional Bell Operating Companies (RBOCs) and GTE, is now challenging the substance of these rules in the Eighth Circuit proceedings on remand from *AT&T-Iowa*, and Pacific states that it "reserves all rights accruing to it as a result of the continuing litigation of the Act." (*Id.*)

Pacific's comments suggest that in the Eighth Circuit litigation, it will challenge the FCC's conclusion in the First Report and Order (at ¶¶ 699-700) that the "reasonable profit" provided for in § 252(d)(1)(B) of the Telecommunications Act is already accounted for in the forward-looking cost of capital used in TELRIC studies, and that no additional profit on UNEs is permitted. Under the FCC's view of the Act, the 10.0% cost of capital that we approved for both the TSLRIC and TELRIC studies conducted by Pacific accounts for all of the profit on UNEs to which Pacific is entitled. *See* D.96-08-021, 67 CPUC2d 221, 246-47 (1996); December 18, 1996 ALJ Ruling, *mimeo.* at 18, n. 21.

If the Eighth Circuit rules against the FCC on its interpretation of § 252(d)(1)(B), or if the United States Court of Appeals for the Ninth Circuit reverses the ruling on access charges by Judge Illston quoted in Section II.C.1., we will reconsider the general pricing formula (TELRIC + 19%) that we are adopting in this decision.

Third, Pacific is engaged in gross exaggeration when it argues that it must have more flexibility in setting UNE prices because of AT&T's recent acquisitions in the cable industry. Pacific contends that these acquisitions:

> ". . . change[] the entire regulatory paradigm. There are now two loops to the customer premises. One of those loops – AT&T's – is completely unregulated. The other loop – Pacific's – is completely regulated and being unbundled at cost. Thus, the regulatory approaches to these two loops are diametrically opposite. Yet, shortly there will be no rational basis for regulators to treat them differently . . . [Until symmetrical regulation comes about,] the Commission should not worsen the dichotomy between the two regulatory regimes. Yet the minimum uniform mark-up applied by the PD does just that." (Pacific Opening Comments, pp. 4-5.)

It is apparent that AT&T's new cable systems do not yet constitute a "second loop," and a recent federal ruling raises serious doubts whether these systems will remain "completely unregulated." On the first question, we note that recent articles in the press have stated that AT&T will have to make large investments in its newly-acquired cable facilities over the next several years to give those facilities the two-way transmission capability that traditional telephone service requires.[49] Thus, while these facilities after

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[49] A recent article in the *New York Times* summarizes the current situation as follows:

> "So AT&T's first challenge is to make all of the cable systems it has agreed to acquire in some ways more like two-way telephone systems. That project, which requires the deployment of new equipment into cable hubs across the country, has already cost the cable industry billions of dollars, and in Mediaone, AT&T is set to acquire a cable operator with one of the most advanced networks in the industry, but one that still requires significant upgrades. AT&T has also struck partnerships with the Comcast Corp. and Time Warner Inc., two big cable operators, to offer telephone service using those companies' systems.

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upgrading may become a "second loop," they cannot be considered a loop equivalent today.

On the second question, U.S. District Judge Owen Panner ruled on June 3, 1999 that the City of Portland and Multnomah County, Oregon, were not preempted by federal law and had not violated various constitutional provisions in imposing certain conditions on their approval of the transfer of TCI's local cable franchise to AT&T. Specifically, Judge Panner held that the city and county could condition their approval upon AT&T's agreement to allow Internet service providers (ISPs) not affiliated with AT&T to connect their equipment directly to AT&T's cable modem platform, thus bypassing AT&T's

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"But even once a cable system has been adapted to send and receive data, voice and television signals, it is still not ready for the digital future. To offer high-speed Internet service, huge investments must be made in high-speed Internet switches that can route millions, even billions of bits of digital information every second. Even more daunting is the prospect of offering telephone service.

"Every house that intends to switch from conventional to cable-based phone service must be visited by a trained technician to install an electronic box outside the house to connect the home's inside wiring to the external cable wire. Big telephone switches the size of a van must be purchased and configured, almost by hand, to link with the cable network."

The article also notes that the technology to offer reliable phone service over the Internet does not yet exist, and that AT&T does not expect to offer such updated telephone service until at least 2001. "AT&T Conjures Up Its Vision for Cable, But Can It Deliver?", *New York Times*, May 7, 1999, p. A-1.

proprietary cable ISP.[50] Unless it is overturned on appeal,[51] Judge Panner's ruling appears to subject AT&T's cable facilities to an important form of regulation.

In short, Pacific's comments do not persuade us that the PD erred in deciding to base UNE prices on adopted TELRICs plus a uniform markup to cover shared and common costs. As shown above, this approach is consistent not only with caselaw under the Telecommunications Act, but also with the pricing rules in the First Report and Order that the Supreme Court has reinstated. Accordingly, we now turn to a consideration of the uniform markup pricing approach.

III. SHOULD THE MARKUP TO BE ADDED TO PACIFIC'S TELRIC COSTS REFLECT ONLY SHARED AND COMMON COSTS, OR SHOULD IT ALSO REFLECT PACIFIC'S RETAIL COSTS AND THE RETAIL COSTS OF PACIFIC'S UNREGULATED SUBSIDIARIES?

Not surprisingly, one of the principal issues in the pricing hearings was the extent of the markup that should be added to Pacific's TELRIC costs to allow for recovery of "shared" and "common" costs.[52] In its First Report and Order, the

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[50] *AT&T Corp., et al. v. City of Portland, et al.*, Case CV 99-65-PA, 1999 U.S. Dist. LEXIS 8223.

[51] Judge Panner's decision has been appealed to the United States Court of Appeals for the Ninth Circuit. That court heard oral argument in the case, which is entitled *AT&T Corp., et al. v. City of Portland, et al.* (No. 99-65), on November 1, 1999.

[52] This Commission's definitions of shared and common costs are set forth in the Consensus Costing Principles adopted in D.95-12-016. As stated in Appendix C, page 6 of that decision, shared costs are defined as "costs that are attributable to a group of outputs but not specific to any one within the group, which are avoidable only if all outputs within the group are not provided." Common costs are defined as "costs that are common to all outputs offered by the firm. While these costs are not considered part of a TSLRIC study, recovery of such costs is required. Recovery of common costs is a pricing issue."

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FCC stated that a uniform markup was an appropriate way to recover shared and common costs that could not otherwise be assigned to UNEs.[53]

Many parties offered testimony on what the markup should be, but the starting point for all of this testimony was Pacific's proposal. The markup advocated by Pacific's witness, Richard Scholl, was straight-forward: he proposes to divide the total of shared and common costs that he believes was approved in D.98-02-106 (about $1.05 billion) by the total direct costs of the network elements approved in D.98-02-106 (about $4.75 billion). The resulting fraction is about 22.1%, which when rounded to the nearest percentage point results in a markup of 22%. (Ex. 129-S, Attachment C.)

As we shall see, the parties offered many different criticisms of Pacific's proposal, with some advocating markups as low as 3%.

In its First Report and Order, the FCC uses the term "common costs" to cover both shared and common costs as defined in D.95-12-016. Paragraph 676 of the First Report and Order states:

> "The term 'common costs' refers to costs that are incurred in connection with the production of multiple products or services, and remains unchanged as the relative proportion of those products or services varies (*e.g.*, the salaries of corporate managers). Such costs may be common to all services provided by the firm or common to only a subset of those services or elements . . . For the purpose of our discussion, we refer to joint and common costs as simply common costs unless the distinction is relevant in a particular context."

[53] Paragraph 696 of the First Report and Order states in pertinent part:

> "We conclude that forward-looking common costs [should] be allocated among elements and services in a reasonable manner, consistent with the pro-competitive goals of the 1996 Act. One reasonable allocation method would be to allocate common costs using a fixed allocator, such as a percentage markup over the directly attributable forward-looking costs."

A. The AT&T/MCI Position

One of the most detailed critiques of Pacific's markup calculation was offered by Terry Murray on behalf of AT&T/MCI. Ms. Murray maintains that while Pacific has calculated the $1.05 billion numerator of the markup fraction correctly, its $4.75 billion denominator is much too small. Ms. Murray maintains that the denominator should also include "the total TSLRIC (including both service-specific costs and shared-family costs) of the retail-only component of Pacific's retail services, and the total forward-looking cost of all of Pacific's Category III and non-regulated services." (Ex. 613-S, pp. 31-32.) Ms. Murray calculates that these additional items that belong in the denominator total approximately $2.9 billion. (Ex. 613-S, Attachment TEM-4.) Ms. Murray also points out that the denominator should include non-recurring costs (NRCs) and OSS costs, items to which she did not assign values because NRCs and OSS costs were still being determined at the time she prepared her testimony. (*Id.* at 38.)[54] When the total of shared and common costs adjudicated in D.98-02-106 ($1.05 billion) is divided by the larger denominator advocated by Ms. Murray ($4.75 billion + $2.9 billion), the result is about 13.8%.

Under AT&T/MCI's proposal, this resulting "equiproportional" markup would be applied to all UNEs except residential loops. Ms. Murray argues that not imposing the markup on TELRIC costs for residential loops will "facilitate competition for residential local service without creating pressure to

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[54] NRCs were adopted by us in D.98-12-079. No OSS recurring costs were adopted, because the models submitted by Pacific and GTEC were both found to contain significant flaws. (*Mimeo.* at 45-46.) Pacific and GTEC were instructed that if they wanted to seek recovery of OSS recurring costs attributable to serving CLECs, they should do so in the Local Competition proceeding (R.95-04-043/I.95-04-044), which has a memorandum account procedure for recovering so-called "implementation" costs. (*Id.* at 46.)

raise retail rates," and will also "put competitors using unbundled loops on a more equal footing with Pacific, which . . . receives support from above-the-line Yellow Pages net revenues that enable it to keep retail prices low for residential customers. . ." (*Id.* at 37-38.)[55]

B. Sprint's Position

Sprint's witness, Dr. David Rearden, opens his testimony by stressing the advantages of a uniform markup in pricing UNEs over the much more subjective approach advocated by Pacific's witnesses, especially Dr. Hausman and his "risk adder." Dr. Rearden points out that a uniform markup "does not make assumptions about the nature of markets or the characteristics of demand for any particular UNE in the future." (Ex. 401, p. 7.) Further, Dr. Rearden argues, a non-uniform markup might encourage an ILEC to set a higher markup for essential or bottleneck facilities so as to increase the prospect of cost recovery and reduce the competitive pressure that would result from higher markups to non-essential facilities. (*Id.*)

As to the amount of the markup over adopted TELRIC costs, Sprint recommends 15%. Choosing this figure, Dr. Rearden asserts, would limit the markup "to what an efficient, forward-looking firm in an effectively competitive market could extract from its customers." (*Id.* at 8.)

Dr. Rearden also asserts that his 15% figure is consistent with a broad array of industry data, and with Sprint's own experience as a local

[55] We consider the AT&T/MCI proposal not to apply the shared-and-common-cost markup to residential loops in Section IV of this decision.

exchange carrier. Dr. Rearden particularly relies on so-called ARMIS data,[56] which covers both the RBOCs and smaller ILECs. Dr. Rearden emphasizes that according to ARMIS data, Southwestern Bell and Ameritech have consistently experienced overhead below 15% in recent years.[57] Dr. Rearden concludes that "[s]ince all the RBOCs are of similar size, it is reasonable to use the lower outcomes among RBOCs observed in the data as a benchmark." (*Id.* at 10; Exhibit DTR-1.) Moreover, ARMIS data shows that from 1992 to 1996, average cost for *all* ILECs (including small companies) ranged from 17.48% to 18.92%. (*Id.*)

As for Sprint's own experience, Dr. Rearden points out that it furnishes local exchange services in 19 states, and has advocated a 15% markup to recover shared and common costs in all of them. (*Id.* at 10.) Dr. Rearden maintains that "[s]ince Sprint LTD companies are not very large relative to the RBOCs or GTE, economies of scale do not indicate that Sprint is better positioned than larger firms to keep overheads low." (*Id.*) Thus, Sprint concludes in its brief, "[i]f Sprint LTD, a smaller ILEC, can live with a 15 percent markup for shared and common costs, this markup should more than accommodate a larger RBOC such as Pacific." (Sprint Opening Brief, p. 13.)

C. FBC's Position

The FBC's testimony on the appropriate markup was sponsored by Dr. Marvin Kahn. As we shall see, the members of the FBC modified their

[56] "ARMIS" stands for Automated Reporting Management Information System. It is a system maintained by the FCC for collecting statistics for the telecommunications industry.

[57] According to Dr. Rearden, Southwestern Bell had overhead levels below 15% from 1994-1996, and Ameritech's were below this figure in 1993, 1995 and 1996.

position between the date their opening brief was filed and the date their reply brief was filed. As a result of this change, the FBC now contends – like Sprint's Dr. Rearden – that a markup over TELRIC costs of no more than 15% is appropriate to cover Pacific's shared and common costs.

However, in his pre-filed testimony, Dr. Kahn recommended a markup of 9.1%. The starting point for deriving this figure, according to the FBC, was the principle that

> ". . . competitive markets are best at ensuring efficient pricing. Where competitive markets do not exist, as in the case of the UNEs supplied by Pacific, a mark-up that approximates the profits available in competitive markets forces the incumbent to be an efficient provider. The FBC mark-up proposal uses Pacific's response to real-world inputs from the competitive Centrex market and thereby attempts to replicate a competitive outcome." (FBC Opening Brief, p. 7.)

Dr. Kahn began his analysis by reviewing a sample of contracts Pacific entered into during 1995-97. (Ex. 508, p. 9.) The "gross" markup was calculated by subtracting the long-run incremental cost (LRIC) of Centrex service from the contract price. (*Id.* at 10-11.)[58] Dr. Kahn calculated that for the group of contracts he studied, this resulted in a mean markup of 19% over the TSLRIC costs for Centrex. (*Id.* at 12.)[59] However, because the TELRIC methodology

[58] Dr. Kahn notes that for some of the earlier Centrex contracts he examined, the IRD decision (D.94-09-065) authorized the use of either LRIC or direct embedded costs, whichever was lower. Some of the data he derived therefore had to be adjusted for the move to LRIC costing. (*Id.* at 10.)

[59] Because Centrex is a service, Dr. Kahn used TSLRIC costs, since the "cost object" of a TSLRIC study is a service. In the TELRIC methodology, the "cost object" is a network element, and considerable manipulation is required to derive the cost of services from this data.

assigns directly to UNEs shared and common costs that are considered "unassignable" under the TSLRIC methodology, Dr. Kahn then adjusted this 19% markup to reflect the Commission's decision to use TELRIC for pricing. Dr. Kahn concluded that a markup over TELRIC costs of 9.1% was equivalent to a markup of 19% over TSLRIC costs. (Ex. 511-S, p. 3.)

In its reply brief, the FBC has attempted to respond to strong criticism from Pacific's Mr. Scholl that Centrex contracts are not, standing alone, a good proxy for competitive markups. Mr. Scholl argues that in addition to Centrex contracts, a reasonable competitive proxy must consider the markups on toll services.[60] The FBC replies:

> "The FBC has attempted here to incorporate margin data from toll services into its mark-up analysis. This analysis is presented in Appendix A to this reply brief and relies completely on the evidence contained in the record of this proceeding. This analysis responds to two matters raised by Pacific's assertions. First, it is responsive to Pacific's criticisms regarding a surrogate mark-up based on Centrex service pricing only. Second, it serves as a check on the various

[60] Mr. Scholl argues that a proper surrogate for a markup in a competitive market must be based on more than Centrex contracts, because Pacific enjoys only limited pricing flexibility on Centrex service. (Ex. 131-S, pp. 10-11.) Furthermore, Mr. Scholl disagrees with Dr. Kahn's assertion that toll contracts should not be considered because of the lack of intraLATA presubscription. According to Mr. Scholl:

> "Dr. Kahn's rejection of usage services as competitive services over which Pacific Bell exercises wide pricing discretion is wrong. While the absence of presubscription might have some effect on small, single line customers (e.g., residential customers and small business customers), it has absolutely no effect on customers with modern business systems. Those systems can be preprogrammed to select specific carriers with no action by callers initiating toll calls. In addition, they can also be programmed to direct toll traffic directly to the selected carrier via special access circuits, bypassing Pacific Bell's switching entirely." (*Id.* at 13.)

> mark-up[s,] delineating a 'range of reasonableness' for the mark-up proposals by parties to this proceeding." (FBC Reply Brief, p. 8.)

Appendix A to the FBC Reply Brief does include data relating to mark-ups on toll services, but the FBC adjusted this data to remove the contribution from toll access, which the FBC argues is necessary if one assumes a competitive toll market. Using both a "cost" method and a "pricing" method, Appendix A then calculates markups for toll services. These were combined in a weighted average with the Centrex markups that Dr. Kahn had calculated in his pre-filed testimony. The resulting markups over TELRIC ranged from 12.5% to 20.6%. However, the FBC concludes, "because of the limits on the availability of data, the highest reasonable mark-up would be 15 percent, as proposed by Sprint." (FBC Reply Brief, Appendix A, p. 6.)

It should be noted that the FBC opposes the AT&T/MCI proposal that the uniform markup should not apply to residential loops. The FBC assert that such an approach would send incorrect pricing signals to the market:

> "Ms. Murray acknowledges that her proposal to exempt residential loop prices from the mark-up represents a deviation from her principle that the mark-up be applied uniformly. She justifies this deviation on the grounds that it is necessary to promote competition in the residential local exchange market . . . However, her proposal is at odds with [the] basic premise underlying her mark-up proposal that UNE prices should reflect the prices which would occur in a competitive market.
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> * * *
>
> "It does not matter in this regard whether Pacific is already recovering its shared and common costs through yellow page revenues. What matters is that a facilities-based provider who provides loops in competition with Pacific and is equally efficient as Pacific, compete against a loop price which allows it to recover its efficiently-incurred shared and common

cost[s]. Ms. Murray's proposal precludes this possibility, thereby reducing the incentives of alternative facilities based loops providers to enter the market." (FBC Opening Brief, p. 26.)

D. Other Parties' Positions

Positions on the markup question were also taken by ORA, TURN and Cox. While only Cox submitted testimony on the question, all three parties' briefs advocated a uniform markup in the middle of the range suggested by the non-ILEC parties.

ORA argues that the markup should be 12%, which it describes as "the mid-point in the range of markup proposals presented by . . . FBC and Sprint." (ORA Reply Brief, p. 13.) It seems clear that ORA formulated its recommendation before having an opportunity to review the new calculations set forth in Appendix A to the FBC's Reply Brief.

TURN's position is very similar to that of AT&T/MCI. In addition to supporting the AT&T/MCI argument that the uniform markup should not apply to residential loops, "TURN recommends that the Commission adopt a uniform mark-up of no more than 15 percent for all UNEs, with the exception of the residential loop." (TURN Reply Brief, p. 2.)

Cox's position is the most complex. In both its opening and reply briefs, Cox devotes most of its attention to how the Commission should modify the existing imputation rules in light of the decision in D.98-02-106 to use TELRIC for UNE pricing.[61] Cox also argues that a markup of 3-5% should be

[61] As stated in Section VIII.F. of this decision, the essence of Cox's imputation proposal is that the Commission must include in price floors, the retail expenses that are excluded from UNE costs under the TELRIC methodology. Cox summarizes the reasons for doing so as follows:

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sufficient to give Pacific an opportunity to recover its shared and common costs. Cox cautions, however, that the Commission should adopt its markup proposal *if and only if* it also embraces Cox's imputation proposal. (Cox Opening Brief, p. 5.)

Cox's recommendation for a 3-5% markup begins with the same Centrex data used by Dr. Kahn. Using the Centrex data, Cox's witness, Dr. Francis Collins, concludes that the maximum amount of shared and common costs Pacific should be allowed to recover is $860 million. From this he subtracts $103 million in adjustments ordered by D.98-02-106. From the resulting figure, $757 million, he then subtracts the $500 million in shared and common costs that are directly assigned to UNEs under the TELRIC methodology. The result, $257 million, is then divided by the total TELRIC costs of $4.8 billion, to yield 5.4%. (Ex. 1101-S, pp. 11-12.) In the alternative, Cox recommends that the Commission adopt the 9.1% markup advocated by Dr. Kahn.

E. Discussion

After reviewing the positions of all the parties, we have concluded that with certain adjustments, Pacific's computation of the markup for shared and common costs is the most reasonable and should be adopted. The

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"[The Commission] has specifically (and correctly) excluded Pacific's costs of retailing its bundled services from the prices of UNEs. These retailing costs, however, should not be excluded from the price floors, because to do so would allow Pacific to price its retail services below its costs of providing those services. By incorporating those retail costs into Pacific's price floors, the Commission would ensure that Pacific would not be allowed to cross-subsidize its retail services at least to the extent of the excluded retail costs. In addition, this approach would assure that competitors who purchase UNEs would be able to re-bundle those UNEs, expend their own marketing costs associated with the re-bundled services, and still compete with Pacific, who could not flexibly price below its costs of service including retailing costs." (Cox Opening Brief, p. 5.)

adjustment we will order Pacific to make is to include an additional $375 million in the denominator of the fraction used to compute the markup. This $375 million represents the total non-recurring costs (NRCs) we have adopted for the unbundled network elements we are pricing here. (D.98-12-079, *mimeo.* at 5.) With this adjustment (and after correcting the other cost elements in the fraction to reflect the final TELRIC adjustments approved in Resolution T-16204), the resulting markup for shared and common costs is 19.2%, which -- in keeping with our usual practice – we round to 19%.

Each of the approaches suggested by other parties for computing a shared-and-common-cost markup suffers from significant infirmities. As indicated below, the computations offered by these parties either ignore the determinations on shared and common costs made in D.98-02-106, misapply the TELRIC methodology, or ignore other Commission-mandated adjustments.

AT&T/MCI, for example, while beginning with a numerator equal to the total of shared and common costs approved in D.98-02-106 (about $1.05 billion), propose to include costs in the denominator that would unreasonably reduce the markup. Specifically, Ms. Murray maintained in her testimony that the denominator should include not only the total TELRIC costs for UNEs approved in D.98-02-106 (about $4.75 billion), but also "the total TSLRIC (including both service-specific costs and shared-family costs) of the retail-only component of Pacific's retail services, and the total forward-looking cost of all of Pacific's Category III and non-regulated services." (Ex. 613-S, pp. 31-32.)[62]

[62] It should be noted that Ms. Murray's estimate of "forward-looking" Category III costs is based on Pacific's annual 10-K filing with the Securities Exchange Commission, and is therefore based on *embedded* cost estimates.

We agree with Pacific that including these costs – which total fully $2.9 billion – in the denominator of the markup fraction would be both unfair and inconsistent with the TELRIC methodology. We agree with the following explanation by Mr. Scholl of why it would be mixing apples and oranges to include retail costs in the denominator:

> ". . . Ms. Murray has ignored the fact that all of the shared and common costs that are retail-related have been removed from the shared and common costs identified in this phase. In D.98-02-106 (Appendix A, p. 2) the Commission explicitly addressed the issue of any retail-related dollars included in the shared and common expenses. In that decision, the Commission directed adjustments which resulted in the exclusion of any and all retail-related expenses from Pacific's identified shared and common costs. Thus, the shared and common costs and the TELRICs adopted by the Commission exclude all retail-related costs. It is therefore entirely appropriate and proper to divide the *non-retail* shared and common costs by the *non-retail* TELRICs to obtain the *non-retail* minimum TELRIC markup for UNEs." (Ex. 131-S, p. 5; emphasis supplied.)[63]

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[63] In their opening comments on the PD, AT&T and MCI continue to insist that it is erroneous not to include Pacific's retail costs and the costs of its Category III services in the denominator of the markup fraction. AT&T/MCI state:

> "The draft decision's conclusion and the corresponding calculation are based on factual error because, as all parties including Pacific agree, *no such thing as a 'non-retail shared and common cost'* exists. Instead, the common cost number in the record of this proceeding is Pacific's firm-wide common cost." (AT&T/MCI Opening Comments, p. 16; footnotes omitted.)

Because the numerator of the fraction supposedly includes firm-wide common costs, AT&T and MCI insist that the denominator must include firm-wide costs as well, including retail and Category III expenses. (*Id.* at 16-17.)

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We also agree with Pacific that it would be unfair to include Category III services in the denominator, since these services have their own separate shared and common costs:

> "Pacific's unregulated businesses have their own overhead organizations. To the extent they use Pacific's overhead departments, the costs are directly billed to them under the Commission-ordered transfer pricing mechanism. These billings are removed and so have not been (and are not here) reflected in Pacific's common costs determined in the incremental cost studies. Thus, the common costs allocated to Category III services for purposes of determining the size of the regulated business, per the Commission's rules, are

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This argument is without merit. We agree with Pacific that it is evident from an examination of D.98-02-106 that common costs not related to UNEs were removed from the common cost total adopted in that decision. D.98-02-106 states:

> "Our own examination of the expenses Pacific has designated as 'shared common' indicates that some of these costs cannot truly be considered 'common,' because they have a clear retail component that, under the TELRIC methodology, may not be included in the determination of wholesale UNE costs.
>
> " . . . Instead of accepting the [$200+ million in] reductions proposed by [AT&T/MCI witnesses] Selwyn and Lundquist, we think . . . that it is more reasonable to exclude approximately $68 million of Pacific's reported common costs as retail-related." (*Mimeo.* at 63-64)

In light of this discussion (which is reflected in COL 39 of D.98-02-106), and the rejection of a similar AT&T/MCI argument on page 7 of Resolution T-16204, we agree with Pacific that "the TELRIC cost decision [has] already considered and adjusted for the issue AT&T and MCI attempt to raise again in their comments on the PD." (Pacific Reply Comments, p. 7.)

It is also worth noting that AT&T/MCI make no attempt in their comments to rebut the PD's reasons for rejecting as unreasonably low the 15% shared-and-common-cost markup recommended by Sprint. The silence of AT&T/MCI on this issue is significant, because the markup advocated by Sprint is higher than what the AT&T/MCI position would result in.

> excluded from the shared and common costs adopted by the Commission as shared and common costs in D.98-02-106, and used by Pacific in this proceeding. As Mr. Sawyer notes, 'Ms. Murray uses *only Pacific Bell* costs in the *numerator* of her calculation. Therefore, the *denominator* of Ms. Murray's common cost factor calculation should not include any costs from Pacific's subsidiaries.'" (Pacific Opening Brief, pp. 4-5; footnotes omitted, emphasis in original.)

Finally, we agree with Mr. Scholl that Ms. Murray is in error when she argues that unless the costs of Pacific's unregulated and Category III services are included in the denominator, Pacific will not be properly at risk to recover the common costs for these services:

> "[T]here are no shared and common costs of Category III and non-regulated services in the shared and common costs identified in Pacific Bell's TELRIC study. Because there are no shared and common costs of [such] services in the numerator, it would be improper to include any costs of Category III and non-regulated services in the denominator[,] as proposed by Ms. Murray. The Category III and non-regulated services already have their allocation of common costs which they must recover, and those common costs are not part of the shared and common costs here. It appears that Ms. Murray is recommending that Pacific Bell's Category III and non-regulated services should subsidize unbundled network elements provided to her clients." (Ex. 131-S, pp. 8-9.)

In addition to the errors in Ms. Murray's analysis, we also think there are significant conceptual errors in the markup proposals of the FBC and Sprint. Both of these parties claim that, in accordance with the TELRIC methodology, the markup for shared and common costs that they advocate is equivalent to what a firm in a competitive market could realistically recover. However, computational and other errors require that their respective recommendations be rejected.

It seems fair to say that in FBC's case, there has been a change of position. Whereas Dr. Kahn advocated a 9.1% markup during his cross-examination, the FBC's reply brief (at page 10) states that "the record and analysis supports the adoption of a mark-up within the range of 9.1 to 15 percent and in no event higher than 15 percent." This change of position has apparently come about because, after the hearings were over, the parties comprising the FBC changed their minds and agreed with Pacific that an analysis based only on Centrex contracts would be incomplete.[64] After including an adjustment for the toll contracts that Pacific says should be considered, the FBC now concede that a 15% markup could be justified.[65]

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[64] As indicated in footnote 60, Pacific argues that the proxy for the shared-and-common-cost markup in a competitive market must include toll contracts as well as Centrex contracts, since Pacific enjoys only limited pricing flexibility with respect to Centrex.

At the time its original testimony was submitted, the FBC argued that the lack of intraLATA presubscription (which is also known as intrastate dialing parity) in the toll market resulted in a lack of competition in that market. Pacific disputed this, but in any event the issue has become moot. In D.99-04-071, issued April 22, 1999, we directed Pacific to implement intrastate dialing parity no later than May 7, 1999, unless this deadline were to be extended by the FCC. The FCC subsequently declined to extend the deadline.

[65] The FBC summarize their revised markup computation as follows:

> "The appropriate competitive surrogate mark-up, according to Pacific, would include experience in both the toll and Centrex markets. The toll[-]only mark-ups over TSLRIC calculated in Appendix A and the Centrex mark-ups over TSLRIC calculated by Dr. Kahn were weighted by service revenues. This resulted in a range of mark-ups over TSLRIC of 22.5 percent to 31.1 percent. One option is to select the midpoint as being representative of this range. However, recognizing the limitations of the data and, more importantly, the inflated mark-ups that result from the absence of presubscription in the intraLATA toll market, a mark-up toward the lower end of this range is more appropriate. A mark-up of 25 percent over TSLRIC, which is above the lower end of this range, is the

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Whether one considers Dr. Kahn's original analysis or the revised analysis in the FBC Reply Brief, the FBC markup proposal cannot be accepted. First, as Pacific notes in its reply brief, Dr. Kahn repeatedly ignored the determinations of shared and common costs made in D.98-02-106 and substituted his own "tortuous computations" for what these costs should be.[66] Second, although the FBC claim that their new analysis supporting a 15% markup "relies completely on the evidence contained in the record of this proceeding" (FBC Reply Brief, p. 8), the assumptions underlying these new calculations were not subjected to cross-examination.[67] What does seem clear is that the FBC's members now acknowledge there is merit in Pacific's critique of

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equivalent of a mark-up of 15 percent over TELRIC." (FBC Reply Brief, p. 9 n. 8.)

[66] Pacific is not guilty of exaggeration when it states:

> "[W]hat is probative is that Dr. Kahn performed all of these arithmetic gymnastics to identify an amount of shared and common costs associated with TELRIC costs, even though the Commission earlier had directly identified that amount [in D.98-02-106]. The reason is clear[:] Dr. Kahn and his client didn't like the Commission's finding. They wanted a much smaller number which would produce a much smaller markup than the Commission-approved number produced." (Pacific Reply Brief, p. 15.)

[67] The revised markup analysis in Appendix A of the FBC Reply Brief concludes that a markup at the lower end of the range calculated in Appendix A is justified because of "the limitations of the data" and "the inflated mark-ups that result from the absence of presubscription in the intraLATA toll market." (FBC Reply Brief, p. 9, n. 8.) Pacific did not have an opportunity to cross-examine an FBC witness on these assumptions, on the weighting of service revenues that produced the range calculated, or on the assumption that under the "cost method" for calculating toll markups minus contribution, an interexchange carrier "which purchases access to offer its own toll services, experiences costs similar to that of the incumbent." (FBC Reply Brief, Appendix A, p. 2.)

Dr. Kahn's original analysis, and have decided to support the higher shared-and-common-cost markup that Sprint believes is justified.[68]

Thus, we turn to Sprint's contention that Pacific's markup for recovering shared and common costs should not exceed 15%. As noted above, Sprint's witness, Dr. Rearden, based this recommendation on a combination of ARMIS data and the markup that Sprint itself obtains in those states where it is a local exchange carrier.

While at first blush Dr. Rearden's presentation has considerable appeal, we agree with Pacific that Sprint's selectively-chosen ARMIS data (which is historical cost data) is of limited relevance for setting prices based on TELRIC, which is a forward-looking cost methodology. Further, Sprint's experience as a local exchange provider sheds little light on the magnitude of the shared and common costs that a large firm like Pacific is likely to incur.

As to the ARMIS data, we agree with Mr. Scholl that ARMIS overhead costs cannot be compared easily with shared and common costs determined under the TELRIC methodology:

> "Many of the costs which are shared and common costs in Pacific Bell's TELRIC analysis are not 'overhead' costs in the ARMIS reports, but rather are included in other categories. By basing his recommendation on ARMIS data, Dr. Rearden is both understating his numerator (shared and common costs) and overstating his denominator (TELRICs), resulting in a

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[68] Many of the flaws in the FBC analysis can also be found in the markup testimony sponsored by Dr. Collins on behalf of Cox. As stated by Mr. Scholl, Dr. Collins ignored the shared-and-common-cost determinations made in D.98-02-106 and relied on Dr. Kahn's decision to exclude toll contracts from the competitive services he examined. When these and some basic arithmetic errors are corrected, the result is a shared-and-common-cost markup quite close to the one calculated by Mr. Scholl. (Ex. 131-S, pp. 18-20.)

significantly understated shared and common cost factor." (Ex. 131-S, p. 21.)

We also think Mr. Scholl is correct when he argues that the amount of shared and common costs that a small LEC like Sprint can recover tells little about the size of the shared-and-common-cost markup that is appropriate for a large firm like Pacific:

> "When firms enjoy economies of scope, the costs of the functions where those economies exist are shared costs. The source of the economies is that it is less costly to perform the same or similar functions for several services together rather than separately for each service. Thus, a firm with fewer economies of scope would necessarily have less shared costs and proportionately more direct costs. Conversely, a firm with more economies of scope such as Pacific Bell would have proportionately more shared costs and less direct costs. Thus, contrary to Dr. Rearden's claim, a large, multi-product firm such as Pacific Bell should have a greater portion of its costs shared, resulting in a larger, not smaller shared and common cost factor." (*Id.* at 21-22.)

In short, while we are rejecting Pacific's argument that it cannot recover all of the costs of providing unbundled network elements if UNE prices are set at TELRIC plus a uniform markup, we agree that the uniform markup should be set at a level that allows Pacific to recover *all* of the shared and common costs it must incur in providing UNEs.

Therefore, the approach we are adopting here is a slight variation on the one suggested by Mr. Scholl in his opening testimony, in which he divided the total shared and common costs approved in D.98-02-106 by the total direct costs for UNEs approved in the same decision. (Ex. 129-S, Attachment C.) The only change we are making in this formula is to include in the total of direct costs (*i.e.*, the denominator of the fraction), the total NRCs applicable to these UNEs. Ms. Murray asserted in her testimony that these costs should be included (although she could not provide a total at the time she drafted her testimony),[69] and neither Mr. Scholl nor any other Pacific witness disagreed with her.[70] Based on the costs we adopted in D.98-12-079, the total of such NRCs is $375 million. [71]

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[69] Exhibit 613-S, p. 38.

[70] We are not including collocation costs in the denominator. Although Ms. Murray asserted that the inclusion of such costs would be appropriate (Ex. 614, pp. 38-39), we do not yet have a reliable estimate of what total collocation costs might be. The extent of forward-looking collocation costs is now being determined in the Collocation phase of this proceeding, in which briefing was recently completed. In view of the fact we do not have an adopted figure for these costs (and our confidence that collocation costs will be only a fraction of NRCs, even if the demand for collocation is large), we have decided that it is not necessary to include collocation costs in the denominator of the fraction used to compute the uniform markup.

[71] In its June 4, 1999 comments on the PD, Pacific contends that it is error to include this $375 million in the denominator of the markup fraction, because it results in double-counting of NRCs. Pacific contends that $500 million in NRCs are already reflected in the denominator, and cites workpapers submitted by Pacific along with its TELRIC studies in January 1997 as evidence of this. (Pacific Opening Comments, pp. 11-12.)

We have carefully examined our TELRIC orders for Pacific, D.98-02-106 and 98-12-079, and we are satisfied that no double-counting has occurred.

The TELRIC studies that Pacific submitted in January 1997 identified a large total of non-recurring maintenance expenses (*i.e.*, NRCs), as well as a large sum of direct (*i.e.*, recurring) costs, which *together* comprised what Pacific contended were its total TELRIC costs. These claimed total costs amounted to approximately $4.8 billion. However, our order in D.98-02-106 did not make any determination about NRCs, because D.98-02-106 dealt only with recurring costs. (*Mimeo.* at 11-12.).

In its comments on the PD, Pacific appears to be relying on the fact that the recurring costs found reasonable in D.98-02-106 (and related compliance filings) total $4.814 billion, approximately the same number that Pacific had submitted as its *total* costs in January 1997. However, as noted above, the $4.814 billion that emerged from D.98-02-106 covered only total *recurring* costs (including such things as loop plant, switching and entrance facilities). The *non-recurring* costs applicable to Pacific under the TELRIC methodology were adopted in D.98-12-079, and total $375 million. (*Mimeo.* at 5.) These NRCs must be added to the denominator shown in the text to obtain the total of recurring and non-recurring TELRIC costs. Thus, there is no double-counting.

We also know from Pacific's most recent compliance filing in response to D.98-02-106 that the total of shared and common costs for all UNEs is $996 million.[72] This figure should therefore be divided by the total of direct TELRIC costs for all UNEs approved in D.98-02-106 and related compliance filings ($4.814 billion), plus total NRCs ($375 million). This computation results in a markup for the recovery of shared and common costs of 19.19%, which – in keeping with prior practice – we round to 19%.

As indicated in Section II.C.2. of this decision, we have decided that this markup should apply to all the UNEs we are pricing here except, perhaps, residential loops (an issue we consider in Section IV, *infra*). Uniform application of the markup is consistent with the position Pacific took in its testimony and briefs, and is also consistent with the pricing rules in the First Report and Order.[73] The prices resulting from the addition of the 19% markup to the recurring costs

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[72] This figure was taken from Pacific's Advice Letter (A.L.) 19306B, which was filed on October 23, 1998 in response to our Resolution T-16204. This resolution set forth the Commission's decision on protests filed in response to Pacific's A.L. 19306 and A.L. Supplement 19306A.

The total direct TELRIC costs used in the text above are $55.5 million more than those set forth in A.L. 19306B. This increase is necessary because Pacific has acknowledged that it neglected to add the Programming and Information Management (PIM) expenses discussed in A.L. 19306B to total direct TELRIC costs. Once this correction is made, total direct TELRIC costs equal $4.814 billion.

[73] Although no party provided citations on the point, we note that the economic literature reflects a consensus that a uniform markup on all products of the firm is the most reasonable method of recovering common costs. *See* Stigler, *The Theory of Price,* 3d Ed. (MacMillan Company 1952), pp. 162-165; Ekelund & Ault, *Intermediate Microeconomics* (D.C. Heath & Co. 1995), pp. 67-73; D. Friedman, *Price Theory* (Southwestern Publ. Co. 1988), pp. 373-74; Baumol, *Economic Theory and Operations Analysis,* 2d Ed. 1965, pp. 300-301; Bilas, *Microeconomic Theory,* 2d Ed. (McGraw-Hill Co. 1971), pp. 188-190.

we adopted in D.98-02-106 (as modified by Pacific's compliance filings) are set forth in Appendix A.

We have also decided that the 19% markup should be applied to the non-recurring costs that we adopted in D.98-12-079. Mr. Scholl has presented persuasive reasons why the uniform markup should apply to non-recurring as well as recurring costs,[74] and other parties who commented on the issue agree that this is appropriate.[75] Non-recurring charges for the one-time functions related to our adopted NRCs are set forth in Appendix B. Consistent with the cost structure adopted in D.98-12-079, these non-recurring charges are stated in three versions, depending on whether the CLEC ordering network elements is using (1) a fully-mechanized OSS gateway, (2) a semi-mechanized process in which the UNE order is delivered electronically to Pacific's service center but entered manually into Pacific's service order data base, or (3) a "manual" order (*i.e.*, ordering by facsimile machine).[76]

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[74] In his rebuttal testimony, Mr. Scholl presents the following rationale for applying the markup to NRCs as well as recurring costs:

> "The total TELRIC used to calculate the average amount of shared and common costs as a percent of TELRIC include the [NRCs]. The [NRCs] are part of the calculation of total TELRIC when all UNEs are sold wholesale [which is one of TELRIC's basic methodological assumptions.] Thus, a markup above [NRCs] to set non-recurring charges is required if all of the TELRIC-related shared and common costs are to be recovered by the average markup." (Ex. 131-S, p. 22.)

[75] *See* AT&T/MCI Opening Brief, pp. 35-36; Ex. 614, pp. 49-50 (Murray direct testimony).

[76] In setting forth these non-recurring charges, we recognize that the Commission has not yet decided whether LEX/LASR-based service orders should be categorized as fully-mechanized service orders. D.98-12-079 treated LEX/LASR as a semi-mechanized system, but Ordering Paragraph 5 of D.98-12-079 asked the parties to comment on whether it would be more appropriate to treat LEX/LASR as a fully-mechanized system. Once this issue has been decided in the OSS/NRC phase of this proceeding,

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IV. SHOULD PACIFIC'S UNE PRICES FOR RESIDENTIAL LOOPS BE REDUCED BY OFFSETTING ITS NET REVENUES FROM YELLOW PAGES AND ITS DRAW FROM THE UNIVERSAL SERVICE FUND?

While Pacific argued in the hearings that properly-set UNE prices would often exceed TELRIC plus a markup for shared and common costs, AT&T/MCI took the position that, for residential loops, *no* markup over TELRIC was appropriate, and that the Commission should actually price such loops *below* TELRIC. As we shall see, AT&T/MCI witnesses Terry Murray and Dr. Lee Selwyn argued that these results would be equitable and could be achieved by (1) offsetting Pacific's net revenues from Yellow Pages against the otherwise applicable markup for shared and common costs, and (2) giving purchasers of unbundled loops used for residential service a surcredit of $2.64 financed through Pacific's share of the California High Cost Fund-B (CHCF-B). In his reply testimony, Ronald Sawyer of Pacific offered an alternative proposal for dividing the subsidy from the CHCF-B between the ILEC providing the loop and the CLEC offering residential service. We examine all of these proposals below.

A. The AT&T/MCI Proposal To Offset Yellow Page Revenues Against the Shared and Common Costs Applicable To Residential Loops

1. AT&T/MCI's Justification for the Proposal

AT&T and MCI acknowledged their proposal to offset residential loop prices with Yellow Page net revenues was an exception to their general position on shared and common costs. The AT&T/MCI Opening Brief states:

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any additional non-recurring charge tables that may be necessary as a result of this decision will be issued.

> "The sole exception to [our] recommendation to allocate shared and common costs proportionally among [UNEs] is the proposed price for unbundled loops purchased to serve residential customers . . . AT&T and MCI propose that shared and common costs associated with loops purchased to serve residential customers be deemed covered by an appropriate contribution from net Yellow Pages revenues. That is, AT&T and MCI propose subsidy-free residential loop prices that fully compensate Pacific for all of the costs that Pacific incurs to provide those loops, but that do not include any 'adder' for Pacific's shared and common costs." (AT&T/MCI Opening Brief, pp. 28-29.)

The principal justification for this proposal was presented by Dr. Lee Selwyn. In his direct testimony, Dr. Selwyn argues that unless Yellow Pages revenues are taken into account, Pacific's retail services will be subsidized in relation to those of its competitors:

> "Perhaps the most significant [other subsidy source] – amounting to some $400-million or more each year – is the contribution that Pacific generates from its yellow pages directory advertising business. *By statute,* contribution from the yellow pages business is *required* to be treated above-the-line, and is to be used by incumbents to offset the remaining incumbent revenue requirement. If recurring and nonrecurring charges for [UNEs] and other services the incumbent furnishes to competitors are set to fully recover all forward-looking costs *plus a portion of common overhead costs,* then *by definition* the entirety of the yellow pages contribution will necessarily flow exclusively to the incumbent's retail services, and the incumbent will be able to utilize this subsidy to underprice its competitors' retail offerings *even if the incumbent is a less efficient retail service provider.*" (Ex. 610-S, pp. 40-41; emphasis in original.)

AT&T/MCI argue that their Yellow Pages proposal is consistent with both the Telecommunications Act and our Universal Service funding decision, D.96-10-066, 68 CPUC2d 524 (1996). As to the federal statute, AT&T/MCI point out that § 252(d)(1)(A) of the Act requires UNE prices to be based on the cost "of providing the network element." Since shared and common costs cannot *by definition* be allocated to any particular UNE, there is no specific statutory requirement that these costs be recovered, according to AT&T/MCI. Moreover, they continue, while the FCC recognized in the First Report and Order that recovery of shared and common costs is appropriate, the FCC also made clear in paragraph 696 of the First Report and Order that such costs need not be proportionally recovered among elements. (AT&T/MCI Opening Brief, pp. 31-32.)

As for our Universal Service decision, AT&T/MCI argue that the reasons given there for not treating Yellow Page revenues as an offset to the universal service fund are inapplicable. Most importantly, AT&T/MCI contend, D.96-10-066 relied on the fact that the Commission was there "establishing a fund to subsidize high cost areas of the state" rather than "establishing rates," so Pub. Util. Code § 728.2(a)[77] was deemed inapplicable. AT&T/MCI argue that here, by contrast, the Commission *is* establishing rates, so § 728.2(a)'s requirement that Yellow Page revenues be taken into account is applicable.

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[77] Pub. Util. Code § 728.2(a) provides in full:

> "Except as provided in subsection (b), the commission shall have no jurisdiction or control over classified telephone directories or commercial advertising included as part of the corporation's alphabetical telephone directories, except that the commission shall investigate and consider revenues and expenses with regard to the acceptance and publication of such advertising for purposes of establishing rates for other services offered by telephone corporations."

AT&T/MCI also assert that the Commission's consideration of Yellow Page revenues will not be adequate unless it establishes "competitively neutral" rates for loops that "recognize and adjust for" the "advantage to Pacific inherent in using Yellow Pages net revenues to reduce residential basic rates." (*Id.* at 31.)

Finally, AT&T/MCI argue that treating net revenues from Yellow Pages as a source of recovery for the shared and common costs associated with loops would be consistent with the position that Pacific took in the Universal Service proceeding. AT&T/MCI point out that in D.96-10-066, the Commission noted that one of Pacific's arguments against a Yellow Pages offset was that "a yellow pages offset [would] eliminate[] another source of recovery for shared and common costs." (68 CPUC2d at 615.) AT&T and MCI claim that their proposal for loops is consistent with that earlier Pacific position. (AT&T/MCI Opening Brief, pp. 34-35.)

2. Pacific's Position

In its opening and reply briefs, Pacific argues that the AT&T/MCI Yellow Pages proposal is both illegal and bad policy.

First, Pacific argues that using Yellow Page revenues to offset the shared and common costs applicable to residential loops would violate the Telecommunications Act. Such a violation would occur, according to Pacific, because § 252(d)(1)(A) requires that UNE costs must "be determined without reference to a rate-of-return or other rate-based proceeding." However, Pacific continues, consideration of Yellow Page earnings – which already serve to keep down residential rates – would "turn[] this proceeding exactly into a rate-of-return proceeding." Furthermore, Pacific claims, because Yellow Page revenues are already figured into residential rates, adopting the AT&T/MCI proposal would require a rate rebalancing. (Pacific Opening Brief, p. 48.)

Pacific's second major argument is that the AT&T/MCI proposal unfairly benefits new entrants relying on UNEs, while penalizing those who are facilities-based. This would occur, according to Pacific, because the facilities-based entrants "will still need to recover their own shared costs[,] even though CLECs using our UNEs will be exempted from paying toward the shared costs of Pacific's network." (*Id.* at 49.) In Pacific's view, such discrimination is illegal under the Telecommunications Act. (*Id.*)[78]

Third, Pacific argues that if the AT&T/MCI proposal were to be adopted, it would raise serious issues under the Takings Clauses of the Fifth and Fourteenth Amendments. Pacific contends that under *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982), the purchase of unbundled loops "constitute[s] a physical taking of Pacific's property, since CLECs obtain exclusive occupation of the copper and the bandwidth, as well as the space in our central offices, conduits and poles which the unbundled loops occupy." (Pacific Opening Brief, p. 49.) Pacific contends that the prices it would receive for residential loops under the AT&T/MCI proposal would fall well short of constitutional requirements:

> "'Just compensation' . . . must exceed the cost of the taken property. AT&T/MCI's proposal to zero out shared/common costs with yellow pages earnings, and then reduce the prices below TELRIC with the CHCF-B fund, leave the proposed price deficient under the Act and the Constitutional standard." (*Id.* at 49-50; footnotes omitted.)

Pacific's final set of arguments are based on Pub. Util. Code § 728.2 (a). First, Pacific asserts that the literal words of this statute do not

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[78] The FBC makes essentially the same argument at page 26 of its Opening Brief.

support the AT&T/MCI proposal, because § 728.2(a) refers to considering Yellow Page revenues when "establishing rates for *other services* offered by telephone corporations," and UNEs are definitely *not* services. (*Id.* at 50-51.) Second, and more broadly, Pacific argues:

> "It is beyond dispute that the 'other services' referred to in Section 728.2 is residence basic service. The point of the statute was to protect the residential subsidy, and that protection is still necessary. The decision creating the Universal Service Fund, D.96-10-066[,] does not completely remove the subsidy to basic residential service. Thus, yellow page earnings should continue to be directed toward residential service, and not toward subsidizing competitors. While yellow page earnings, if applied as Ms. Murray proposes, would lower the price competitors paid for residential loop UNEs, there is no reason to think this lower price would be 'passed through' to consumers in the form of lower prices charged by CLECs for basic residence service." (*Id.* at 51; footnotes omitted.)

3. Discussion

We agree with Pacific that, for several reasons, it would be bad policy to use Yellow Page revenues to offset the shared and common costs that are otherwise applicable to residential loops.

First, we disagree with Dr. Selwyn that, for purposes of analyzing the duties imposed on the Commission by Pub. Util. Code § 728.2(a), UNEs should be treated synonymously with services. Pacific is correct that UNEs are "piece-parts of the network," and that they were "created as a separate and distinct alternative from the resale of services under Section 251 of the Act." (*Id.* at 51.) Thus, as we held in D.96-10-066 with respect to the Universal Service

Fund,[79] the plain language of § 728.2(a) does not require us to take Yellow Page earnings into account when setting UNE prices. Pacific is correct that the overall purpose of § 728.2(a) was to ensure that residential ratepayers benefited from Yellow Page earnings; the statute was not intended to benefit Pacific's competitors in the local exchange market.

Second, it would be double counting to use Yellow Page revenues as a justification for exempting residential loops from the markup for shared and common costs. As Pacific has pointed out, Yellow Page revenues have already been taken into account in setting the revenue requirement used to determine basic residential rates. Specifically, Yellow Page net revenues were included "above-the-line" in determining the "start up revenue adjustment" for Pacific in D.89-12-048, 34 CPUC2d 155 (1989).[80] Under these circumstances, Pacific is quite correct that AT&T/MCI "fail to explain how Yellow Pages

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[79] In rejecting a similar argument about Yellow Page revenues in D.96-10-066, we said:

> "As we noted in D.95-12-021, PU Code § 728.2(a) suggests that the revenues and expenses associated with yellow pages should only be considered when establishing *rates* for other services . . . We are not establishing rates for other services in this proceeding. All that we are doing is establishing a fund to subsidize high cost areas of the state." (68 CPUC2d at 616.)

[80] As explained in D.89-12-048, the "start up revenue adjustment" was necessary in order to ensure that the "price cap" rates put into effect on January 1, 1990 pursuant to our New Regulatory Framework (NRF) decision, D.89-10-031, 33 CPUC2d 43 (1989), would not result in Pacific or GTEC earning substantially more than the 11.5% rate of return authorized for them.

The start up revenue adjustment for both Pacific and GTEC was based on each ILEC's intrastate results of operations for the first eight months of 1989, which were then annualized. Pursuant to the discussion in D.89-10-031, Yellow Page net revenues were included in the results of operations studied. *See* 33 CPUC2d at 146-47, 192.

revenue used in a rate-of-return proceeding to set Pacific's overall revenue requirement [*i.e.*, in D.89-12-048] can now be used again to reduce forward-looking incremental TELRIC costs . . ." (Pacific's Reply Comments, p. 6.)

Third, we think there is merit in Pacific's argument that if the AT&T/MCI Yellow Pages proposal were to be adopted, entrants who rely principally on UNEs would receive an unfair advantage over entrants who rely principally on their own facilities. As Pacific points out, under the Selwyn-Murray proposal, facilities-based entrants would still have to cover their own shared and common costs, while the purchasers of Pacific's loop UNEs would have no such obligation with respect to loops that serve residential customers. Such an arrangement would be discriminatory.

We also agree with Pacific that under the AT&T/MCI proposal, there is no guarantee that residential ratepayers would receive the benefits that § 728.2(a) intended for them. While AT&T/MCI suggest that not imposing a markup on residential loops will promote more robust competition in the basic residential market, their proposal includes no specific mechanism for passing the benefits on to residential customers. In D.98-07-033, our recent decision allowing Pacific to reduce rates permanently as an offset for its share of Universal Service funds, we expressed skepticism about the promises of AT&T, MCI and Sprint to pass on to consumers the benefits of reduced switched access rates, and we required these interexchange carriers (IXCs) to submit an enforceable implementation plan for doing so.[81] The absence of such an

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[81] In D.98-07-033, after stating that "we do not find the IXCs' pledges are sufficient to establish that any switched access price reductions we adopt will be completely and timely flowed-though to a broad-base of IXC customers" (*mimeo.* at 25), we required AT&T, MCI and Sprint to "each submit to the Commission an implementation plan

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implementation mechanism here is an additional reason for rejecting the AT&T/MCI proposal.

Finally, we do not think the AT&T/MCI proposal can be rationalized on the ground that it is consistent with the position Pacific took in the Universal Service hearings that preceded D.96-10-066. As noted above, Pacific's position in that case was that Yellow Page revenues should not serve to reduce the amount of the CHCF-B, because, *inter alia,* such an offset would "eliminate[] another source of recovery for shared and common costs." (*Mimeo.* at 175.) We have examined Pacific's brief in the Universal Service case, and when read in context, we think Pacific was making the point that the net revenues earned from its Yellow Pages were available to cover shared and common costs that are associated with competitive services.[82] But this common sense observation – that it is easier to recover shared and common costs when a service is less competitive than when it is highly competitive -- cannot be treated

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within 30 days of this decision and a verification report within 6 months of the [switched access] rate reductions adopted here being effective." (*Id.* at 33.)

[82] *See* "Errata of Pacific Bell To Its Opening Brief Regarding Establishment of Universal Service Fund," filed June 4, 1996 in R.95-01-020/I.95-01-021, pp. 70-71.

as a waiver by Pacific of what it considers its right to recover the shared and common costs allocable to loops under a uniform markup approach.[83]

[83] In their opening comments on the PD, AT&T and MCI continue to insist that the net revenues available to Pacific from Yellow Pages should be assumed to cover the shared and common costs applicable to residential loops, and that failure to treat Yellow Page revenues in this way would unfairly disadvantage Pacific's competitors. *See* AT&T/MCI Opening Comments at 14-16.

For the reasons stated in the text, we agree with the PD that Yellow Page net revenues should not be considered available to cover the shared and common costs of loops used to provide residential service. We also note, however, that the concerns AT&T/MCI have on this score are ameliorated to some extent by the conditions regarding loops that the FCC has imposed upon the applicants in its decision approving the SBC-Ameritech merger. *Memorandum Opinion and Order,* CC Docket No. 98-141 (FCC 99-279), released October 8, 1999. The conditions regarding loops are discussed at paragraph 391 of the FCC's decision, and are set forth in full at ¶¶ 45 and 46 of Appendix C to the decision. Under these conditions (which appear to be identical to those negotiated by SBC, Ameritech and the FCC staff and filed as part of an *ex parte* communication with the FCC on August 27, 1999), SBC and Ameritech are obliged to make specified quantities of discounted loops available to serve residential customers in all of the states in which they will operate. In California, 479,000 such loops will be made available at a monthly recurring charge of $9.69, which is $2.01 (and 20.1%) less than the charge we are adopting in Appendix A. In practical effect, therefore, the loops covered by the conditions would not be subject to the markup for shared and common costs that is reflected in Appendix A.

Under the conditions, all CLECs that have signed interconnection agreements with Pacific would be eligible to purchase the discounted loops. Further, all CLECs would be notified of the loops' availability at the same time, and approval by this Commission of all interconnection agreement amendments relating to discounted loop purchases would be required. However, several restrictions would apply to the discounted loops: they could be used only for residential service, they could not be used to provide advanced services such as ADSL, they would apply only to future orders, and they could not used in connection with the UNE platform that SBC and Ameritech have agreed to provide. Despite these restrictions, we think that the requirements for offering discounted loops that the FCC has imposed will go some distance toward addressing the competitive concerns that AT&T/MCI have raised in their comments. (A discussion of how the loop conditions interact with other merger conditions appears at ¶¶ 493-498 of the FCC's merger decision.)

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B. The Proposal To Reduce The Price of Residential Loops Below TELRIC By Applying A Surcredit Financed From the Universal Service Fund

As noted above, Terry Murray and Ronald Sawyer have both offered proposed solutions to a problem they jointly acknowledge in connection with the Universal Service funding program set forth in D.96-10-066. Ms. Murray and Mr. Sawyer agree that while it is easy to determine how the Universal Service subsidy should be divided between an ILEC and a CLEC when the latter offers service in a high-cost area solely through its own facilities or through resale, the task is more difficult when the CLEC uses some of its own facilities but also purchases UNEs. As we shall see, however, Ms. Murray and Mr. Sawyer offered radically different solutions to this problem, and each was highly critical of the other's solution.

On October 15, 1999, AT&T filed what it termed an "emergency petition" asking this Commission not to issue the revised PD, but instead to set aside submission and take comments on the effect of the SBC-Ameritech merger decision. AT&T claims that this is necessary because Pacific filed an *ex parte* notice regarding the impact of the merger conditions on loops on September 28, 1999, "this information did not exist at the time the record in this proceeding was open," and "it was not possible for any party to review, cross-examine, or otherwise investigate the impact of this information on the pricing phase of this proceeding." (AT&T petition, p. 2.)

AT&T's arguments are disingenuous, and its petition is without merit. This Commission, AT&T's parent corporation and many other parties submitted comments on the proposed SBC-Ameritech merger conditions, which are cited in the portions of the FCC decision discussed above. *See, e.g.,* ¶¶ 391, n.731; 393, n. 733; 495, n. 900; 497, n.905. In addition, AT&T and MCI have sought to bring a great deal of information allegedly relevant to this pricing decision to the Commission's attention through the *ex parte* process. If AT&T believes that we have misconstrued the SBC-Ameritech merger conditions on some point crucial to this decision, it is free to file an application for rehearing or a petition for modification.

1. The AT&T/MCI Proposal

For AT&T/MCI, the issue of how to divide the universal service subsidy when a CLEC uses some of its own facilities but also purchases UNEs is rooted in the different cost assumptions behind UNEs and the CHCF-B. Under the system established in D.96-10-066, the amount of subsidy available from the CHCF-B is determined on a geographically-deaveraged basis, since the subsidy amount is calculated separately for each Census Block Group (CBG). However, under D.98-02-106, UNE costs have been determined on a statewide-average basis, and - at least for now -- UNE prices will be statewide as well. For Ms. Murray, these differing cost structures introduce troublesome discontinuities:

> "Because the *price* of the loop [UNE] becomes the *cost* of the loop input for a new entrant purchasing unbundled loops from Pacific, statewide-average pricing of unbundled loops means that competitors purchasing unbundled loops from Pacific will incur uniform costs regardless of the length of loop or the density of the geographic area in which the loop is located. This uniform *cost* structure is very different from the geographically differentiated cost structure that Pacific . . . faces. It is also very different from the cost structure on which the [CHCF-B] is based. This disparity in loop cost structures raises questions as to whether new entrants buying unbundled loops from Pacific at uniform statewide-average prices should be eligible to collect universal service funding.
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> * * *
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> "It has been relatively straightforward to establish rules for universal service support that treat incumbents such as Pacific in the same manner as new entrants [who are] purchasing bundled wholesale services from the incumbent or providing retail service entirely over their own facilities. In both cases, the relationship between

the cost structure the incumbent faces . . . and the cost structure the entrant faces establishes a clear basis for a nondiscriminatory assignment of the universal service subsidy. In the case of total service resale, the entrant faces an average cost structure that already reflects the benefits of any universal service subsidy that supports the incumbent's retail rate; therefore, the competitively neutral policy is to allow the incumbent to collect all of the universal service subsidy. In the case of facilities-based competition, the entrant and the incumbent face similar geographically deaveraged cost structures; therefore, the competitively neutral policy is to allow the carrier providing service to an eligible customer to receive the relevant subsidy.

"Unfortunately, it is not so simple to design a policy that treats the incumbent and an entrant buying [UNEs] in an evenhanded manner. The reason for this difficulty is the disparity in cost structures that the incumbent and the entrant face. Unlike the total service resale example, the prices that an entrant faces for [UNEs] do not reflect the benefits of any universal service support flowing to the incumbent. Unlike the facilities-based competition example, when there are statewide-average prices for [UNEs], the prices that an entrant buying [UNEs] faces do not reflect the geographically deaveraged cost structure that the incumbent faces. Under these circumstances, allowing either carrier to collect all of the universal service subsidy without giving the other carrier some form of compensation would create an unfair and discriminatory outcome." (Ex. 614, pp. 14-17.)

Ms. Murray argues that the issue of how to divide the Universal Service subsidy can be solved by providing a surcredit on each loop that a CLEC purchases to provide residential service. She describes her surcredit proposal as follows:

> "The Commission could create a per-line surcredit that would partially offset the statewide-average price that a new entrant must pay for an unbundled loop whenever the new entrant buys an unbundled loop to service a residential customer. Pacific would then draw the full per-line subsidy from the CHCF-B for all eligible customer locations where the retail customer received service over Pacific's loop facilities, regardless of the actual retail provider of that service. (*Id.* at 19.)

Ms. Murray continues that the surcredit should apply only to the loop because it is "the source of the geographic cost variations that determine whether a customer location is eligible for universal service funding and, if so, the amount of the subsidy applicable to that location . . ." (*Id.* at 20.) She calculates the proposed per-line surcredit as follows:

> "The per-line surcredit should be set so that a new entrant serving all of Pacific's residential customers using [UNEs] would collect an amount equal to the total annual universal service fund amount for Pacific's service territory. Thus, the annual per-line surcredit would equal the total size of the CHCF-B for Pacific's service territory divided by the total number of residential lines. The monthly surcredit, of course, would just be this figure divided by 12. Given the size of the CHCF-B the Commission adopted for Pacific, I calculate the monthly surcredit to be $2.64." (*Id.* at 19-20.)

2. Pacific's Criticisms of the AT&T-MCI Loop Surcredit Proposal

In both Mr. Sawyer's reply testimony and Pacific's Opening Brief, Pacific offers several different grounds for its strong opposition to Ms. Murray's surcredit proposal.

To begin with, Pacific argues that the $2.64 surcredit would violate the Telecommunications Act. When combined with the AT&T/MCI

Yellow Pages proposal, the effect of the $2.64 surcredit would be to reduce residential loops prices below the TELRIC costs adopted for loops in D.98-02-106. Such prices, Pacific argues, plainly would not be "based on the cost . . . of providing the . . . network element," as required by § 252(d)(1)(A) of the Act. Moreover, Pacific continues, the surcredit violates § 252(d)(1)(A)'s requirement that the cost of UNEs must be determined "without reference to a rate-of-return or other rate-based proceeding," because Ms. Murray's position is, essentially, that some of the loop's TELRIC costs should be covered from another source, and that the Commission should not be concerned because Pacific's "overall return" will keep it whole. (Pacific Opening Brief, p. 54.)

Second, Pacific argues that the surcredit proposal is inconsistent with the Universal Service funding rules adopted in D.96-10-066. Instead of being an explicit subsidy subject to careful rules, the $2.64 surcredit would amount to an implicit universal subsidy buried in wholesale rates for UNEs. The surcredit would be available whether the residential loop is used to provide service in a high-cost area or a low-cost area, even though funding under the CHCF-B is restricted to high-cost areas (*i.e.,* areas where the cost of residential service exceeds $20.30). Further, Pacific continues, the surcredit would be available for *any* loop used to provide residential service, even though the rules in D.96-10-066 provide that CHCF-B funds can be used only for *primary* residential lines. Finally, Pacific argues, there is no guarantee under Ms. Murray's proposal that the benefits of the surcredit would be flowed through to residential customers in high-cost areas, even though the rules in D.96-10-066 ensure that such flow-through will occur. (*Id.* at 55-56.)

Pacific also argues that the Murray surcredit proposal is inconsistent with our recent ruling in D.98-07-033, which adjusted (or "rebalanced") Pacific's retail rates in an amount equal to the "draw" to which

Pacific estimates it is entitled under the CHCF-B.[84] As noted in D.98-07-033, this rebalancing of rates is intended to be permanent, and as a result of it, Pacific will no longer entitled to any draw from the CHCF-B. If Ms. Murray's surcredit proposal were to be adopted, Pacific argues, the rates that were adjusted in D.98-07-033 would have to be "unbalanced" immediately. (Pacific Opening Brief, p. 54.)

3. Pacific's Alternative to the AT&T/MCI Proposal For A Surcredit on Residential Loops

Although he is harshly critical of Ms. Murray's surcredit proposal, Pacific witness Ronald Sawyer concedes that it is designed to address a real problem. In his reply testimony, Mr. Sawyer acknowledges that the Commission's Universal Service rules do not clearly address the case where a CLEC provides residential service through a combination of its own facilities and UNEs purchased from the ILEC, because "the Commission adopted the universal service rules prior to anyone fully understanding the current evolution of CLECs combining UNEs." (Exhibit 116, p. 20.)

Mr. Sawyer proposes to deal with this problem by equitably dividing the CHCF-B subsidy between the CLEC that provides the residential service (*and* assumes COLR obligations) and the ILEC that provides the loop. Mr. Sawyer describes his approach for an equitable division as follows:

> "Basically, the CLEC would get funding for the difference between [Pacific's retail residential] service price of $15.76, in areas served by Pacific, and the CLEC's cost to provide basic residential service. The

[84] The categories of rates that were "rebalanced" and the amount of the adjustment for each category is shown in summary form on the table at page 39 of the mimeo version of D.98-07-033.

> CLEC's cost to provide basic service would equal the proxy cost for all functions except the loop as determined by the universal service proxy model plus the price the CLEC pays for the UNE loop. The carrier providing the loop would get the proxy cost for the loop in the high cost area less its charge for the unbundled loop. For example, assume the proxy cost for basic service in a high cost area is $35[,] and the proxy loop cost is $20. If Pacific's price is $13 for the unbundled loop, the CLEC providing universal service would receive $12.24, the difference between its [proxy] cost of $28 ($35-$20+$13) and the $15.76 price. For providing the unbundled loop, Pacific would receive $7.00 ($20-$13). Of the total universal service funding of $19.24 ($35-$15.76), the CLEC receives $12.24 and Pacific receives $7.00. Under Ms. Murray's inappropriate proposal, Pacific would receive the full $19.24 funding." (*Id.* at 22.)

4. AT&T/MCI Criticisms of the Sawyer Proposal

In their reply brief, AT&T/MCI are just as critical of Mr. Sawyer's approach as he is of Ms. Murray's. First, AT&T/MCI criticize Pacific for not providing "*any actual* sample calculation or any estimate of the overall flow of universal service fund dollars between itself and new entrants" under Mr. Sawyer's proposal. This omission is fatal, AT&T/MCI argue, because only Pacific has the data necessary to make these calculations. (AT&T/MCI Reply Brief, pp. 18-19.)

Second, AT&T/MCI argue that the example given by Mr. Sawyer is "extremely deceptive," because the loop constitutes about 90% of the cost of basic service in high-cost areas, rather than the 57% assumed by Mr. Sawyer. If one substitutes the more realistic percentage, the CLEC would receive only $0.74 of the CHCF-B subsidy, while Pacific would receive $18.50:

> "The assumptions in the revised hypothetical are: (1) Pacific's service price is $15.76, (2) the total basic

> service proxy cost in a given area is $35, (3) the underlying proxy costs are $31.50 for the loop and $3.50 for the non-loop components and (4) Pacific's loop price is [still] $13. Under those assumptions, Pacific's proposal would calculate the entrants share of the subsidy as $0.74, which is the entrant's proxy cost of $16.50 ($3.50 for the proxy cost of the non-loop components plus the $13 price of the loop) minus the $15.76 service price. Therefore, the remainder of the subsidy, or $18.50 ($35 - $15.76 - $0.74), would go to Pacific." (*Id.* at 19, n. 32.)

AT&T/MCI conclude that adopting Mr. Sawyer's proposal would confer a "windfall" on Pacific. Their reasoning is as follows:

> "Absent geographic deaveraging, new entrants will always pay Pacific the full average cost for unbundled loops, plus any markup, regardless of the underlying cost of the loop actually purchased. In areas with above-average loop costs, Pacific would receive compensation from the universal service fund for the difference between the statewide-average loop price that the new entrant would pay for the unbundled loop[,] and the geographically specific loop cost used to calculate the amount of universal service fund support permitted. Thus, Pacific would be fully compensated for its geographically specific costs in high-cost areas. In areas with below-average loop costs, Pacific would receive the full statewide-average price for unbundled loops, even though its geographically specific costs for those loops fell well below the average price that it charged the new entrant." (*Id.* at 20.)

5. Discussion

To a considerable degree, the debate between Ms. Murray and Mr. Sawyer about whose proposal more equitably divides Universal Service funds has been mooted by recent rulings of the Eighth Circuit and the FCC.

In their June 4, 1999 comments on the PD, AT&T/MCI admit that Ms. Murray's proposal "to obtain the universal service subsidy on an average state-wide basis is a back-door method for solving the need for a deaveraged unbundled network element loop price, which is the superior solution . . ." (AT&T/MCI Opening Comments, p. 13.) As noted in Section I.D. of this decision, the rule in the First Report and Order requiring geographic deaveraging of UNE prices -- 47 C.F.R. § 51.507(f) -- was reinstated by the Eighth Circuit in an order issued on June 10, 1999. And while the FCC has stayed this geographic deaveraging requirement for the time being, the stay will be lifted on May 1, 2000. Accordingly, as stated in Section I.D., this Commission expects to commence a proceeding in the near future to implement geographic deaveraging of UNE prices, the "superior solution" to the problem identified by Ms. Murray.[85]

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[85] In their opening comments on the PD, AT&T/MCI argue that there is really no need for a separate proceeding to consider geographic deaveraging of UNE prices, because

> "[t]he OANAD records provides all of the information that the Commission will need to adopt valid geographically deaveraged loop prices now. Attachment A to these comments contains a detailed roadmap, referencing specific cost data files and identifying the computational steps necessary to transform the data within those files into geographically deaveraged costs and prices. Appendix C to Attachment A offers a specific example of a possible three-zone grouping [as required by 47 C.F.R. § 51.507(f)] . . ." (AT&T/MCI Opening Comments, p. 9.)

For several reasons, we decline to consider the geographic deaveraging approach set forth in Attachment A to the AT&T/MCI comments. First, even if the approach in Attachment A is sound (an issue on which we express no opinion), it amounts to new testimony, and neither Pacific nor any other party has had an opportunity to comment on it or cross-examine the witnesses who advocate it. Second, the approach in Attachment A would be inconsistent with D.98-02-106, which adopted a statewide-average TELRIC for loops. Third, Attachment A is 21 pages long. If we were to consider it, we would not be holding AT&T/MCI to the 30-page limit for opening comments set forth in Chief ALJ Carew's May 10, 1999 memorandum to the parties that accompanied the PD.

In view of the fact that we will be dealing with geographic deaveraging of UNE prices soon, we think it would be imprudent – quite apart from the other defects in the Murray and Sawyer proposals -- to adopt their admittedly interim approaches for dividing Universal Service funds between Pacific and the CLECs that purchase loops from it. However, because AT&T and MCI have devoted so much effort in their comments on the PD to defending Ms. Murray's proposal, we set forth here the various reasons why we believe – quite apart from the fact we will soon be taking up geographically-deaveraged UNE prices -- that neither Ms. Murray's nor Mr. Sawyer's proposal should be adopted.

a) The Surcredit Proposal Is Inconsistent With the Telecommunications Act

First, we agree with Pacific that Ms. Murray's proposal for a surcredit cannot be squared with the Telecommunications Act of 1996, because the effect of Ms. Murray's proposal would be to price residential loops below the TELRIC for loops that we adopted in D.98-02-106. As Pacific points out, § 252(d)(1)(A) of the Act requires that the "just and reasonable rate" for a network element must be "based on the cost . . . of providing the . . . network element . . . ," and § 252(d)(1)(B) provides that the rate "may include a reasonable profit." The common-sense reading of these provisions is that UNE prices set below adopted TELRICs violate the Act.

b) The Universal Service Funds That AT&T/MCI Propose To Use for the Surcredit Have Already Been Allocated Toward Permanent Rate Reductions

Quite apart from the requirements of the Telecommunications Act, there is a threshold problem with the Murray proposal (and also that of Mr. Sawyer): even though the CHCF-B has not yet been formally established,[86] the funds from it that each proposal seeks to divide have already been allocated toward rate reductions ordered in D.98-07-033.

The rate reductions that we ordered in D.98-07-033 came about as a result of our conclusion in D.96-10-066 that "in order to make subsidies for high cost areas explicit, there must be a correlating downward adjustment of rates or price caps through a surcredit or reduction in tariffed rates or price caps so as to prevent the LECs from recovering implicit subsidy support as well." (*Mimeo.* at 207.) In the hope of speeding along the process of getting the CHCF-B set up, we ruled in D.96-10-066 that the downward adjustment would initially be accomplished by requiring Pacific and the other four ILECs covered by the CHCF-B to reduce all of their rates (except those for basic residential service and in existing contracts) by an equal percentage. (*Id.* at 209.) However, we also gave these ILECs the option of filing applications "describing what rates or price caps they seek to permanently rebalance downward as a result of receiving monies from the CHCF-B." (*Id.*)

D.98-07-033 grew out of the application filed by Pacific in response to this invitation. Although D.98-07-033 did not adopt *in toto* the proposal of Pacific or any other party for how Pacific's estimated CHCF-B draw should be allocated among the rates that might be reduced, we did agree that a permanent rate reduction in the amount of $305.2 million was appropriate.

[86] At the present time, Pacific is submitting claims. Subject to approval by the CHCF-B Administrative Committee, these claims will be payable from the CHCF-B once that fund has been formally established. In the meantime, Pacific has been allowed to make interim withdrawals from the funds it is holding for eventual deposit into the CHCF-B.

(*Mimeo.* at 2.)[87] About 78% of the reduction was allocated to basic toll services, Zone Usage Measurement (ZUM) and local usage.[88] In view of these rate reductions – which heavily benefited residential customers -- we agree with Pacific that it would amount to double counting if we were to apply a portion of the same $305.2 million toward reducing UNE loop prices.

c) Both the Murray and Sawyer Proposals Would Lead to Outcomes That Are Inconsistent With the Purposes Behind the Universal Service Fund

Quite apart from the double-counting issue, we think there are serious shortcomings in both the Murray and Sawyer proposals that warrant rejecting them.

In Ms. Murray's case, the principal problem with her surcredit proposal is that it converts an explicit subsidy intended to benefit residential customers in high-cost areas into an implicit subsidy that could be used to compete for customers anywhere, since the surcredit would apply to *all* residential loops. Second, as Pacific points out, D.96-10-066 provides that funds from the CHCF-B are to be available only for *primary* residential lines, while Ms. Murray's surcredit would apply to *any* loop used to provide residential

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[87] It should be noted, however, that Ordering Paragraph 7 of D.98-07-033 directed Pacific to reconcile the $305.2 million estimate adopted in the decision with Pacific's actual draw from the CHCF-B once that draw had been approved. (*Mimeo.* at 72.)

[88] A summary of the parties' proposals and of the rate reductions we adopted is set forth in Table I, which appears at page 4 of the mimeo. version of D.98-07-033.

About 21% of the total rate reductions were applied to switched access services, but as noted in the text, we required the three principal beneficiaries of these reductions (AT&T, MCI and Sprint) to submit implementation plans to ensure that the benefits of reduced switched access rates were flowed through to their respective customers. (*Id.* at 33.)

service. The PD cited both of these factors as reasons for rejecting Ms. Murray's surcredit proposal.

In their June 4, 1999 comments on the PD, AT&T/MCI claim to have found answers to both of these objections. On the first issue, AT&T/MCI argue that the PD's concerns about converting a subsidy intended for high-cost areas into one that could be used to compete anywhere can be met by requiring "that a purchaser of unbundled loops be certified as a COLR before it could become eligible for" the proposed surcredit. (AT&T/MCI Opening Comments, pp. 12-13.) On the second issue, AT&T/MCI argue that the PD's concerns about the proposed surcredit not being restricted to primary residential lines "could easily be remedied by allowing purchasers of unbundled loops to obtain the surcredit for only one loop per customer premises," although this would admittedly require the Commission to "recalculate the average per-line credit and increase it appropriately to reflect the smaller base of lines involved." (*Id.* at 13.)

We do not believe either of these proposed "fixes" adequately addresses the PD's concerns. On the first point, COLR status under D.96-10-066 is determined separately for each Census Block Group (CBG), and in order to be designated as the COLR for a CBG, a CLEC must be willing to serve all customers, both residential and business, within the CBG. Only COLRs are entitled to draw from the CHCF-B. (68 CPUC2d at 625-26.) In light of these requirements, the AT&T/MCI suggestion that a surcredit applicable to *all* residential loops should be available once a CLEC "has been certified as *a* COLR" would amount to a drastic alternation of our Universal Service rules, because it would apparently entitle AT&T, MCI or any other CLEC that has been designated as the COLR for a *single* CBG to be eligible for the proposed surcredit *anywhere* within California.[89]

The suggestion that the loop UNE surcredit be recalculated so that it is available for only one loop per customer premises is also unresponsive to the PD's concerns. If this suggestion were adopted, it would simply increase the amount of the proposed surcredit, but would do nothing to address the PD's concerns about converting an explicit subsidy intended to benefit customers in high-cost areas into an implicit subsidy that could be used to compete for customers anywhere.

For these reasons, we agree with the PD's conclusion that Ms. Murray's proposal for a surcredit on the loop UNE price should not be adopted.[90]

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[89] As Pacific points out in its reply comments on the PD (at page 2), neither AT&T nor MCI has yet applied for COLR status in any of the CBGs where the high-cost subsidy is available.

[90] We also reject the argument in the AT&T/MCI comments that unless we adopt either geographically-deaveraged loop prices or Ms. Murray's proposed surcredit immediately, we will be conferring "windfall profits" on Pacific and violating the anti-discrimination provisions of §§ 251 and 252 of the Telecommunications Act. (AT&T/MCI Opening Comments, pp. 5, 11.)

AT&T/MCI base their "windfall" argument on the following line of reasoning:

> "[W]hen one subtracts the cost of the other components of basic exchange service, the revenues Pacific obtains from the sale of unbundled loops at a price that reflects [TELRIC] *exceed* the basic exchange revenues that Pacific would otherwise obtain through the sale of the same loop as part of flat-rate residential service. Therefore, competitors that purchase unbundled loops at averaged rates will actually supply Pacific with a new subsidy, which was not addressed in any manner by [D.98-07-033] . . ." (AT&T/MCI Opening Comments, p. 11.)

Footnote continued on next page

We also agree with the PD's conclusion that Mr. Sawyer's proposal for dividing the CHCF-B subsidy should not be adopted. Most importantly, we agree with the PD that the example given in Mr. Sawyer's testimony (and quoted above in Section IV.B.3.) is not representative of the costs that are likely to be incurred in serving a high-cost area. As AT&T/MCI point out, the loop is more likely to comprise 90% of the total costs of providing basic service in a high-cost area rather than the 57% assumed by Mr. Sawyer. Thus, Pacific would receive the lion's share of CHCF-B funding in virtually all cases under Mr. Sawyer's approach. If his proposal were to be adopted, it would amount to *de facto* geographic deaveraging for high-cost areas, since Pacific would receive a loop price equal to or greater than its costs in medium- and low-cost areas, and would also receive most of the Universal Service funding in the

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We think this claim is convincingly answered by Pacific:

> "[T]he CHCF-B does not fully compensate Pacific for its costs incurred to provide residential basic service statewide. This occurs because the $20.30 funding benchmark is above the statewide average retail price [of $15.25]. One potential source to recover this shortfall is the contribution from the full range of services residential customers in urban areas buy from Pacific. However, under the AT&T and MCI proposal[,] these carriers can get the full benefits of CHCF-B funding while only serving select[ed] profitable customers . . ." (Pacific Reply Comments, p. 3.)

As Pacific notes in its reply comments, neither AT&T nor MCI has applied for COLR status in any of the CBGs where the high-cost subsidy is available. (*Id.* at 2.) Since assuming COLR status is a condition precedent under D.96-10-066 for receiving CHCF-B funding, neither AT&T nor MCI has any basis for claiming that it has been denied an opportunity to participate in the high-cost fund on the same terms as any other carrier. This disposes of the AT&T/MCI claim that our decision violates the prohibitions on discrimination set forth in §§ 251 and 252 of the Telecommunications Act.

high-cost areas. As indicated above, geographic deaveraging of UNE prices pursuant to the requirements of 47 C.F.R. § 51.507(f) seems preferable to the incomplete and *ad hoc* deaveraging that Mr. Sawyer's proposal would result in.

d) Conclusion

In keeping with the foregoing discussion, we have decided that no adjustment to the price of the loop UNE should be made on account of Yellow Page net revenues or the Universal Service funding available from the CHCF-B. Accordingly, the price of the loop – like all other UNEs covered by this decision – will be set at the TELRIC costs adopted in D.98-02-106 (as modified by our resolutions regarding Pacific's compliance filings), plus a markup of 19% to cover shared and common costs.

V. HOW SHOULD ADDITIONAL TELRIC COSTS NEEDED TO SET PRICES FOR CERTAIN ELEMENTS IN THE AT&T INTERCONNECTION AGREEMENT BE DETERMINED, AND HOW SHOULD THE LOOP COSTING AND PRICING ISSUES RAISED BY COVAD BE RESOLVED?

In their Opening Brief, AT&T and MCI observe that while in most cases, applying a particular pricing proposal "is a simple matter of taking the ... TELRIC recurring cost for a given element [adopted in D.98-02-106] and adding the appropriate . . . markup," there are a few cases in which

> ". . . the recurring cost estimates adopted in D.98-02-106 do not correspond in any simple fashion to the [UNEs] for which the Commission must adopt prices. Before one can apply [a particular] pricing methodology to arrive at prices for these elements, one must first derive some estimate of the relevant monthly recurring TELRIC. AT&T/MCI have identified at least nine such cases that affect one or both of the companies' interconnection agreements with Pacific." (AT&T/MCI Opening Brief, p. 24; footnote omitted.)

AT&T/ MCI argue that such TELRIC costs must be derived for the following network elements that were not addressed in D.98-02-106:

- DS-1 line ports,
- 4-wire voice grade entrance facilities,
- DS-3 entrance facilities without equipment,
- Unbundled loops provided over digital loop carrier and delivered to an entrant as a digital facility,
- Line Identifier Database (LIDB) queries,
- 800 database queries,
- SS7 links and link mileage, and
- Digital cross-connect systems (DCS).

As indicated below, Pacific did not dispute the need to develop costs and prices for these elements, but disagreed sharply with AT&T/MCI over how the costs should be derived. As we shall see, Pacific argued that no derivation was necessary in some cases, because the Commission has allegedly approved TELRIC costs for some of these nine elements.

Following this discussion, we consider the issues raised by Covad with respect to loops.

A. The AT&T/MCI Position on How Additional TELRIC Costs Should Be Derived

AT&T/MCI's proposals for deriving costs for the first four of these elements were set forth in the direct testimony of Terry Murray. For DS-1 line ports, Ms. Murray recommended using Pacific's end-office dedicated DS-1 port as a proxy, since it allegedly has sufficiently similar cost characteristics with the DS-1 port called for in the AT&T and MCI interconnection agreements. (Ex. 614, p. 25.) For 4-wire entrance facilities, Ms. Murray multiplied the TELRIC cost for the 2-wire entrance facility adopted in D.98-02-106 by 1.6, a multiplier traditionally used in the telecommunications industry. For the DS-3 entrance facility without equipment, Ms. Murray started with the TELRIC cost for a DS-3 facility *with* equipment, and then backed out the cost of both remote and central office circuit equipment. The result, Ms. Murray states, is a "probably a conservatively high estimate," because it includes some unnecessary fiber and equipment. (*Id.* at 25-26.)

A more elaborate exercise was required to derive a cost for unbundled loops provided over digital loop carrier and delivered to the entrant as a digital facility. Ms. Murray describes her cost derivation process as follows:

> ". . . I used Pacific's entire cost for feeder and electronics for the DS-1 loop plus a proportional share of the total DS-1 loop investment, support expenses and non-volume-sensitive costs to develop the 'per DS-1' portion of the cost. The 'per voice line activated' portion of the cost equals Pacific's entire reported cost for the distribution portion of the basic link plus a proportional share of the total DS-1 loop investment, support expenses and non-volume-sensitive costs." (*Id.* at 26.)

For the remaining elements on the list, AT&T/MCI urge that costs should be developed based on statements that appear in the reply testimony of Pacific witness Richard Scholl (Exhibit 132). For SS7 links, AT&T/MCI argue that the price should be based on transport costs generally, since Mr. Scholl acknowledged that SS7 costs are the same. (AT&T/MCI Opening Brief, pp. 27-28.) Because Mr. Scholl stated that TELRIC costs for LIDB queries and 800 database queries could be derived from the TSLRIC costs for these elements adopted in D.96-08-021, AT&T/MCI urge that Pacific be directed to derive such costs, and that other parties be afforded an opportunity to comment on Pacific's approach. Finally, AT&T/MCI note that Pacific did not propose any prices for DCS, and they urge that Pacific should also be directed to develop costs for this element. (*Id.* at 28.)

B. Pacific's Position on How Additional TELRIC Costs Should Be Derived

As noted above, Pacific's position on how costs should be developed for the "missing" elements was articulated by Mr. Scholl. He agrees with AT&T/MCI that costs for LIDB queries and 800 database queries can be derived from the TSLRIC studies, and that the TELRIC costs approved in D.98-02-106 for the STP port and various transport elements that can serve as SS7 links can be used to develop costs for SS7 links and "link mileage." (Ex. 132, pp. 32-33.)

With regard to other elements, however, Mr. Scholl differs sharply with the approach advocated by Ms. Murray. On DS-1 line ports, for example, he contends that the element has never been adequately defined by AT&T/ MCI, and that trying to cost and price it in the absence of an adequate definition is premature. (*Id.* at 32.)

For 4-wire voice grade entrance facilities and DS-3 entrance facilities without equipment, Mr. Scholl contends that Pacific *has* in fact prepared TELRIC studies. As to the 4-wire entrance facilities, he claims the study was approved in D.98-02-106, but Pacific neglected to propose a price based on the study in the pricing testimony of Mr. Hopfinger. As to DS-3 entrance facilities without equipment, Mr. Scholl states that the TELRIC study prepared for this element "was inadvertently omitted in Pacific Bell's initial TELRIC filing [of January 13, 1997]," although the component pieces were apparently included in Pacific's workpapers. In Mr. Scholl's opinion, the Commission has now effectively approved this study, because the results of it were included in the compliance filings that Pacific made in response to D.98-02-106. (*Id.* at 33-34.)

For digital cross-connect systems (DCS), Mr. Scholl states that the only aspect of this element that has been defined is multiplexing, which is included in Pacific's TELRICs:

> "[T]he DCS is a component part of the EISCC used to connect digital [UNEs] to a collocation cage, and its cost is contained in the TERLIC for the DS-1 EISCC. In the arbitrations, what was called by some the 'DCS' element became defined as 'multiplexing.' The TELRIC of that multiplexing element is included in the TELRICs presented here. There has been no further identification of any DCS network element. If any additional DCS network element is ever defined, then Pacific Bell will identify the TERLIC of that element." (*Id.* at 33.)

Finally, as to unbundled loops provided over digital loop carrier and delivered to the entrant as a digital facility, Mr. Scholl again argues that all necessary TELRIC costs have already been adopted. Mr. Scholl describes the necessary cost foundation as follows:

> "[T]he TELRIC for a DS-1 unbundled loop was included in the adopted TELRICs, as were the costs of digital entrance facilities. These loops are delivered via the DS-1 EISCC to the entrant's cage as a digital facility. They are the only digital loops provided, and the only ones requiring digital facilities for the connection to the entrant's collocation cage. There are no additional digital services which require [UNEs]. Other unbundled loops for analog services are delivered directly to the entrant's cage via the appropriate EISCC." (*Id.* at 34.)[91]

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[91] In its Reply Brief, Pacific seems to be taking a different position on digital loops than Mr. Scholl. In the brief, Pacific heatedly argues that Ms. Murray's testimony is the latest salvo in a thus far-unsuccessful battle designed to force Pacific to install expensive Next Generation Digital Loop Carrier (NGDLC) in its network:

> "AT&T/MCI proposed a "Digital Loop" with rate elements . . . presuming the use (and unbundling of) NGDLC digital loop carrier equipment. These proposed prices continue AT&T's ongoing campaign to obtain UNE prices for loops based on NGDLC equipment which has not been installed in our network, is not scheduled to be installed, and is not used in any of our approved incremental cost studies. In the TELRIC cost phase[,] AT&T/MCI attempted unsuccessfully to put these cost elements into this proceeding through the Hatfield Model. They now try again in the

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C. Discussion Concerning Additional Costs

On several of the uncosted elements, we think AT&T/MCI generally have the better of the argument. We will use a modified version of their approach to estimate TELRIC costs for the DS-1 Port, the DS-3 entrance facility without equipment and unbundled loops provided over digital loop carrier. However, we agree with Mr. Scholl that the AT&T/MCI approach is unnecessary, and that our adopted TELRIC studies make it relatively easy to develop costs for, the 4-wire entrance facility, SS7 links and link mileage and digital cross connects. For LIDB and 800 database queries, we have decided that the TSLRIC costs for these elements that were approved in D.96-08-021 should be used for the time being.

For DS-1 line ports, the main difference between the parties is whether the element has been adequately described. The PD concluded that it had been, and that the adopted TELRIC costs for End Office Switching Trunk Port Termination could be used to derive a suitable estimate for the "line side" DS-1 port. In its comments on the PD, Pacific states that the other parties' definition of the line side DS-1 port "is recognizable to us only if it is the same thing as the switch portion of our 'Supertrunk' offering." (Pacific Opening Comments, p. 17.) We agree the switch portion of Pacific's Supertrunk offering is a justifiable proxy for the DS-1 line side port, and we have used it in Appendices A and B.

For the DS-3 entrance facility without equipment, the situation is more complicated. The PD concluded that the costs reported in the TELRIC

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pricing phase . . . [A]s Ms. Murray acknowledged on the stand, these Digital Loop rate elements include 'black box' components such as 'Channelized DS-1 Virtual Feeder to RT.'" (Pacific Reply Brief, pp. 38-39.)

study that Pacific belatedly submitted for this element were excessive, and that the most reasonable approach was to use Ms. Murray's suggestion of backing out remote and central office circuit equipment costs from the adopted TELRICs for the DS-3 entrance facility *with* equipment. However, in its comments on the PD, Pacific argues that this method would result in "dark fiber," because "the standard industry definition of DS-3 entrance facilities without equipment only excludes the *remote* equipment at the customer location. The termination electronics at the central office *is* included. The PD incorrectly proposes to eliminate the equipment at both ends." (*Id.* at 17-18.) Upon further study, we agree with Pacific, and have made appropriate adjustments in the pricing appendices.

As to unbundled loops provided over digital loop carrier (DLC), we think the argument in Pacific's reply brief that the adopted TELRIC costs do not include DLC is without merit. As a review of D.96-08-021 indicates, Pacific's investment plans for DLC were an issue in connection with the proper "cross-over" point assumed in its TSLRIC studies. (*Mimeo.* at 58.)[92] The loop and access line costs we approved in D.96-08-021 assumed about a 52-48 ratio of copper to fiber, and this assumption was carried forward into the TELRIC studies we adopted in D.98-02-106. (*See* D.98-02-106, *mimeo.* at 83-85; D.98-12-079, *mimeo.* at 68-69.)

In view of this history, we find reasonable Ms. Murray's approach of using a combination of fiber and fiber electronics from the DS-1 loop and the DS-1 EISCC as a proxy for estimating the TELRIC of providing unbundled loops over DLC. Mr. Scholl also appears to acknowledge that this approach is

[92] In D.96-08-021, we defined the cross-over point as "the point at which it becomes more economic to use fiber instead of copper" in loops. (*Mimeo.* at 57.)

reasonable. If we were to accept the argument in Pacific's brief that digital loop carrier cannot be unbundled, we would be unfairly hampering entrants in their ability to use DLC technology over longer loops.[93]

As Mr. Scholl notes, we have already approved Pacific's TELRIC study for 4-wire voice grade entrance facilities. In view of the discomfort we expressed in D.98-02-106 with the allegedly "historic" multiplier relied on by Ms. Murray in her 4-wire analysis, *mimeo.* at 83-85, we will use Pacific's approved study for pricing this element.[94]

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[93] In its comments of the PD, Pacific continues to argue that a price for DLC loop should not be adopted, "since no DLC loop was brought forward through the OANAD cost study process, and none exists in interconnection agreements." (Pacific's Opening Comments, p. 18.) As noted in the text, we think that the assumptions about the fiber-copper ratio for loop plant used in both the TSLRIC and TELRIC studies make it feasible to derive a cost for this element.

Moreover, Pacific is flatly wrong when it asserts that a DLC loop is not provided for in any of its interconnection agreements. The Pacific-MCI interconnection agreement, for example, provides:

> "Certain of Pacific's geographical areas are currently served solely via integrated digital loop carrier (IDLC). In such areas Pacific will make alternate arrangements equal in quality to those used by Pacific . . . At Pacific's option, these arrangements may include, . . . (ii) universal digital loop carrier facilities." (Pacific-MCI Interconnection Agreement, approved pursuant to D.97-01-039, Attachment 6, Section 3.5, Article 3.5.1.)

[94] In its comments on the PD, Pacific points out that while Appendix A to the PD included a price for 4-wire voice-grade entrance facilities based on the discussion in the text, the appendix did not include a price for 2-wire entrance grade facilities. Pacific argues that a final price for the 2-wire entrance facility is needed, since its interconnection agreement with AT&T provides for such a facility. (Pacific's Opening Comments, p. 21.)

This raises a complication, because the TELRIC costs that we adopted in D.98-02-106 covered only a 4-wire voice-grade entrance facility; no cost was adopted for the 2-wire option. *See* Pacific's January 13, 1997 TLERIC submission, Tab B-7. Pacific suggests that

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Because Mr. Scholl also acknowledges that the adopted TELRIC studies include values for the STP port and transport elements that could serve as SS7 links, we will use these values for pricing SS7 links and link mileage.[95]

For digital cross-connects (DCS), we think there is sufficient cost support in the TELRIC studies to justify using the TELRIC of the DS-1 EISCC as the DCS cross-connect. For multiplexing, the cost of a single DCS channel will be one twenty-fourth the TELRIC of the DS-1 multiplexing function, because there are 24 DS-0 channels in a DS-1.

Two elements for which it is not currently possible to estimate TELRIC costs are LIDB queries and 800 database queries. As indicated above, we have decided that for the time being, the most reasonable course of action is to use the TSLRIC costs that we adopted for these elements. However, we will also adopt AT&T/MCI's suggestion that Pacific be ordered to derive TERLIC costs for these elements. The costs so derived shall be submitted in a General Order 96-A advice letter filing, which will be subject to protest.

The recurring costs of the additional elements discussed above are set forth in Appendix A. The price of each element will be its respective cost plus a 19% markup to cover shared and common costs.

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we deal with this problem simply by dividing the price of the 4-wire entrance facility by two. (Pacific's Opening Comments, p. 21.) Since the costing record that we considered in D.98-02-106 does not allow us to derive a more precise estimate, and since no party has objected to Pacific's suggestion in reply comments, we will adopt it.

[95] In its comments on the PD, Pacific argued that the PD had erred in pricing the SS7 link on a per minute-of-use (MOU) basis rather than per-circuit, which is how they are billed in Pacific's interconnection agreements. (Pacific Opening Comments, p. 19.) Since no party has argued in its reply comments that billing on a per-circuit basis is inappropriate, we have modified the prices shown in Appendix A to reflect per-circuit billing. The SS7 link price is based on the Dedicated Transport UNE, and varies depending on whether the purchasing CLEC chooses a DS-0 or DS-1 line.

It is also appropriate to discuss briefly the non-recurring charges applicable to these elements. Pacific pointed out in its opening comments on the PD that while Appendix B thereto contained non-recurring charges for some of the elements discussed in this section, it did not set forth non-recurring charges for unbundled loops provided over DLC, the DS-1 switch port and DCS service. Pacific recommended specific non-recurring charges for each of these elements. (Pacific Opening Comments, p. 20-21.)

In its discussion of the DLC issue, Pacific recommended that in setting a non-recurring charge, the Commission should "start with the non-recurring cost for the 2-wire basic link, and then adjust the work group occurrence factor for the NOTG[[96]] group to 100%, to reflect the need to involve that group each time a DLC loop would be provisioned." (*Id.* at 19.)

Pacific's recommendation is unreasonable and should not be adopted. Not only is it inconsistent with the determinations made in our recent NRC/OSS order, D.98-12-079, but its practical effect would be to increase the cost of DLC loops substantially. In D.98-12-079, the NRCs adopted for 2-wire loops assumed a 48% occurrence factor for the NOTG group to account for the provisioning of DLC loops. This occurrence factor was consistent with the 52-48 ratio of copper-to-fiber found reasonable in the decision. *See* D.98-12-079, COLs 21-22. The effect of adopting Pacific's recommendation and assuming a 100% occurrence factor would be to increase both the connect and disconnect charge for each DLC loop sold by $5.50. We have therefore decided to base the non-recurring charges for DLC loops on our adopted NRCs for 2-wire loops. These charges are shown in Appendix B.

[96] "NOTG" stands for Network Operations Translation Group. The NOTG performs a "grooming" function for loops provided over fiber-fed digital loop carrier systems.

Pacific's position on the appropriate non-recurring charge for the DS-1 switch port is more reasonable. For this element, Pacific recommends using the DS-1 Trunk Port as a surrogate. (Pacific Opening Comments, p. 17.) We agree and have modified Appendix B accordingly.

For DCS service, Pacific makes the following recommendation:

> "[T]he Commission should start with the non-recurring cost for Pacific's Digital Cross-Connect Service DCS. The cost for that service should [be] used as the cost for the 'initial' channel of the DCS UNE. 'Additional' channels of that UNE appearing on the same service order would have these costs reduced by the travel time included in the cost of the initial channel." (*Id.* at 20-21.)

Pacific's approach is unreasonable and should not be adopted. DCS non-recurring charges include multiplexing based on 24 DS-0 channels for every DS-1 channel. Under Pacific's proposal, competitors would be required to pay a second complete non-recurring charge for multiplexing for each "additional" channel they order. Instead of this, we will direct Pacific to provide 24 channels for each DCS ordered. The CLEC leasing the DCS will have 24 DS-0 channels available to it at that specific DCS bank, but will not be permitted to distribute these DS-0 channels to different locations. The same principle will apply for multiplexing DS-1 signals into DS-3, and for de-multiplexing both DS-3 and DS-1 signals. This approach is reflected in the non-recurring charges for DCS set forth in Appendix B.

D. The Loop Costing and Pricing Issues Raised By Covad

We now turn to the special costing and pricing issues raised by Covad, a new entrant that offers telecommunications services based on asymmetric digital subscriber line technology (ADSL). Covad has raised two principal points in its testimony and briefs: (1) Pacific's proposed prices for dedicated transport are excessive, and (2) Pacific has failed to justify its proposal to charge nearly 40% more for digital loops than for copper loops.

On the first point, Covad argues that Pacific's proposed prices for dedicated transport are unreasonable because they equal or exceed Pacific's own retail rates for dedicated transport.[97] Covad contends that Pacific should be required to price transport at the adopted TELRIC plus a markup of no more than 15% to cover shared and common costs. Moreover, Covad argues, Pacific's TELRIC studies and proposed prices fail to reflect the economies of scale associated with SONET[98] technology for higher capacity dedicated transport, such as DS-3x3 and DS-3x12 services. (*Id.* at 13-14, 19-20.)

On the second point, Covad argues that "the digital-capable loops that Covad requires from Pacific consist of plain old end-to-end copper wires freed of . . . encumbrances such as load coils that are placed on 'plain copper' loops to support analog services, or are free from bridge taps." (*Id.* at 10.) Covad argues that it should therefore have to pay only a copper-based price for the loops it seeks, because "Covad purchases and attaches its own electronic hardware to the copper loop to make it digital-capable." (*Id.* at 12.) Covad also argues that the ADSL tariff Pacific recently filed with the FCC supports the argument that a copper-based price is justified for ADSL loops.

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[97] Like several other parties, Covad seizes upon the fact that Pacific witness Hopfinger proposed a dedicated transport rate that was 9900% of the adopted TELRIC cost for such transport. (Covad Opening Brief, p. 14.)

[98] "SONET" stands for Synchronous Optical Network, a fiber optic transmission standard that allows for transmission speeds ranging from 51.84 Mbps to 13.2 Gbps.

E. Pacific's Response To Covad

In its reply brief, Pacific forcefully argues that its pricing proposals for dedicated transport *do* reflect the benefits of SONET technology, and that Covad is wrong in arguing for "deeply discounted transport UNE rates" based on the alleged failure of Pacific's cost studies to reflect SONET technology. On this issue, Pacific states:

> "Mr. Scholl explained [in Exhibit 137] that the TELRIC of each DS-3 service already reflects the SONET technology of Pacific's forward-looking network, which provides each DS-3 transport as a portion of the overall optical transport of the SONET network (OC-12 or OC-48).[[99]] Thus, the TELRIC of each of the DS-3 transport arrangements reflects the economies of that OC scale. Consequently, the network used to provide each DS-3 transport is identical regardless of whether it is provided singly or as part of a DS-3x3 or DS-3x12 service." (Pacific Reply Brief, p. 19.)

On the question of loop pricing, Pacific is more conciliatory. It concedes that ADSL services can be provided over copper loops and suggests a "compromise" pricing scheme depending on whether Pacific or the ADSL provider performs any necessary "loop conditioning" work. Pacific's proposal is as follows:

> "ADSL cost work conducted subsequent to the TELRIC cost studies indicate that, where the ADSL provider furnishes its own electronics, the *recurring* costs for an ADSL loop are the same as for the two-wire loop UNE. And, it now appears that the electronics for the ADSL UNE will be furnished by the ADSL provider [itself], as COVAD is currently proposing. Consequently, as the industry is now developing, the

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[99] "OC" stands for optical carrier, and is a standard carrier reference for SONET used to express bandwidth. For example, OC-1 indicates 51.84 Mbps, OC-12 indicates 622.08 Mbps, and OC-48 indicates 2.488 Gbps.

> recurring costs for many ADSL loop UNEs will be bare copper.
>
> "Given these industry developments, a potential compromise may be to develop separate 'with equipment' and 'without equipment' prices for ADSL providers. Providers furnishing their own electronics (DSLAM, etc.) would pay the 2-wire loop UNE rate. ADSL providers relying upon Pacific to provide DSLAM would pay the ISDN loop rate. This rate structure would remain in effect for the remaining terms of current interconnection agreements . . .
>
> "For this compromise to be viable, it is critical that Pacific be permitted to collect applicable loop conditioning charges on a time and materials basis, as Mr. Deere proposes. The costs for loop conditioning can be substantial where it is required: Pacific's FCC ADSL tariff . . . includes a $900 conditioning charge for loops requiring such work. It would be inappropriate to reduce the monthly recurring UNE charge for ADSL providers unless the conditioning charge is also required." (*Id.* at 20-21.)

F. Discussion of Loop Issues Raised by Covad

We agree with Pacific that its cost studies for dedicated transport are forward-looking and adequately reflect the benefits of SONET technology. However, we also agree with Covad's larger point in raising the SONET issue; *viz.*, Pacific's proposed prices for dedicated transport (and several other UNEs) are too high. Accordingly, as noted in Sections III.E. and VI.B.5. of this decision, the price for each UNE being offered by Pacific will be set at the adopted TELRIC for that element, plus a markup of 19% to cover shared and common costs.

On the issue of the appropriate charge for ADSL loops, we believe that the "compromise" proposal suggested by Pacific should not be adopted. The loop conditioning charges in Pacific's proposal are very high, and -- as the quotation immediately above indicates -- are taken from the ADSL tariff that

Pacific has filed with the FCC. Our own staff's examination of this FCC tariff indicates that the loop conditioning charges in it are based on embedded rather than forward-looking costs. Thus, Pacific's proposed compromise does not take account of our decision in D.98-02-106 to use TELRIC for pricing network elements.

While we agree that it would be unfair to require Pacific to furnish loops that require conditioning without receiving some compensation for this work, we believe that these conditioning charges should be based on forward-looking cost principles.[100] Until we can adopt final TELRIC-based costs and prices for loop conditioning,[101] we have decided that Pacific should receive the non-recurring charge applicable to ISDN loops to cover conditioning costs for all 2-wire loops used to provide digital subscriber line service.[102] The monthly recurring charge that Pacific should receive will depend on whether the digital subscriber line service provider purchasing the loop will use it to offer ADSL

[100] We note that in the Revised UNE List Order issued on November 5, 1999, the FCC has explicitly provided that loop conditioning charges must be based on forward-looking cost principles, and must comply with the rules for non-recurring costs set forth in 47 C.F.R. § 51.507(e). *See* ¶¶ 172, 194; Appendix C, § 51.319(a)(3)(B) & (C).

[101] We hereby direct Pacific to begin preparations immediately for submitting line conditioning cost studies based on the TELRIC methodology. At an appropriate point in the future, we will instruct Pacific (and other parties interested in submitting their own line-conditioning studies) where and in what docket these studies should be submitted.

[102] For ADSL-ready loops that require no additional conditioning, the non-recurring charge should be the one applicable to analog loops. The ADSL loops that fit this description are those very close to the central office. Load coils and signal boosters are not present in such loops, and thus there is no need to remove, or "condition," them.

service (which requires a 2-wire copper loop), or IDSL service (which requires an ISDN loop).[103]

In the PD that was issued on May 10, 1999, we restricted our discussion of digital subscriber line service to ADSL. The parties' comments on the PD make clear, however, that there are currently two types of digital subscriber line service, ADSL and IDSL. As noted above, ADSL service uses a 2-wire copper loop; it requires that the customer be located within 3 miles of the central office where the loop originates. IDSL service, on the other hand, uses an ISDN loop; it allows the customer to be located as much as 5 miles from the originating central office. Except for copper loops located very close to a central office, both the basic copper loop and the ISDN loop require conditioning before digital subscriber line service can be offered over them. *See* Pacific's Reply Comments, p. 11.

Although Covad's testimony and briefs concerned ADSL service, its comments on the PD address mainly IDSL service. Covad does not challenge our decision (and the PD's) to use the ISDN non-recurring charge as interim compensation for loop conditioning. However, Covad argues strenuously that

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[103] As the discussion in the text suggests, we disagree with Pacific's assertion that until final conditioning costs are adopted, we should set "nominal prices" for loop conditioning that would be subject to a "retroactive true-up" once the TELRIC costs for conditioning are determined. (Pacific's Opening Comments, p. 16.) As Northpoint emphasizes in its reply comments on the PD, Pacific has offered no specifics about what these "nominal prices" should be. (Northpoint Reply Comments, pp. 1-2.) Moreover, in order to promote commercial stability, we have generally disfavored the use of true-ups with interconnection agreements. Page 2 of Resolution ALJ-174 states, for example, that the "rates adopted in the Commission's OANAD pricing decision or decisions" shall be substituted for the interim UNE rates in arbitrated interconnection agreements "on a forward basis."

the monthly price of the IDSN loop is too high. Covad argues that this price – which is comprised of the basic loop price of $11.70 plus the ISDN increment of $4.44 – should be reduced by $2.22. Covad states:

> "Such a long time (2 years plus) has passed since Pacific Bell's *1994 based* costs were examined in this proceeding that the Commission should use its discretion and general expertise to make current its decision by discounting the costs of ISDN plug-in hardware by 50% based on the passage of time alone . . . , or go further and eliminate entirely the ISDN mark up for ISDN loops . . ." (Covad Opening Comments, p. 4.)

We decline this suggestion for several reasons. First, although we expect to undertake a general reexamination of Pacific's network element costs eventually, now is clearly not the time to do so. If we were to adjust ISDN prices here based on events that have allegedly occurred since Pacific's cost studies were submitted, we would logically be required to reevaluate all of Pacific's other costs as well.[104] Such reevaluation would, as a practical matter, prevent us from adopting final UNE prices. Second, Pacific is correct that the evidence Covad is relying on to justify a $2.22 ISDN increment (including the Chicago loop price offered by Ameritech and the loop price offered by GTEC) lies outside the record of this proceeding. (Pacific Opening Comments, p. 10.)[105]

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[104] However, as noted in Section VII.B. of this decision, we are establishing an annual cost reexamination proceeding for the purpose of reconsidering the costs of no more than two UNEs per year, if either a CLEC or ILEC can demonstrate that there has been a cost change for the element of at least 20% from the costs adopted in D.98-02-106 (and related compliance filings).

[105] We also reject the implicit claim of discrimination that Covad has made with respect to ISDN pricing. In its comments on the PD, Covad argues that the ISDN loop price is too high because, *inter alia*, when this loop is combined with an ISDN port, the price for the combination specified in the PD, $30.24, exceeds Pacific's *retail* price for both

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VI. SHOULD PACIFIC BE REQUIRED TO CONTINUE COMBINING UNEs FOR ALL PARTIES WHOSE INTERCONNECTION AGREEMENTS PROVIDE FOR SUCH COMBINATIONS, AND IF SO, HOW SHOULD THE APPROPRIATE COMPENSATION FOR SUCH COMBINATIONS BE DETERMINED?

As noted in the introduction, one of the principal issues in the UNE pricing hearings was whether Pacific should be required to combine unbundled network elements at the request of CLECs that purchase them. This issue figured prominently in the Eighth Circuit's decision in *Iowa Utilities Board v. FCC*, 120 F.3d 753 (8th Cir. 1997), as well as in the U.S. Supreme Court's reversal of the Eighth Circuit in *AT&T-Iowa.*

In order to understand how the "recombination" issue was framed at the hearings -- and what remains of it for us to decide after the Supreme Court's decision -- it is useful to review some of the background that occurred before the hearings. This background includes the discussion at the March 16, 1998 prehearing conference (PHC), as well as the March 27, 1998 ruling in which the assigned ALJ asked the parties for testimony on various issues related to recombinations.

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residential ($26.00) and business ($28.82) ISDN service. (Covad Opening Comments, p. 5.)

We agree with Pacific that Covad's comparison is misleading. As Pacific points out, FCC end user charges totaling $7.04 must be added onto these retail ISDN prices. (Pacific Reply Comments, p. 11.) Furthermore, we agree with Pacific that for residential service, the relevant comparison is with Pacific's price for flat-rate rather than measured ISDN service. Pacific's price for flat-rate ISDN residential service is $31.25, whereas the rate for measured ISDN residential service is $26.00. Letter of Timothy S. Dawson to ALJ McKenzie, dated June 29, 1999.

A. Background of the Recombination Controversy

1. Rulings on Recombination in the Eighth Circuit's Iowa Decision

The controversy at the pricing hearings over whether Pacific could be required to offer combinations of UNEs arose out of two passages in the Eighth Circuit's decision in *Iowa Utilities Board.* In the first passage, the Eighth Circuit held that under the Telecommunications Act, the FCC could not require incumbent local exchange carriers (ILECs) to combine network elements for CLECs:

> "The last sentence of subsection 251(c)(3) reads, 'An [ILEC] shall provide such unbundled network elements in a manner that allows *requesting carriers to combine* such elements in order to provide such telecommunications service.' . . . This sentence unambiguously indicates that requesting carriers will combine the unbundled elements themselves. While the Act requires incumbent LECs to provide elements in a manner that enables the competing carriers to combine them, we do not believe that this language can be read to levy a duty on the incumbent LECs to do the actual combining of elements." (120 F.3d at 813.)

In the second passage (which resulted from the Eighth Circuit's October 14, 1997 Order on Reconsideration), the Court of Appeals held that the FCC had erred in prohibiting the ILECs from tearing apart network elements that were already combined on a "platform." The Eighth Circuit said:

> ". . . § 251(c)(3) does not permit a new entrant to purchase the incumbent LEC's assembled platform(s) of combined network elements (or any lesser existing combination of two or more elements) in order to offer competitive telecommunications services. To permit such an acquisition of already combined elements at cost based rates for unbundled access would obliterate the careful distinctions Congress has drawn in

> subsections 251(c)(3) and (4) between access to unbundled network elements on the one hand and the purchase at wholesale rates of an incumbent's telecommunications retail services for resale on the other. Accordingly, the Commission's rule, 47 C.F.R. § 51.315(b), which prohibits an incumbent LEC from separating network elements that it may currently combine, is contrary to § 251(c)(3) because the rule would permit the new entrant access to the incumbent LEC's network elements on a bundled rather than an unbundled basis." (*Id.*)

In D.98-02-106, we took note of these holdings and ruled that the recombination issue was a proper one for the UNE pricing hearings. (*Mimeo.* at 16-17.) Moreover, we stated that "we will . . . leave it to the discretion of the ALJ, working in consultation with Commissioner Duque, to determine how the Eighth Circuit's rebundling directive should be implemented in the supplementary pricing hearings." (*Id.*)

2. Discussion of Recombination Issue at the March 16, 1998 Prehearing Conference and in the ALJ Ruling of March 27, 1998

After the issuance of D.98-02-106, the assigned ALJ convened a prehearing conference (PHC) to discuss issues and procedures for the supplementary pricing hearings.[106] In his ruling convening the PHC, the ALJ instructed the parties that they should be prepared to discuss various aspects of the recombination issue, including whether they read the above-quoted language as "merely . . . prohibit[ing] the FCC from ordering the States to implement rebundling, or whether this language also acts as a bar on the States' power to

[106] Administrative Law Judge's Ruling Convening Prehearing Conference To Discuss Issues For Supplementary Pricing Hearings, issued March 4, 1998, *mimeo.* at 3-4.

limit and control the extent to which [ILECs] may 'tear apart' their preassembled platforms (and charge a fee for reassembling the pieces)." (*Mimeo.* at 3.)

Considerable time was spent on the recombination issue at the PHC held on March 16, 1998. The parties' positions were summarized as follows in the ALJ's post-PHC ruling of March 27, 1998[107]:

> "Pacific and [GTEC] took the position at the PHC that the language in *Iowa Utilities Board* at 120 F.3d 813 means that this Commission lacks authority, under principles of preemption, to order combinations of network elements . . . All the non-LEC parties took the position that this Commission has independent authority under California law to order the LECs to offer combinations of [UNEs], but differed on how that authority should be exercised in particular cases.
>
> "Several parties that have signed interconnection agreements requiring Pacific to provide varying combinations of elements, such as [AT&T and MCI], took the position that the Commission should not disturb those agreements, some of which provide for renegotiation in the event of a 'final and non-appealable' court ruling that the FCC lacks authority to order recombinations . . . Although Pacific disagrees with AT&T and MCI over whether the renegotiation provisions in its agreements have been triggered, it agrees with AT&T and MCI that the Commission should not disturb those interconnection agreements insofar as they set forth Pacific's obligations to offer recombinations of UNEs . . .

[107] Administrative Law Judge's Ruling Concerning Issues Raised at March 16, 1998 Prehearing Conference, issued March 27, 1998. Hereafter, this ruling will be referred to as the "March 27, 1998 Ruling."

> "For those parties who have not entered into interconnection agreements, or whose interconnection agreements are silent on the issue, there was agreement among the non-LEC parties that the Commission should exercise its authority under California law to order Pacific to offer any combination of UNEs that a CLC might want . . . Most of these parties are opposed to the idea that Pacific should receive any compensation (which they describe as a 'regluing charge') for combinations of UNEs that Pacific already employs itself or offers to other CLCs . . ." (*Mimeo.* at 3-4; citations omitted.)

After presenting this summary, the March 27 ruling set forth the ALJ's preliminary conclusions[108] about the issues raised. First, rejecting the arguments of Pacific and GTEC, the ALJ tentatively concluded that this Commission has independent authority under California law to order recombinations.[109] The ALJ further opined that – provided appropriate steps were taken to minimize the potential for arbitrage between resale service and the purchase of UNEs - exercise of the Commission's recombination authority would not be inconsistent with the Eighth Circuit's discussion in *Iowa Utilities Board.* (*Id.* at 5-8.)

The ALJ then offered the parties some guidance about two issues he wanted them to address in their testimony. First, he instructed Pacific to specify which combinations of UNEs it was willing to make available on a

[108] The ALJ noted that his conclusions were tentative because "we have not yet had the benefit of briefing from the parties on the precise scope of our authority under California law." (March 27, 1998 Ruling at 7.)

[109] In reaching this conclusion, the ALJ relied upon the powers conferred on the Commission by sections 451, 453, 454, 701, 761, 851, 871 and 2871-2897 of the Pub. Util. Code.

voluntary basis to all parties, as well as which combinations had been requested by at least two CLECs. (*Id.* at 9.) Second, the ALJ set forth a proposed formula for a "regluing" charge (on the assumption that such a charge might be legally necessary to overcome the arbitrage problem), and asked the parties to propose alternative formulae for compensating Pacific for "the intellectual and physical work necessary to create services from elements." (*Mimeo.* at 9-11.)[110]

As we shall see, Pacific ultimately ended up taking the position at the hearings that this Commission lacked authority to order ILECs to provide UNE combinations. Instead, Pacific proposed to let CLECs create their own combinations through "points of access." To complicate matters further, it became apparent during the hearings that notwithstanding its legal position, Pacific had entered into separate agreements with AT&T, MCI and Sprint to continue providing previously agreed-upon UNE combinations to those carriers during the remaining term of their interconnection agreements.

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[110] The ALJ stated that all proposals for a "recombination fee" or "regluing charge" would be subject to a ceiling suggested in a January 7, 1998 summary judgment ruling by the U.S. District Court in Seattle in *U.S. West Communications, Inc. v. MFS Intelenet, Inc.* (Western District of Washington, No. C97-222WD). The ALJ described the ceiling as follows:

> "[T]he recombination fee is equal to the difference between the wholesale rate established under § 252(d)(3) of the Telecommunications Act and the *sum* of the UNE costs that make up wholesale service. Further, it is our understanding that this fee is then spread *pro rata* among the elements according to the TELRIC costs determined for them. In view of the absence of data from Pacific regarding the actual costs of offering UNE combinations, and as an interim expedient, we think this type of recombination fee offers an equitable starting point for determining what compensation Pacific should receive for the actual work of combining UNEs." (March 27, 1998 Ruling, *mimeo.* at 10.)

3. Pacific's Agreements with AT&T, MCI and Sprint To Continue Providing UNE Combinations During The Remaining Term Of Those Carriers' Interconnection Agreements

During the hearings, it became apparent that despite Pacific's argument that it could not be required to furnish UNE combinations, Pacific had in fact agreed to continue providing such combinations to certain parties in exchange for a change in billing systems. Under Memoranda of Understanding with Sprint, MCImetro[111] and AT&T (which agreements were admitted into evidence as Exhibits 141, 142 and 143, respectively), Pacific agreed with these three carriers that in exchange for an agreement to replace the CABS system for resale ordering and billing with the new CRIS system, Pacific would continue providing the UNE combinations called for under these three carriers' interconnection agreements. Pacific agreed to continue providing such combinations for the remaining life of the interconnection agreements (all of which expire by early 2000.)

The language in the Pacific-AT&T Memorandum of Understanding (Exhibit 143) is typical:

> "1. In return for, and conditioned upon, AT&T's agreeing to meet, and meeting, the May 11, 1998 CABS to CRIS conversion for Pacific and Nevada [Bell] and the payment by Pacific of expenses of such conversion as set forth below, Pacific and AT&T agree to the following:
>
> "a. Pacific will waive what it believes to be its legal right to require AT&T to combine UNEs and its

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[111] MCImetro is the subsidiary of MCI through which local exchange service is provided in California and certain other states. For convenience, we hereafter refer to MCImetro simply as MCI.

> contractual right to renegotiate the UNE Combination provisions of its Interconnection Agreement for the remainder of the term of the Interconnection Agreement. Instead, Pacific will comply with the current provisions regarding UNE Combinations in the Interconnection Agreement (including the terms and conditions related to the recurring and nonrecurring price(s) for UNE Combinations as set forth in Attachment 8 of the Interconnection Agreement)... Other than the recurring and non-recurring charges currently specified in the Interconnection Agreement ... Pacific will not impose any bundling charges for the term of the Interconnection Agreement to perform such agreed upon Combinations. These provisions will apply for the remainder of the term of the Interconnection Agreement regardless of any regulatory, legislative, or judicial change or ruling unless such continued compliance is expressly prohibited by a change in the law subsequent to the date of this Memorandum of Understanding."

Although the language conditioning Pacific's continued provision of UNE combinations upon acceptance of the CABS-to-CRIS conversion was largely the same in all three Memoranda of Understanding, the payment terms were different. While Pacific agreed to reimburse AT&T and Sprint up to $500,000 in conversion costs (conditioned upon a right to audit these costs), it agreed to pay MCI only $200,000 "in complete settlement" for the claimed costs of converting from CABS to CRIS, with no right of audit.

Each Memorandum of Understanding contained a confidentiality clause. For example, paragraph 1.g. of Pacific's agreement with AT&T required, in effect, that both parties keep secret the existence of Appendix D to their Memorandum, which specified some of the UNE combinations to be made available. The Pacific-AT&T confidentiality clause provided as follows:

> "This Memorandum of Understanding and each term hereof and the negotiation hereof are confidential and

> proprietary to AT&T and Pacific and, except as provided in the following two sentences, are subject to the terms of Section 19 of the Interconnection Agreement. Either party may disclose the provisions set forth in section 1.a. hereof and that AT&T has agreed to convert from CABS to CRIS, and either party may file Exhibits A, B and C hereto with the California Public Utilities Commission as mutually approved amendments to the Interconnection Agreement. Other than as stated in the prior sentence, the second sentence of Section 19.5 of the Interconnection Agreement shall not apply to permit disclosure of this Memorandum of Understanding or any term hereof or the negotiation hereof without the advance written consent of the other Party."

During the hearings and in its briefs, Pacific argued that it would provide UNE combinations to AT&T, Sprint and MCI in accordance with the terms of the Memoranda of Understanding. However, Pacific continued, it could not be required to file what it termed a "recombination tariff," because -- in Pacific's view -- the Commission lacked authority to require either UNE tariffs or the provision of UNE platforms. (Pacific Opening Brief, p. 69.)

B. Pacific's Proposal For Allowing CLECs to Combine Unbundled Network Elements For Themselves

As explained in Section VI.C., *infra*, Pacific argued at length that this Commission lacked authority under California law (and was preempted by the Eight Circuit decision) from ordering ILECs to recombine network elements for carriers who wish to purchase them. However, in order to comply with the Eight Circuit ruling that ILECs must make UNEs available so that CLECs can combine them for themselves, Pacific put forward what it described as its "points of access" proposal.[112]

The points-of-access proposal was presented in Exhibit 107, the direct testimony of Pacific's network engineering witness, William Deere. Mr. Deere described a point of access as "a location where the CLEC has physical access to UNEs for the purpose of combining those elements to provide telecommunications services." (Ex. 107, p. 15.)

According to Mr. Deere, Pacific expects to offer five points of access eventually, although only the first – which is premised on physical collocation – was available at the time of the hearings. (Tr. 42: 6235-36.) Under this first point-of-access, where a CLEC is physically collocated in one of Pacific's central or tandem offices, Pacific "extends UNEs that require cross connection to a Point of Termination (POT) frame located inside the CLEC's physical collocation space. Using this method, the CLEC has secure access to its circuits and they are protected from access by others. This option also allows cross connection to equipment provided by the CLEC in the collocation space." (Ex. 107, p. 16.)

In the second method of access, Pacific proposes to "extend[] UNEs that require cross connection to a CLEC UNE access point (common frame) located in a collocation *common area*. This method provides a CLEC an option of connecting UNEs that do not require connection to CLEC equipment in the collocation space. All physically collocated CLECs choosing Method 2 in an office have access to the same access point." (*Id.*; emphasis supplied.)

[112] The points-of-access proposal apparently applied to parties who did not have an interconnection agreement with Pacific, or whose interconnection agreement was silent on the subject of UNE combinations.

In the third method, Pacific proposes to extend UNEs requiring cross connection to the CLEC's "UNE Frame located in a common area room space, *other than collocation common areas,* within the central office or tandem office building. The CLEC point of access is located in a secure area of the building other than the collocation space. This allows CLECs to share a common frame for the connection of [Pacific] UNEs. The CLEC does not have access to its own equipment from this point." (*Id.*; emphasis supplied.)

In the fourth method, Pacific would "extend[] UNEs to an external Point of Presence, such as a cabinet located outside the central office or tandem office building, provided by [Pacific] on [Pacific's] property. This arrangement will operate like Method 3, except the point of access will be *outside of* [Pacific's] building." (*Id.* at 17; emphasis supplied.) In the fifth method, Pacific would extend UNEs "to a building not controlled by [Pacific] via cabling provided by the CLEC. The CLEC provides the cable necessary to reach from a manhole outside the central office building to [Pacific's] Distribution Frame" in the Pacific central office where connection is requested. (*Id.*)

Although UNE prices for GTEC are not being set in this phase, GTEC also presented testimony on how it enables CLECs to combine UNEs for themselves. (Ex. 307; Hartshorn.) All three of GTEC's proposed methods relied on some form of collocation. The first method, based on physical collocation, is similar to the first point of access described by Mr. Deere. (*Id.* at 7-11.) GTEC's second method, which was based on "virtual"[113] collocation, is similar to the fifth

[113] Virtual collocation has been defined as a situation in which "the LEC owns and maintains the circuit terminating equipment, but the CAP designates the type of equipment that the LEC must use and strings its own cable to a point of interconnection close to the LEC central office." *Bell Atlantic Telephone Companies v. F.C.C.*, 24 F.3d 1441, 1444 (D.C. Cir. 1994).

point of access described by Mr. Deere. (*Id.* at 11-13.) GTEC's third proposed method relied on "common collocation," in which a common area in a central office is made available to all CLECs who wish to collocate in that office. (Ex. 308, pp. 2-5.) This method, on which the Commission is now considering cost studies submitted by Pacific and GTEC,[114] is similar to Pacific's second proposed point of access. Indeed, Sprint states that "GTE's proposal for providing access to UNEs is nearly identical to Pacific's proposal, with the exception of interconnection outside the central office." (Sprint Opening Brief, p. 42; footnote omitted.)

C. The Parties' Positions on the Extent of the Commission's Authority To Order ILECs To Recombine Unbundled Network Elements For CLECs

1. The Pacific and GTEC Argument That the Commission Lacks Authority To Order UNE Combinations

In their post-hearing briefs, Pacific and GTEC both argued that the Commission should not consider the recombination issue, because any Commission ruling was likely to be superseded quickly by the Supreme Court's decision in the *Iowa Utilities Board* case. (Pacific Opening Brief, pp. xiv-xv; GTEC Reply Brief, pp. 24-25.) However, they continued, if the Commission felt obliged to address the recombination issue before the Supreme Court ruled, then it was

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[114] *See* Joint Assigned Commissioner and Administrative Law Judge's Ruling Concerning Costing and Pricing of Collocation for Pacific Bell and GTE California Incorporated, issued August 31, 1998, *mimeo.* at 8. This ruling defines "common collocation" as

> ". . . very similar to physical [collocation] in that the arrangement utilizes a caged area with direct or escorted access available to all collocating CLCs; it differs in that the area within the cage is jointly occupied by one or more CLCs, with each carrier leasing 'space' within the cage in terms of how much space it occupies." (*Id.* at 5.)

clear that the Commission lacked authority under either state or federal law to order UNE combinations. Pacific stated:

> "[T]here is only one legally defensible interpretation of the Eighth Circuit opinion: Neither the FCC nor any state commission can require an ILEC to combine UNEs or prevent an ILEC from separating UNEs it may currently combine." (Pacific Opening Brief, p. 59; footnote omitted.)

The reason the Commission lacks such authority, Pacific continued, was that the pre-assembled UNE platforms sought by CLECs were "the exact equivalent of resale under another name," and "any attempt to allow CLECs to offer a full line of resold services under the guise of purchasing ILEC-combined [UNEs] is contrary not only to the language of the specific provisions governing unbundling, but also to the basic statutory distinction between resale and access to [UNEs]." (*Id.* at 62.)

Pacific also rejected the idea that the UNE-resale distinction could be preserved if a "regluing" charge were to be imposed. Noting that all appeals of the First Report and Order had been consolidated in the Eighth Circuit, whose "decision is the law of the land until the Supreme Court rules," Pacific argued:

> "[The gluing charge approach] simply disregards the Eighth Circuit order. The Eighth Circuit's holding is that the plain language of the Act requires 'requesting carriers' to do the combining of network elements. The holding stops there. The Eighth Circuit did not modify, but instead *nullified* the FCC's rules requiring ILECs to combine because such requirements were 'inconsistent' with the Act. The Eighth Circuit did not say it was 'OK' to require combining 'if' ILECs were compensated in a

way which left the resale provisions of the Act intact." (*Id.* at 63-64; footnotes omitted.)[115]

Pacific also disagreed with the conclusion in the March 27, 1998 ALJ Ruling that the Commission has independent authority under the California law to order UNE combinations. Pacific argued that the provisions in the Pub. Util. Code relied upon by the ALJ are inconsistent with Pub. Util. Code § 709.2, which is the Legislature's most specific discussion of unbundling in the telecommunications context. Pacific asserted that prior to the passage of § 709.2(c)(1) – which expressly refers to "fair unbundling of exchange facilities" in *this* docket -- unbundling was understood to mean whether "one part of the network could be physically 'unplugged' from the rest of the incumbent's facilities and separately priced so that other companies could compete to provide just that single piece of the network." (Pacific Opening Brief, pp. 67-68.) According to Pacific, the argument that CLECs should have access to platforms of assembled UNEs "turns that understanding of 'unbundling' on its head." (*Id.* at 68.)

GTEC joined Pacific in arguing that a requirement that ILECs make combinations of UNEs available to requesting carriers on a platform amounted to resale by another name. However, GTEC's position in this regard was based entirely on the alleged preemptive effect of the Eighth Circuit's decision. Without discussing Pub. Util. Code § 709.2, GTEC acknowledged that "[a]ssuming there were no federal laws regarding local competition, California

[115] Interestingly, Pacific argued in the alternative that if the Commission concluded it had authority to order UNE combinations, it should impose a gluing charge consistent with the "cap" described in the March 27, 1998 ALJ Ruling. (*Id.* at 69-70.)

state law probably would authorize this Commission to order ILEC rebundling." (GTEC Reply Brief, p. 21.)

2. The Contention of the Facilities-Based Coalition That the Commission Has Statutory Authority To Order UNE Combinations

The strongest position favoring the Commission's authority to order the provision of UNE combinations was staked out by the Facilities-Based Coalition. The FBC argued that Pacific had badly misread the Eighth Circuit's decision when it argued that, under principles of preemption, that decision precluded the States as well as the FCC from ordering ILECs to provide UNE combinations. Noting that the issues before the Eighth Circuit related solely to the extent of the FCC's powers, the FBC maintained that "[t]he Eighth Circuit's decision was a ruling on the extent of the FCC's power under the Telecommunications Act; *Iowa Utilities Board* is not a ruling that preempts the states from acting under their state law powers." (FBC Opening Brief, pp. 76-77.)

Based on the same statutory provisions cited in the March 27, 1998 ALJ Ruling, the FBC concluded that the Commission has authority under California law to order UNE combinations. The FBC placed special reliance on Pub. Util. Code § 761, which in its view "provides the Commission with ample state law authority to require Pacific and GTEC to combine UNEs for the CLCs if the Commission concludes, after hearing, . . . that this is the best and most appropriate means for 'the furnishing of [this] commodity' by ILECs." (FBC Opening Brief, p. 75.)

The FBC disagreed that, when seeking UNE combinations, CLECs like themselves were merely trying to obtain resale service at a deeper discount.[116] The FBC noted that members had spent millions of dollars on their own facilities, and had no desire to devalue those investments by making finished services (in the form of a UNE platform) available to CLECs who had not invested in facilities.

The reason for requiring Pacific to offer UNE combinations at no charge, the FBC continued, was that Pacific had agreed to do this for AT&T, Sprint and MCI in the Memoranda of Understanding. Failure to do the same thing for other CLECs, the FBC argued, would violate the anti-discrimination requirements of Pub. Util. Code § 453(a):

> "Given [Pacific's failure to file the testimony on UNE combinations requested by the ALJ], and given as well the fact that Pacific secretly agreed to continue to combine UNEs for AT&T, MCI and Sprint *at no charge*, the Commission should not allow Pacific to collect any charge for combining UNEs for all other carriers as well. If Pacific can afford to combine UNEs at no charge for AT&T, MCI and Sprint, the cost of combining UNEs

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[116] Specifically, the FBCs contended that in some cases, purchasing all of the UNEs included in a resale service was *not* equivalent to purchasing the service, because other ingredients might be necessary:

> "The UNE-[platform] is not actually equivalent to the wholesale service. For example, wholesale service customers are not charged for incoming calls or non-completed . . . outgoing calls, whereas CLCs using the UNE-[platform] would be charged for switching on all inbound calls and on all non-completed outgoing calls. To say that such services are 'the same' or 'equivalent' represents a failure to apply close scrutiny." (FBC Opening Brief, p. 83. n. 62.)

Further, the FBCs argued that their members were likely to want to combine UNEs in non-traditional ways. For example, "connecting unbundled loops to multiplexers and dedicated transport UNEs may be a necessary UNE combination to serve customers near ILEC central offices where a CLC does not have a collocation cage." (*Id.* at 72, n. 45.)

> . . . cannot possibly be large; what it is willing to do for free for the three largest ILECs it should also do for free for other carriers as well." (FBC Opening Brief, pp. 82-83.)

An additional reason for imposing such a requirement, the FBC argued, was that Pacific's points-of-access proposal was vague and ambiguous.

3. The AT&T/MCI Position That CLECs Cannot Be Required To Invest in Network Facilities As A Precondition To Combining UNEs For Themselves

Although the primary concern of AT&T and MCI was that the Commission not disturb the arrangements they had negotiated with Pacific in the Memoranda of Understanding, both carriers also argued – for the same reasons as the FBC -- that the Commission has authority under California law to order UNE combinations, and that Pacific's points-of-access proposal was inadequate. (AT&T/MCI Opening Brief, pp. 50-55.)

The AT&T /MCI witness on recombinations, Steven Turner, also criticized the points-of-access approach for relegating CLECs to costly manual recombination arrangements, while Pacific would enjoy fully automated ones:

> "The only 'network access' offered by Pacific to competitors for the purpose of combining UNEs is the opportunity to perform manual combining at competitor facilities in collocation or collocation-like arrangements remote from the [main distribution frame.] The result is this: Pacific will provision telecommunications service to its retail customers over a fully automated set of network components and operations support systems. Competitors, regardless of the state of progress in obtaining access to Pacific OSS, will remain bound to manual, labor-intensive cross-connection activities in order to try to provision

> competing services over those same network components. Pacific offers network access that is 'separate and unequal.'" (Ex. 601, p. 6.)

4. The Concerns of Sprint and the FBC About Security Issues Raised By Pacific's Points-Of-Access Proposal

In addition to their legal objections, Sprint and the FBC raised security concerns about Pacific's points-of-access proposal.

Sprint was one of several parties emphasizing the increased degradation of service quality that might result from the "common collocation" arrangement Pacific was proposing through its advocacy of a Point of Termination (POT) frame. In his reply testimony, Sprint witness Michael West stated:

> "The POT frame will lengthen the time to install or move customer circuits and will add unnecessary coordination costs between the two carriers for re-engineering of circuits and isolating, testing and repairing customer services. In addition, use of the POT frame most likely will impair the ability and efficiency of a CLC to serve customers at the same level of parity as PacBell. Insertion of the POT frame will have a negative impact on the CLC when turning up telecommunications services by adding more complexity to the provisioning process.
>
> "The frame proposal is not based on sound economic and engineering principles to reduce cost and provide a quality service. It appears to be just another barrier to entry for the CLCs. Adding unnecessary loop length in circuits creates design concerns, additional points of failure, unnecessary record keeping, and the increased probability of wrong assignments and disconnects. The addition of a common frame also raises serious issues regarding security, network integrity, facilities management, and protection of proprietary and

> confidential business information among CLCs and the ILEC." (Ex. 409, p. 7.)

As support for these arguments, Sprint pointed to the cross-examination of GTEC's collocation witness, Larry Hartshorn, whose proposals for letting CLECs combine UNEs via collocation were considered by Sprint to be very similar to Pacific's. When Mr. Hartshorn was asked what risks GTEC was trying to guard against when it fenced off its collocation areas, he stated that the risk was "[t]hat inadvertently or unknowingly, personnel in the central office may in fact cause degradation or outage to large segments of our customers." (Tr. 52:7748.) When asked how that might happen, Mr. Hartshorn replied:

> "That could occur by simply leaning on a piece of equipment, brushing a cable, accidentally bumping into a piece of equipment[,] can cause electrical surges, power outages. There are innumerable ways in which outages and impacts to customers can be caused within a central office." (*Id.*)

Sprint argued that these same risks apply to a common collocation cage, and could be avoided if the Commission ordered Pacific not to take apart its preexisting UNE combinations. (Sprint Opening Brief, pp. 43-44.)

The FBC made a similar argument about potential degradation of service and noted that Pacific's proposal raised a discrimination issue:

> "By refusing to connect UNEs directly to each other, Pacific forces CLCs to purchase an additional cross-connect, and further creates additional points of connection at which circuits may fail. Pacific's proposal is discriminatory because Pacific does not combine the elements that it uses to provide finished retail services (*e.g.*, loops and ports used to provide finished local exchange services) in this manner; instead, when using

> such elements itself, Pacific combines the elements directly." (FBC Opening Brief, p. 57; footnotes omitted.)

D. Discussion

1. The Supreme Court's Decision in *AT&T-Iowa* Moots Many of the Issues Raised By the Parties in Their Recombination Testimony

The Supreme Court's January 25, 1999 decision in *AT&T Corp. v. Iowa Utilities Bd.* moots much of the testimony that the parties submitted on the recombination issue. In particular, since the Supreme Court has brushed aside the concerns about arbitrage that lay behind the debate over whether we have independent state authority to order UNE combinations, and whether a "recombination" fee or gluing charge must be imposed if we exercise such authority, the scope of the issues that must be decided here has been considerably reduced. However, as explained below, we think that the discrimination issue raised by Pacific's Memoranda of Understanding with AT&T, MCI and Sprint remains a live controversy and must be resolved.

In its decision, the Supreme Court quickly dismissed the Eighth Circuit's justification for setting aside the FCC Rule that prohibited ILECs from "tearing apart" their UNE platforms, *viz.*, the potential for "regulatory arbitrage" between resale and the purchase of UNEs. The ILECs had argued to the Supreme Court that resale rates, unlike UNEs, include subsidies to support universal service, and that if CLECs could avoid paying resale rates by purchasing all the UNEs needed to provide a finished service, the incumbents would be left "holding the bag for universal service." (119 S.Ct. at 737.) The Court brushed this concern aside with the observation that "§254 requires that universal-service subsidies be phased out, so whatever possibility of arbitrage remains will be only temporary." (*Id.*)[117] Moreover, the majority opinion continued, the rule at issue, FCC Rule 315(b) (47 C.F.R. § 51.315(b)) was a reasonable interpretation of § 251(c)(3) of the Telecommunications Act, and was therefore entitled to deference:

> "Because [§ 251(c)(3)] requires elements to be provided in a manner that 'allows requesting carriers to combine' them, incumbents say that it contemplates the leasing of network elements in discrete pieces. It was entirely reasonable for the Commission to find that the text does not command this conclusion. It forbids incumbents to sabotage network elements that *are* provided in discrete pieces, and thus assuredly contemplates that elements *may* be requested and provided in this form (which the Commission's rules do not prohibit). But it does not say, or even remotely imply, that elements *must* be provided only in this fashion and never in combined form." (*Id.*)[118]

After pointing out that "§ 251(c)(3) is ambiguous on whether leased network elements may or must be separated," the Court concluded:

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[117] The Supreme Court also noted that as with the "all elements" rule, its remand of 47 C.F.R. § 51.319 – the rule setting forth the FCC's description of the network elements to be offered on an unbundled basis – "may render the incumbents' concern [about Rule 315(b)] academic." (*Id.*)

[118] Another portion of the Supreme Court's discussion directly rejects the argument made in Pacific's Opening Brief (at pages 67-68) that authority to order combinations of UNEs would be inconsistent with the generally understood meaning of "unbundling." On this question, the Supreme Court said:

> "Nor are we persuaded by the incumbents' insistence that the phrase 'on an unbundled basis' in § 251(c)(3) means 'physically separated.' The dictionary definition of 'unbundled' (and the only definition given, we might add) matches the FCC's interpretation of the word: 'to give separate prices for equipment and supporting services.' Webster's Ninth New Collegiate Dictionary 1283 (1985)." (*Id.*)

> "[T]he rule the Commission has prescribed is entirely rational, finding its basis in § 251(c)(3)'s nondiscrimination requirement. As the Commission explains, it is aimed at preventing incumbent LECs from 'disconnect[ing] previously connected elements, over the objection of the requesting carrier, not for any productive reason, but just to impose wasteful reconnection costs on new entrants.' . . . It is true that Rule 315(b) could allow entrants access to an entire preassembled network. In the absence of Rule 315(b), however, incumbents could impose wasteful costs on even those carriers who requested less than the whole network." (*Id.* at 737-38; citation omitted.)

In keeping with its conclusions, the Court reinstated Rule 315(b).

By brushing aside the arbitrage argument connected with UNE combinations, the Supreme Court has mooted the controversy over whether a gluing charge is appropriate when a CLEC seeks to purchase a UNE platform that an ILEC uses itself. As the ALJ observed in his March 27, 1998 Ruling, the justification for such a charge is to eliminate the possibilities for arbitrage between resale and the purchase of UNE platforms, *mimeo.* at 9-11, and the Supreme Court has now declared the concerns about arbitrage to be *de minimis* as a matter of law.

Similarly, because the Supreme Court has now reinstated the key portion of the FCC's rule on combining elements, it is no longer necessary to resolve the controversy over the extent of our authority under California law to order ILECs to provide pre-assembled UNE "platforms" to CLECs. Under Rule 315(b), Pacific is clearly obliged to provide CLECs with any such platform that it uses itself, and is not entitled to any additional compensation (beyond a "service order" charge) for doing so. As explained below, we think our rulings in the OSS/NRC decision, D.98-12-079, furnish an adequate record on which to determine proper non-recurring charges for UNE combinations.

However, the Supreme Court's ruling that the FCC must reconsider whether the list of UNEs in the original version of Rule 319[119] meets the "necessary and impair" standard raises a potential complication, because ordering ILECs to provide combinations of unbundled network elements logically presupposes that the underlying elements have been lawfully defined. However, as noted in Section I.D., Pacific's corporate parent has agreed that Pacific will continue to honor its existing interconnection agreements (including the combination provisions thereof) during the period in which Rule 319 is being reconsidered. Further, as explained below, we think that Pacific has effectively waived any legal objections it might have had[120] under the Supreme Court's decision to furnishing UNE combinations specified in existing interconnection agreements by entering into the Memoranda of Understanding with AT&T, MCI and Sprint.[121] We also think that the non-discrimination principle that is deeply

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[119] The original version of Rule 319 is codified in the Code of Federal Regulations at 47 C.F.R. § 51.319.

[120] As explained in Section I.D. of this decision, it appears that under the interconnection agreements modeled on the Pacific-AT&T interconnection agreement, Pacific was obliged to state the basis for its objections to providing UNE combinations, and to seek renegotiation of the agreement on that issue, within 30 days after the Supreme Court's ruling became final. *See* Pacific-AT&T Interconnection Agreement filed pursuant to D.96-12-034, ¶¶ 2.4, 9.3. To our knowledge, Pacific made no such request for renegotiation.

[121] Although we are not setting UNE prices for GTEC in this decision, GTEC emphasizes in its comments on the PD that its situation on UNE combinations is different from Pacific's. First, GTEC points out that it has not entered into any agreements with CLECs like the Memoranda of Understanding that Pacific has signed with AT&T, MCI and Sprint. Second, unlike Pacific, GTEC has apparently refused to agree that it will

Footnote continued on next page

embedded in the Telecommunications Act – and that the Supreme Court relied on in upholding the reasonableness of Rule 315(b) – requires Pacific to make UNE combinations available to CLECs that have not entered into a Memorandum of Understanding.

2. The Costs Adopted in D.98-12-079 Furnish An Adequate Basis For Determining the Compensation That An ILEC Should Currently Receive When A CLEC Purchases A Platform of UNEs That the ILEC Uses Itself, And Also For Determining the Compensation That the ILEC Should Receive When It is Asked to Furnish Additional UNEs That Can Be Combined With the Existing Platform.

FCC Rule 315(b) provides that "except upon request, an incumbent LEC shall not separate requested network elements that the incumbent LEC currently provides." Because the Supreme Court upheld Rule 315(b) on the ground that it was a reasonable exercise of the FCC's power under § 251(c)(3) to prevent discrimination among carriers by prohibiting the "anticompetitive practice" of imposing "wasteful reconnection charges," 119 S.Ct. at 737-38, it is clear that an ILEC is not entitled to any additional compensation for providing to a requesting CLEC, network elements that are already pre-assembled or combined in a "platform" that the ILEC uses itself.

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honor all the terms of its existing interconnection agreements during the time Rule 319 is being reconsidered. GTEC states that its position on UNE combinations is as follows:

> "GTE will continue to provide each of the individual network elements defined in the now-vacated FCC rules and our existing interconnection agreements. GTE has noted that if a CLEC asks for UNE combinations or 'platforms,' relying on the Supreme Court's validation of Rule 315(b) in *Iowa Utilities Bd.*, GTE will decline to do so because *Iowa Utilities Bd.* also vacated Rule 319[,] which means that at the present time there are no specified UNEs which must be supplied – in combination or at all." (GTEC Opening Comments, p. 5.)

This does not mean, however, that there is no cost involved in transferring the ILEC's pre-assembled platform of network elements to the CLEC. In D.98-12-079, as modified by D.99-06-060, we recognized that in this so-called "migration" situation, one approach would be for the ILEC to receive the sum of the adopted service order charges applicable to each UNE in the platform. We declined to adopt this approach in D.98-12-079, however, concluding that the issue should be considered in the pricing phase of OANAD, and would be more appropriately addressed after the Supreme Court issued its ruling in *AT&T-Iowa.* (D.98-12-079, *mimeo.* at 32, n. 29; *modified by* D.99-06-060, *mimeo.* at 22-23, Ordering Paragraph 2(a).)

The Supreme Court's decision reinstating Rule 315(b) – and the need to ensure that UNE platforms are provided on reasonable terms and conditions while the disputes surrounding Rule 315 are sorted out – now leads us to conclude that the sum-of-the-service-order-charges approach should be adopted. Accordingly, as shown in the illustrative calculations set forth in Appendix C to this decision,[122] Pacific and other ILECs that are required to provide existing UNE platforms to CLECs are entitled to receive as compensation for doing so, the sum of the service order charges applicable to all of the UNEs in the platform.[123]

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[122] Appendix C furnishes illustrative calculations of combination situations because we still believe, as suggested in D.98-12-079, that it would not be an effective use of Commission resources to try to set forth charges for all of the possible platform and combination situations that might arise under the interconnection agreements we have approved since 1996. We do believe, however, that the illustrative calculations in Appendix C are sufficiently numerous so that the parties should be able to determine charges for virtually all of the combination situations described therein without dispute.

[123] In the case of OSS, this requires some explanation. As a network element, OSS is comprised of pre-ordering, ordering, provisioning, maintenance and billing. For the purpose of calculating the sum of the service order charges in a migration situation, the

Footnote continued on next page

Of course, CLECs are likely to want other types of UNE combinations besides those already assembled on a pre-existing platform. For example, some CLECs may want to purchase UNEs on an individual basis and then have the ILEC combine them. In that situation, we believe the stand-alone non-recurring charge approach we described in D.98-12-079 provides fair and reasonable compensation. If, for instance, a CLEC with collocation facilities wants to offer a basic business service such as Measured Rate Business (1 MB) service, the CLEC could lease an Expanded Interconnection Service Cross-Connect (EISCC) and loop from the ILEC. In this case, the compensation the ILEC would receive for combining these elements would be the sum of the full stand-alone non-recurring charges for the EISCC and the loop.[124]

The final and most complicated combination situation arises where a customer who initially "migrates" on an "as is" basis from the ILEC to a CLEC subsequently decides to purchase additional features or services from the ILEC. In that case, the correct approach is to require the CLEC (which has already paid the ILEC the sum of the service order charges applicable to the migration) the stand-alone non-recurring charges for each additional feature or service ordered from the ILEC.

We recognize that this last situation raises some legal issues, because the parties to the Supreme Court case are currently litigating in the

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relevant service order components would consist of pre-ordering, ordering and billing. For the purpose of calculating the sum of the stand-alone non-recurring charges in a non-migration situation, the relevant OSS components would be pre-ordering, ordering, provisioning, maintenance and billing.

[124] Although technically a Network Interface Device (NID) is also needed in this example, the cost of the NID was included within the TELRIC loop costs that we adopted in D.98-02-106. Pacific would therefore provision the NID along with the loop.

Eighth Circuit over whether the effect of reinstating Rule 315(b) was, as a practical matter, to reinstate Rules 315(c)-(f) as well.[125] GTE and the RBOCs have taken the position that these rules were not included within the petitions for certiorari, so that the Eighth Circuit's decision setting them aside remains intact.[126] AT&T and other intervenors, on the other hand, contend that (1) Rules 315(c)-(f) *were* included within the petitions for certiorari, (2) the Supreme Court's reasoning in upholding Rule 315(b) logically extends to Rules 315(c)-(f) as well, and (3) the Eighth Circuit should entertain additional briefing on the

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[125] Rules 315(c)-(f) provide as follows:

> (c) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements in any manner, even if those elements are not ordinarily combined in the incumbent LEC's network, provided that such combination is (1) technically feasible; and (2) would not impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.
>
> (d) Upon request, an incumbent LEC shall perform the functions necessary to combine unbundled network elements with elements possessed by the requesting telecommunications carrier in any technically feasible manner.
>
> (e) An incumbent LEC that denies a request to combine elements pursuant to paragraph (c)(1) or paragraph (d) of this section must prove to the state commission that the requested combination is not technically feasible.
>
> (f) An incumbent LEC that denies a request to combine elements pursuant to paragraph (c)(2) of this section must prove to the state commission that the requested combination would impair the ability of other carriers to obtain access to unbundled network elements or to interconnect with the incumbent LEC's network.

[126] The Eighth Circuit's ruling concerning Rules 315(c)-(f) appears at 120 F.3d 813. The contentions of GTE and the RBOCs with respect to Rules 315(c)-(f) are set forth in the Motion of the Local Exchange Carriers Regarding Further Proceedings On Remand, filed February 17, 1999 in No. 96-3321 et al., the same Eighth Circuit docket numbers as the original *Iowa Utilities Board* case.

question.[127] In its June 10, 1999 Order in *Iowa Utilities Board*, the Eighth Circuit accepted this invitation and asked that the parties' briefs address whether the Eighth Circuit "should take any further action" with respect to Rules 315(c)-(f).[128]

Whatever their positions in the Eighth Circuit, all parties seem to agree that the Supreme Court's decision did not automatically reinstate Rules 315(c)-(f). Technically, this may leave a gap in the combination authority

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[127] *See* Intervenors' Response To Local Exchange Carriers' Motion Regarding Further Proceedings on Remand, filed March 2, 1999, pp. 12-15. On the issue of whether the Supreme Court's reasoning with respect to Rule 315(b) applies to Rules 315(c)-(f) as well, the Intervenors state:

> "[I]n upholding Rule 315(b), the Supreme Court rejected the construction of § 251(c)(3) that was the basis for the [Eighth Circuit's] conclusion that Rules 315(c)-(f) were invalid. In particular, the Court held that, rather than require new entrants to combine elements, § 251(c)(3) prohibits LECs from providing elements to new entrants on terms that are less favorable than those on which the LECs use those elements . . . This is the principle that the FCC implemented not only when it adopted Rule 315(b) (prohibiting the separation of previously combined elements), but also when it adopted Rules 315(c)-(f) (requiring LECs to combine elements that are not currently combined when entrants pay the costs). Indeed, both sets of rules rest on the single set of findings that new entrants otherwise would incur higher costs than the LEC did itself." (Intervenors' Response, p. 14; citations omitted.)

[128] In its papers before the Eighth Circuit on the proper scope of remand, the FCC took the position that Rules 315(c)-(f), as well as other rules not specifically discussed in the Supreme Court's decision, should be remanded to the FCC for further consideration. *See* Response of Federal Respondents To Local Exchange Carriers' Motion Regarding Further Proceedings on Remand and Motion For Voluntary Partial Remand, filed March 2, 1999, pp. 18-19.

In the Revised UNE List Order issued on November 5, 1999, the FCC has decided not to resolve the status of Rules 315(c)-(f), because that issue is currently before the Eighth Circuit. However, the Revised UNE List Order expresses the view that the Supreme Court's reasoning in reinstating Rule 315(b) applies to Rules 315(c)-(f) as well. *See* ¶¶ 482-83.

conferred on state commissions by the First Report and Order, and raises the issue whether – as assumed above -- we have authority under California law to order an ILEC to combine network elements in ways that the ILEC may not use itself.[129]

We think this question must be answered in the affirmative. As several parties have pointed out in their post-hearing briefs, Pub. Util. Code § 709.2(c)(1) directs us to ensure that this proceeding results in "fair unbundling of exchange facilities." As the Supreme Court noted in *AT&T-Iowa*, the most

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[129] In their comments on the PD, both Pacific and GTEC urge us not to address the issue of our authority to order UNE combinations under state law. Pacific, after noting that it has voluntarily agreed to honor its existing interconnection agreements during the pendency of remand proceedings, argues that "the PD's discussion of the discrimination aspects of combinations . . . disposes of the matter without [the need to] reach[] the question of independent state authority." (Pacific Opening Comments, p. 13.) GTEC argues that our conclusion about the scope of our combination authority under state law amounts to an unlawful reimposition of Rules 315(c)-(f), because "regardless of how broadly written the state law may be, it cannot be relied upon to achieve a result inconsistent with federal law as interpreted by the federal court having exclusive jurisdiction over the issues." (GTEC Opening Comments, p. 6.)

We do not find either of these arguments persuasive. In view of our objective to promote commercial stability between Pacific and CLECs while the status of Rule 319 is sorted out, we think it makes no sense to postpone deciding the scope of our state law authority to order combinations where the exercise of such authority may help to fill in gaps in the combination provisions of existing interconnection agreements.

GTEC's arguments against deciding the scope of our combination authority amount to a claim of pain without injury. First, we are not setting UNE prices for GTEC in this decision. Second, as pointed out in footnote 121, GTEC takes the position that it cannot be compelled to offer UNE combinations, because the Supreme Court's vacation of Rule 319 leaves up in the air the question of which network elements GTEC is obliged to offer. Third, GTEC's assertion that our conclusion about the scope of our state law authority is "inconsistent with federal law" is based on its litigation position that the FCC and the CLEC respondents failed to appeal from the Eighth Circuit ruling that vacated Rules 315(c)-(f). This argument is circular, because – as shown in the text – that issue is now before the Eighth Circuit.

commonly accepted definition of "unbundling" is "to give separate prices for equipment and supporting services." (119 S.Ct. at 737.) This generally-understood meaning of unbundling, the Court continued, made unreasonable the ILECs' argument that references in the Act to "unbundled" network elements meant "physically separated" elements. (*Id.*) We agree with this analysis, and conclude that our unbundling authority under California law includes the power to order ILECs to combine network elements in innovative ways (provided the requested combination is technically feasible, does not prejudice the rights of other CLECs, and results in adequate compensation for the costs of providing the requested combination).[130]

Because many parties commented on the version of Appendix C that appeared in the PD, we think it is appropriate to close this section by describing briefly the changes we have made in response to their comments. First, as Pacific and several other parties pointed out, the version of Appendix C in the PD did not show separate connect and disconnect charges for the combination scenarios described. This was inconsistent with the notation on each page of Appendix B that non-recurring charges for connects and disconnects were to be recovered separately and at the time of occurrence. We have corrected the Appendix C scenarios to show separate connect and disconnect charges.

Second, the version of Appendix C attached to this decision is more extensive than the one that appeared in the PD. The PD version contained six scenarios, one with a variation. The version attached to this decision contains

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[130] We also note that to the extent collocation arrangements (and other indirect ways of combining UNEs) may raise issues of service degradation, we have ample authority under Pub. Util. Code § 761 to anticipate such problems, and to order that they be fixed. (*City of Los Angeles v. Public Utilities Commission*, 7 Cal.3d 331, 350 (1972).)

seven scenarios, three with variations. Scenarios 6, 6a, 7, and 7a of the version we are adopting here all deal with "extended link" situations.[131]

AT&T/MCI and Pacific have disagreed sharply over whether extended link scenarios should be included in Appendix C. AT&T/MCI argue that they should be in order to avoid "unnecessary future disputes." (AT&T/MCI Opening Comments, p. 21.) Pacific argues that extended link scenarios should not be included, because (1) the extended link has not been adequately defined, and (2) it is not required by any existing interconnection agreement. (Pacific Reply Comments, p. 9.)

For two reasons, we believe that AT&T/MCI have the better of the argument on this issue. First, the Pacific-MCI interconnection agreement (which many other parties have opted into) clearly contemplates that Pacific will provide extended links. *See* Pacific-MCI Interconnection Agreement, approved pursuant to D.97-01-039, Attachment 6, Appendix A, lines 3 & 4. Second, including extended link scenarios is consistent with the requirement in our recent decision on Pacific's § 271 application, D.98-12-069, that Pacific provide an extended link. (*Mimeo.* at 149.)[132]

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[131] AT&T/MCI describe the extended link as the combination of "an unbundled loop connected to unbundled transport, [which] is used to 'extend' the unbundled loop via transport from an office in which a carrier does not have collocation to a neighboring office at which collocation does exist[,] or to another new point of interconnection." (AT&T/MCI Opening Comments, p. 21, n. 47.)

[132] As noted elsewhere in this decision, the FCC's November 5, 1999 Revised UNE List Order requires that local circuit switching be treated as a UNE -- even when used to serve business customers in Zone 1 of the 50 largest Metropolitan Statistical Areas of the United States – *unless* the ILEC offers an enhanced extended link to CLECs. ¶¶ 278, 288-89.

On other issues, however, we agree with Pacific's criticisms of the combination scenarios in the PD. Pacific is correct, for example, that since the loop UNE already includes the NID, Scenario 1 in Appendix C of the PD was erroneous. (Pacific Opening Comments, p. 23.) We have therefore deleted it.

We also agree with Pacific that the PD erred in assuming (in Scenario 5) that the change of an existing POTS line to ISDN service represents an "as-is migration" situation. As Pacific points out, the provisioning requirements necessary to make this change result in breaking apart the UNEs connected in the POTS platform. (*Id.* at 23.) In order to provide the ISDN service contemplated by Scenario 5, Pacific must combine a stand-alone ISDN loop with an ISDN port. Under the compensation approach set forth herein, the correct compensation for combining these elements is the sum of the stand-alone non-recurring charges for the ISDN loop and the ISDN port. We have corrected Scenario 5 to reflect this.

We also agree with Pacific that it is appropriate to delete what appeared as Scenario 6 in the PD's version of Appendix C.[133] As Pacific points out, this scenario effectively assumed the migration of an existing combination of UNEs from one CLEC to another. We agree with Pacific that in this situation, "it is completely out of the ILEC's control whether the incumbent CLEC will disconnect the UNEs and break apart the existing platform of UNEs prior to the changeover." (*Id.* at 23-24.) We agree that rules regarding changeovers between CLECs are needed before such a scenario can be described.

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[133] As noted in the text, Scenario 6 in the version of Appendix C attached to this decision deals with an extended link situation.

Finally, we have revised Scenario 3 – which assumes the leasing of UNEs including SS7 signaling – to reflect the SS7 non-recurring costs set forth in Appendix B. In the version of Scenario 3 that appeared in the PD, the non-recurring charges for the SS7 element were based on dedicated transport, since Section V.C. (both in this decision and in the PD) uses dedicated transport *recurring* costs as surrogates for the *recurring* costs of SS7 signaling. We have now concluded, however, that it is inappropriate to use non-recurring charges taken from SS7 surrogates when SS7-specific non-recurring charges are available. Accordingly, the SS7 non-recurring charges set forth in Appendix B have now been substituted in Scenario 3.

3. Pacific Must Continue Furnishing All UNE Combinations Provided For In Any Interconnection Agreement Signed Prior to the Supreme Court's Decision For the Remaining Life of the Interconnection Agreement, or For As Long As the Agreement Remains In Effect

Finally, we turn to the discrimination issue created by Pacific's agreements with AT&T, MCI and Sprint to continue providing UNE combinations during the remaining lives of those carriers' respective interconnection agreements without imposing additional combination fees.

As noted in Section VI.A.3., Pacific agreed to do this in the three Memoranda of Understanding that it signed in the Spring of 1998. The Memorandum of Understanding with AT&T states that Pacific has agreed to do this notwithstanding "what [Pacific] believes to be its legal right to require AT&T to combine UNEs and [Pacific's] contractual right to renegotiate the UNE Combination provisions of the Interconnection Agreement . . ." (Ex. 143, p. 1.) Pacific agreed to continue providing UNE combinations for AT&T "for the remainder of the term of the Interconnection Agreement," notwithstanding "any regulatory, legislative, or judicial change or ruling unless such continued compliance is expressly prohibited by a change in the law subsequent to the date of this Memorandum of Understanding." (*Id.* at 2.)[134]

In light of the Supreme Court's decision in *AT&T-Iowa,* this last clause assumes special significance. The promise in the AT&T Memorandum of Understanding to continue providing UNE combinations is unconditional except for one contingency, *viz.,* the case in which a "regulatory, legislative or judicial change or ruling" *prohibits* Pacific from continuing to provide such combinations.

Clearly, the Supreme Court's decision does not prohibit ILECs from providing UNE combinations; to the contrary, it reinstates the FCC's Rule 315(b). Thus, the one contingency that might have prevented performance by Pacific under its Memorandum of Understanding with AT&T has not come to pass. Moreover, the language in this Memorandum of Understanding about Pacific's obligation to continue providing UNE combinations is otherwise so unconditional that it can be read as overriding Pacific's rights as spelled out in other portions of the AT&T interconnection agreement to renegotiate terms in the event that a court decision or regulatory action "allows but does not require discontinuance" of "any [UNE], Ancillary Service or Combination thereof" that Pacific has agreed to provide.[135]

Under this interpretation of the AT&T Memorandum of Understanding, AT&T would be entitled to continue receiving UNE combinations notwithstanding the Supreme Court's ruling that FCC Rule 319 is invalid and must be reconsidered. (119 S.Ct. at 734-36.) In that case, AT&T (and

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[134] The Memoranda of Understanding with Sprint and MCI contain comparable but not identical language.

[135] *See* Pacific-AT&T Interconnection Agreement, ¶ 2.4, *filed pursuant to* D.96-12-034.

MCI and Sprint under their Memoranda of Understanding) would be entitled to continue receiving UNE combinations even if Pacific could avoid providing UNE combinations to other CLECs on the ground that there cannot be a lawful obligation to provide such combinations until the underlying list of network elements to be unbundled has been properly defined.[136]

Although the discrimination problem that this scenario raises is different from the one that the FBC assumed in their Opening Brief, we agree that it is an issue we are obliged to deal with:

> "If Pacific can afford to combine UNEs at no charge for AT&T, MCI and Sprint, the cost of combining UNEs . . . cannot possibly be large; what it is willing to do for free for the three largest ILECs it should also do for other carriers as well." (FBC Opening Brief, pp. 82-83.)

We think it is clear that under the Telecommunications Act and our own Resolution ALJ-174, we have the power to reform interconnection agreements to prevent unlawful discrimination. The starting point for analysis is § 251(c)(3) of the Act, which imposes on each ILEC:

> "The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions

[136] SBC's February 9, 1999 letter to the Chief of the FCC's Common Carrier Bureau, which is described in Section I.D. of this decision, appears to eliminate this hypothetical possibility. In the February 9 letter, SBC has agreed (apparently on behalf of itself and its subsidiaries) to continue honoring existing interconnection agreements, and to negotiate in good faith regarding new interconnection agreements, notwithstanding the Supreme Court's decision in *AT&T-Iowa* to vacate Rule 319 and remand that rule to the FCC.

> that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252. An [ILEC] shall provide such [UNEs] in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service."

In *AT&T-Iowa*, the Supreme Court expressly relied on this provision in upholding FCC Rule 315(b), concluding that "the rule the Commission has prescribed is entirely rational, finding its basis in § 251(c)(3)'s nondiscrimination requirement." (119 S.Ct. at 737.)

Of course, § 251(c)(3) is not the only provision in the Act making clear that UNEs and interconnection must be offered on a nondiscriminatory basis. Section 251(c)(2) requires ILECs to offer interconnection to requesting carriers "on rates, terms and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252." And § 252(i) of the Act (on which the Supreme Court relied in reinstating the "pick and choose" rule) provides that an ILEC must make available "any interconnection, service or network element provided under an agreement approved under this section to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement."[137]

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[137] The Telecommunications Act also requires that rates for UNEs must be nondiscriminatory. Section 252(d)(1) provides that such rates:

> "(A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and (ii) nondiscriminatory, and

Footnote continued on next page

In the portion of its brief devoted to UNE combinations, Pacific argued that the Commission cannot incorporate the terms of the Memoranda of Understanding into a tariff, because the Commission lacks authority under the Telecommunications Act to set forth in tariffs the rates, terms and conditions applicable to UNEs. (Pacific Opening Brief, pp. 68-69, 70-73.) The basis for Pacific's argument was that making UNEs available in this manner would amount to a reimposition of the "pick and choose" rule that the Eighth Circuit had vacated. (*Id.* at 72-73.)[138]

Of course, the Supreme Court has now reinstated the FCC's "pick and choose" rule (47 C.F.R. § 51.809), finding that the interpretation of § 252(i) that the rule embodies "is not only reasonable, it is the most readily apparent." (119 S.Ct. at 738.) While it is unclear how the "pick and choose" rule will ultimately affect the process of negotiating interconnection agreements, it seems clear that -- quite apart from the Supreme Court's decision to reinstate Rule 315(b) – the revival of the rule has deprived Pacific of the best objection it had to making the terms of the Memoranda of Understanding available to all CLECs.

Because it is necessary to remedy discrimination forbidden by the Act, and because it is consistent with the reinstatement of Rule 315(b), we will require Pacific to continue providing combinations of UNEs to any carrier with which Pacific has signed an interconnection agreement providing for such

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"(B) may include a reasonable profit."

Section 252(c)(2) of the Act requires state commissions to ensure that any interconnection disputes it resolves through arbitration are consistent with the pricing standards incorporating this nondiscrimination requirement.

[138] GTEC made a similar argument at pages 44-45 of its Opening Brief.

combinations, notwithstanding the uncertainty created by the Supreme Court's decision to set aside Rule 319.[139] Although the original consideration for the Memoranda of Understanding was the agreement of AT&T, MCI and Sprint to convert from the CABS to the CRIS billing system, the cost-based combination charges we are adopting in this decision (based on the costs adjudicated in D.98-12-079) will adequately compensate Pacific for the work involved in

[139] In its comments on the PD, the Telecommunications Resellers Association (TRA) argues that our ruling requiring Pacific to continue making UNE combinations available to carriers with whom it entered into an arbitrated interconnection agreement prior to the decision in *AT&T-Iowa* is too narrow, and is based upon an erroneous reading of the anti-discrimination provisions of the Telecommunications Act. TRA urges that the PD should "be modified to firmly establish that all carriers, whether currently parties to arbitrated interconnection agreements or not, are permitted to obtain and maintain, without unlawful limitation or restriction, any UNE combinations, as well as any other interconnection, services, and UNEs, that are made available to any other carrier." (TRA Comments, p. 4.)

We do not believe that the Act's anti-discrimination provisions empower us to grant the relief TRA is seeking. As noted in the text, Pacific's duty to provide combinations of UNEs logically presupposes that there is a legally-valid list of network elements that must be offered for sale on an unbundled basis. Although the FCC issued the text of its Revised UNE List Order on November 5, 1999, that order is not yet final.

Until the Revised UNE List Order becomes final, we believe that we have power under the Act to prevent the discrimination that would otherwise result between the signatories to the Memoranda of Understanding (on the one hand) and all other carriers with arbitrated interconnection agreements (on the other) if only the former were to be able to continue purchasing UNE combinations under their interconnection agreements (which are based on the original version of Rule 319). Parties who have not yet entered into an interconnection agreement, or whose voluntarily-negotiated interconnection agreements do not provide for UNE combinations, cannot make such a discrimination claim.

With respect to parties who have not yet entered into an interconnection agreement, we note that under the terms of the February 9, 1999 letter from SBC to the Chief of the FCC's Common Carrier Bureau, SBC has apparently agreed on behalf of Pacific to "continue to negotiate in good faith with any party seeking to enter into a new local interconnection agreement". *See* Appendix B to Pacific's Opening Comments.

continuing to provide all the combinations called for in the interconnection agreements subject to this requirement.

The obligation we are imposing here will continue for the remaining life of any arbitrated interconnection agreement that was signed prior to January 25, 1999 and that requires Pacific to provide UNE combinations. When we speak of "remaining life," we do not mean merely the three-year term that most of the interconnection agreements provide for. These agreements also seek to ensure commercial stability by providing that if the parties have not negotiated a new interconnection agreement by the end of the three-year term, the old agreement will continue in effect until a new agreement is reached. For example, paragraph 3.1 of the Pacific-AT&T interconnection agreement provides in pertinent part:

> "This Agreement shall be effective for a period of three (3) years, and thereafter the Agreement shall continue in force and effect unless and until a new agreement, addressing all of the terms of this Agreement, becomes effective between the parties."

We think this provision deals with the problem that might otherwise arise if the current generation of interconnection agreements began to expire before the FCC's Revised UNE List Order becomes final, because the obligation to continue providing UNE combinations will be extended along with the term of the old interconnection agreement. We presume that most parties will prefer not to sign a new interconnection agreement until the list of UNEs that must be offered pursuant to § 251(c)(3) of the Act is fully enforceable.

4. When Fully-Mechanized Non-Recurring Charges Should Go Into Effect

In the PD's discussion of the UNE combination issue, the assigned ALJ pointed out that there are significant differences among the fully-mechanized, semi-mechanized and manual non-recurring charges in Appendix B that would be applicable to UNE combinations (and in other situations). The ALJ asked the parties for comment as to whether the lowest (*i.e.*, fully-mechanized) charges should be available to all carriers immediately, or should be phased-in over a period of time. (PD, *mimeo.* at 130, n. 107.)

Pacific, GTEC, AT&T/MCI, Sprint and Northpoint all commented on this issue. Sprint urges, as it did in its Opening Brief, that until the fully-mechanized Electronic Data Interface (EDI) ordering system becomes available, CLECs should pay only the low, fully-mechanized charges, regardless of which ordering system they use. When EDI becomes available, Sprint contends that the charges should depend on whether the CLEC uses EDI or manual processes. Sprint argues that this approach is necessary as an incentive, because "implementation of EDI has been delayed by the ILECs. Accordingly, Sprint urge[s] the Commission to use EDI costs as a basis for OSS prices as an incentive for the ILECs to meet deadlines to implement EDI." (Sprint Opening Comments, p. 4.) Northpoint joins in this recommendation. (Northpoint Reply Comments, pp. 2-3.)

AT&T/MCI take a slightly different tack. They argue that "non-recurring charges must reflect the *forward-looking, long run* costs that new entrants cause the incumbent to bear," and that since these new entrants who are developing electronic interfaces "are not causing the incumbents to bear costs for manual or semi-manual ordering processes *in the long-run*," they should have to pay only fully-mechanized charges. (AT&T/MCI Reply Comments, p. 12; emphasis in original.)

Not surprisingly, the ILECs argue that, with some exceptions, it would be premature to put fully-mechanized prices into effect at this time. Pacific argues that if both manual and semi-mechanized ordering processes are available and the CLEC orders manually, "the manual charges should apply since the CLEC cho[se] the manual ordering process . . ." Pacific argues that the Commission should not go beyond this at this time, because "the issue of OSS implementation and testing is before the Commission in other proceedings," and because electronic flow-through of orders – which Pacific considers the predicate to fully-mechanized prices and which is being implemented for a list of elements agreed to in D.98-12-069 -- will not be feasible for some types of orders. Consistent with this position, Pacific contends that Sprint's "incentive" argument is without merit and should be rejected. (Pacific Reply Comments, p. 12.)

GTEC's position is similar to Pacific's. GTEC argues that there needs to be a transition period, during which the non-recurring charges a CLEC would pay would depend upon which type of ordering system the CLEC is currently using. GTEC urges that fully-mechanized charges should be available only when the CLEC "interface[s] on an electronic/mechanized basis in full compliance with OBF's standards and where the CLEC has implemented and tested its capabilities with the ILEC . . ." (GTEC Opening Comments, p. 18.) To allow CLECs to pay low, fully-mechanized charges before this point is attained, GTEC argues, "amounts to pricing on the basis of a hypothetical, yet-to-exist network." (*Id.*)

To a considerable extent, the positions the parties have taken on the issue raised in the PD reiterate positions they have taken in other Commission proceedings. In Ordering Paragraph (OP) 5 of D.98-12-079, for example, we asked the parties to comment on whether Pacific's Local Service Request Exchange (LEX) ordering system, a proprietary system originally developed by SBC, "should be classified as a fully mechanized system for costing purposes." In the comments it filed in response to this request on January 19, 1999,[140] Pacific has stated that "products ordered via LEX[[141]] that are or will be provided flow-through[[142]] treatment should reflect costs associated with a fully mechanized system[, but] products which are ordered via LEX that will not have flow-through capability and require manual intervention should appropriately reflect the semi-mechanized costs." (Pacific LEX Comments, pp. 2-3.) Pacific contends that our recent decision on Pacific's § 271 application, D.98-12-069, sets forth in Appendix B thereof the UNEs and combinations for which Pacific is obliged to provide flow-through in LEX.[143] Semi-mechanized costs are appropriate in non-flow-through situations, Pacific concludes, because "the costs

[140] Comments of Pacific Bell Pursuant to Ordering Paragraph 5 of D.98-12-079 Regarding the Classification of the LEX OSS System As A Mechanized System For Costing Purposes (Pacific LEX Comments), filed January 19, 1999.

[141] In its comments, Pacific describes LEX as "a graphical user interface provided by Pacific that provides access to ordering functions for resale services and [UNEs]. It has developed to the point where it has the capability of providing [electronic] flow-through for services and elements where it makes economic sense to do so." (Pacific LEX Comments, pp. 1-2.)

[142] In D.98-12-079, we defined flow-through as follows:

> "Electronic flow-through allows the CLC to directly enter orders for UNEs and resale into the IELC's service order databases for provisioning. With the exception of fall-out, there is no order entry required by the ILEC because this function is now performed by the CLC. The order is thus said to bypass or "flow[]-through for provisioning." (*Mimeo.* at 25.)

[143] Under Appendix B of D.98-12-069, Pacific is required to implement flow-through for loop and port combinations, 2-wire basic and assured loops with and without Local Number Portability (LNP), directory service requests, standalone LNP and resale. By the end of 1999, Pacific must also submit a plan for implementing flow-through for xDSL-capable 2-wire loops with and without LNP. Pacific is also required to report by the end of 1999 on relaxing or eliminating exceptions to flow-through. *See* D.98-12-069, Appendix B, *mimeo.* at 3-4.

associated with Pacific's Local Service Center . . . personnel's efforts to complete the order[] must be accounted for." (*Id.* at 2.)

In their joint comments in response to OP 5 of D.98-12-079,[144] a CLEC group argues that Pacific has effectively admitted that LEX is the equivalent of EDI, that D.98-12-079 determined fully-mechanized NRCs for many UNEs not covered by the flow-through obligations set forth in D.98-12-069, and that unless LEX is treated as a fully-mechanized ordering system equivalent to EDI, the Commission will be rewarding Pacific for its delay in developing EDI:

> "The Commission should reject [Pacific's position on LEX] because it would reward Pacific for its failure to develop – indeed, even for continuing to fail to develop – OSS through which CLCs can order UNEs with full flow-through. CLCs have no control over the speed and timing with which the ILECs develop and introduce OSS with more extensive flow-through. It would be unfair to make CLCs pay higher rates to the ILECs because of the ILECs' failure to develop OSS with full flow-through for UNE and resale orders." (CLEC LEX Comments, p. 8.)

In view of the complexity of the issues raised by the parties' comments in response to OP 5 of D.98-12-079, and the overlap of those issues with the recommendations in the comments here, we believe that our ruling here on when fully-mechanized non-recurring charges should go into effect should be limited to those matters on which the parties appear to agree, and that the remaining issues should be resolved in future decision(s) as indicated below.

Pacific and the CLECs apparently agree that for those UNEs and combinations for which flow-through is required by Appendix B of

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[144] Opening Comments of NEXTLINK, ICG and CCTA In Response To Ordering Paragraph 5 of D.98-12-079, filed January 19, 1999 (CLEC LEX Comments).

D.98-12-069, it is appropriate that CLECs placing orders through LEX or EDI should pay no more than the fully-mechanized non-recurring charges set forth in Appendix B of this decision. It also appears from a recent filing in R.97-10-016/I.97-10-017, our proceeding for monitoring the performance of OSS systems, that flow-through for all of the UNEs and combinations specified in Appendix B of D.98-12-069 was scheduled to be achieved by October 31, 1999.[145] We will therefore order Pacific to reflect, in the amendments to interconnection agreements it is being directed to file pursuant to OPs 3 and 4 of this decision, the fully-mechanized non-recurring charges set forth in Appendix B hereto for those UNEs and combinations covered by the flow-through obligations in Appendix B of D.98-12-069, in cases where a CLEC places its order via LEX or a form of EDI. For UNEs and combinations ordered via LEX or a form of EDI that are not included within Appendix B of D.98-12-069, the semi-mechanized non-recurring charges set forth in Appendix B will apply for the time being. In those cases where a CLEC orders UNEs or combinations through manual processes, the manual non-recurring charges set forth in Appendix B of this decision will apply.

Although this approach is reasonable for now, we recognize that it does not address the ultimate issue raised in the comments of Sprint and other CLEC parties, *viz.*, whether there is a need for a more aggressive schedule for achieving flow-through for a larger number of elements than the list specified

[145] *See* Attachment A to Comments of AT&T, Sprint, MCI, ICG, Northpoint, CCTA and MediaOneTelecommunications of California, Inc. On Proposed Decision of ALJ Walwyn, filed July 21, 1999. A very similar schedule for achievement of the flow-through required by D.98-12-069 is set forth in the affidavit of Christopher Viveros, Pacific's Director of OSS Design and Support, submitted recently in Pacific's § 271 compliance filing in response to D.98-12-069.

in D.98-12-069. The proposal of these parties that CLECs should pay only fully-mechanized non-recurring charges until flow-through for additional elements (and resale services) becomes available is, as noted above, now pending in the OSS/NRC phase.

The CLECs making this proposal have asked that if the Commission believes it needs additional information before adopting the proposal, the Commission should give all parties an opportunity to submit an additional round of comments on the question.[146] We would like to afford all parties an opportunity to address the issues raised by this CLEC proposal. We will therefore direct the ALJ assigned to the OSS/NRC phase to issue a ruling setting forth a schedule for submitting such comments, and indicating those issues that the ALJ believes should be addressed in the comments. After such additional comments have been received, we will issue a decision in the OSS/NRC phase of this docket that determines when and in which additional situations, if any, it is appropriate that a CLEC ordering UNEs or combinations via LEX or a currently-available form of EDI should pay the fully-mechanized non-recurring charges set forth in Appendix B hereto.

VII. SHOULD THE PRICES FOR UNBUNDLED NETWORK ELEMENTS ESTABLISHED IN THIS PROCEEDING BE SET FORTH IN TARIFFS?

An important issue that arose at the March 16, 1998 PHC was whether the UNE prices to be developed in this proceeding would simply be substituted for the interim prices in existing interconnection agreements,[147] or whether these

[146] CLEC LEX Comments, p. 10.

[147] All parties agreed that under Resolution ALJ-174, adopted June 25, 1997, the prices set in this proceeding will supersede all of the interim prices currently set forth in Pacific's arbitrated interconnection agreements. Resolution ALJ-174 provides in pertinent part:

Footnote continued on next page

UNE prices should be set forth in traditional tariffs. The parties divided sharply on this issue, with the FBC arguing that traditional tariffs were both lawful and necessary, while Pacific, AT&T and Worldcom argued that traditional tariffs were inconsistent with and preempted by the Telecommunications Act. (March 27, 1998 ALJ Ruling, *mimeo.* at 11-12.)

The ALJ concluded that while "the issue of whether traditional state tariffs that set forth the price, terms and conditions on which [UNEs] . . . can be purchased is an important one," it could not be resolved without briefing by the parties. (*Id.* at 11.) To hedge against the possibility that the Commission might order tariffs, the ALJ directed parties to submit testimony that "set[s] forth the prices, terms and conditions on which the UNEs specified in 47 C.F.R. § 51.319 should be offered, . . . includ[ing] model tariff language." (*Id.* at 13.)

As it turned out, only Pacific made any attempt to offer model terms and conditions with its testimony, in the form of an appendix that Pacific proposed to include with interconnection agreements. However, at the close of the hearings, the ALJ directed the parties to brief the issue of the Commission's authority to require that UNE prices be set forth in tariffs.

As discussed below, we think that the Supreme Court's ruling in *AT&T-Iowa* reinstating the "pick and choose" rule has largely mooted this controversy. Nonetheless, we briefly summarize the parties' positions before stating how we intend to proceed.

"[W]e will continue to require that all agreements arbitrated before the [OANAD] pricing decision goes into effect will include interim rates for unbundled elements which will subsequently be revised on a forward basis. Therefore, we will order that all agreements arrived at by arbitration include the provision that all arbitrated rates for unbundled elements will be subject to change in order to mirror the rates adopted in the Commission's OANAD pricing decision or decisions." (Page 2.)

A. Positions of the Parties

In their post-hearing briefs, Pacific and AT&T/MCI both opposed setting forth UNE prices in tariffs, although for somewhat different reasons.

Pacific argued that for a variety of reasons, requiring UNE prices, terms and conditions to be set forth in tariffs would "conflict with the terms and structure of the Act." (Pacific Opening Brief, p. 70.) Pacific argues that the Act seeks to encourage negotiation and voluntary agreement on the terms of interconnection, and that the powers of state commissions under the Act have been delineated with these goals in mind. For example, when arbitration is necessary, state commissions can decide only those issues the parties place before them; "the Act [does] not want state commissions interfering with terms and conditions the parties [have] already agreed upon." (*Id.* at 71.) Similarly, a state commission can reject an *arbitrated* agreement only if it finds that the agreement is inconsistent with the duties set forth in § 251 of the Act, or the pricing and interconnection standards set forth in § 252. Finally, a state commission can reject a *voluntarily negotiated* agreement only if (1) it is found to discriminate against a carrier not a party to the agreement, or (2) its implementation would be inconsistent with the public interest, convenience and necessity. (*Id.* at 71-72.)

In its brief, Pacific placed special reliance on the argument that requiring the terms and prices of UNEs to be set forth in tariffs would essentially reinstate the "pick and choose" rule vacated by the Eighth Circuit:

> "[A] UNE tariff would likely take the form of a series of provisions from which competitors could pick and choose some, but not all, UNEs. CLECs would be able to choose some UNEs from the tariff and other UNEs from previously negotiated interconnection agreements. The Eighth Circuit correctly held that such a situation would be inconsistent with the statutory structure of the Act, which reveals a preference for voluntarily negotiated Interconnection Agreements. A 'pick and choose' rule would 'thwart the negotiation process

> and preclude the attainment of binding interconnection agreements.' The Act prohibits states from imposing regulations or requirements on a telecommunications carrier that are inconsistent with the Act." (*Id.* at 72-73; footnotes omitted.)[148]

AT&T/MCI also opposed tariffing UNEs. After noting that § 252(h) of the Act requires all interconnection agreements to be open for public inspection -- a requirement that helps ensure the prices in such agreements will be made available to other requesting carriers on the same terms and conditions -- AT&T/MCI emphasized the potential for mischief that could result from tariffs that deviate from these negotiated or arbitrated agreements:

> "Requiring the filing of tariffs would be inconsistent with the construct contemplated by the Act, and invite potential confusion and mischief. Pacific could, if required or allowed, file tariffs which differ from or seek to modify the prices, terms and conditions for provision of [UNEs] incorporated in approved interconnection agreements. Pacific should not be permitted to use this vehicle to circumvent its contractual obligations under approved interconnection agreements, nor to limit its obligation to negotiate in good faith . . ." (AT&T/MCI Opening Brief, p. 70.)

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[148] Pacific also notes that the failure of other parties to offer terms and conditions for the leasing of UNEs would make the creation of appropriate tariffs difficult:

> "[P]rice is not the only term and condition that must be specified when UNEs are provided to CLECs. Terms related to maintenance, repair, replacement of UNEs, access to UNEs, the ability of parties to modify their networks, to name just a few, must also be specified. The record in this proceeding does not address these issues sufficiently to allow the Commission to adopt a tariff containing all necessary terms and conditions." (*Id.* at 73.)

Attachment C to Mr. Hopfinger's direct testimony (Exhibit 110) sets forth terms and conditions for the purchase of UNEs that Pacific claims would be appropriate.

The argument in favor of requiring UNE tariffs was made most forcefully by the Facilities-Based Coalition. The FBC argued that §§ 489, 491, and 495 of the Pub. Util. Code require tariffing, and that this requirement is not preempted by the 1996 Telecommunications Act. (FBC Opening Brief, pp. 54-61.) However, the FBC also argued that these statutory provisions give the Commission:

> ". . . discretion to prescribe the form of tariffing, requiring only the tariffing of rate schedules and classifications and not necessarily terms and conditions. Thus the Commission can require Pacific merely to file rate schedules and limit the provision of UNEs to certificated or registered telecommunications carriers." (*Id.* at 56.)

Finally, the FBC argued that requiring Pacific to file UNE tariffs would act as a "safeguard" against future "secret undertakings" such as the Memoranda of Understanding discussed in Section VI.A.3. of this decision. (*Id.* at 61.)

B. Discussion

As noted above, one of Pacific's principal arguments against the tariffing of UNEs was that such a requirement would effectively resurrect the "pick and choose" rule invalidated by the Eighth Circuit.

In its decision in *AT&T-Iowa,* the Supreme Court *did* reinstate the "pick and choose" rule (47 C.F.R. § 51.809)[149] Although the Court agreed with the

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[149] The pick and choose rule provides in full:

> "(a) An incumbent LEC shall make available without unreasonable delay to any requesting telecommunications carrier an individual interconnection, service, or network element arrangement contained in any agreement to which it is a party that is approved by a state commission pursuant to section 252 of the Act, upon the same rates,

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respondents that the pick and choose rule could be viewed as "threaten[ing] the give and take of negotiations," it concluded that the rule must be upheld because "it tracks the pertinent statutory language almost exactly," and is "the most readily apparent" interpretation of § 252(i) of the Act. (119 S.Ct. at 738.) Further, the Court noted, the exceptions to the pick and choose requirement in cases where (1) providing the same interconnection, service or UNE arrangement to another carrier would be either more expensive than to the original carrier, or (2) would be technically infeasible, both go beyond the requirements of § 252(i). (*Id.*)

It seems clear that in light of the Supreme Court's decision, the debate over whether UNEs should be tariffed is now largely moot. Whether they are called "tariffs"or something else, the statements of prices, terms and conditions that ILECs will have to file in order to comply with the pick and choose rule are likely to bear a very strong resemblance to traditional tariffs.

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terms, and conditions as those provided in the agreement. An incumbent LEC may not limit the availability of any individual interconnection, service, or network element only to those requesting carriers serving a comparable class of subscribers or providing the same service (*i.e.*, local, access, or interexchange) as the original party to the agreement.

"(b) The obligations of paragraph (a) of this section shall not apply where the incumbent LEC proves to the state commission that: (1) the costs of providing a particular interconnection, service or element to the requesting telecommunications carrier are greater than the costs of providing it to the telecommunications carrier that originally negotiated the agreement, or (2) the provision of a particular interconnection, service, or element to the requesting carrier is not technically feasible."

"(c) Individual interconnection, service, or network element arrangements shall remain available for use by telecommunications carriers pursuant to this section for a reasonable period of time after the approved agreement is available for public inspection under section 252(f) of the Act."

The question remains, however, whether we should order Pacific to make an immediate filing of the tariff-like documents that may be contemplated by the pick and choose rule, or wait for the FCC to clarify just what additional documentation that agency believes is necessary to comply with the rule. The discussion of the documentation issue in the First Report and Order is hazy, indicating that the FCC regarded the public availability of interconnection agreements pursuant to § 252(h) of the Act as sufficient (¶ 1320), and leaving it to the states to determine "the details of the procedures for making agreements available to requesting carriers on an expedited basis." (¶ 1321.) However, in its recent filing in the Eighth Circuit, the FCC has requested a remand to itself of those rules not expressly reinstated by the Supreme Court, and has reiterated its powers to reconsider any of the rules in the First Report and Order upon an appropriate showing.

Given the FCC's apparent inclination to have a fresh look at some of the issues considered in the First Report and Order,[150] and the fact that the first generation of interconnection agreements approved pursuant to § 252 of the Act begin expiring at the end of this year, we do not think it would be a good use of our resources or the parties' resources to require now the filing of UNE tariffs. As AT&T/MCI have pointed out, § 252(h) of the Act requires all existing interconnection agreements to be available for public inspection. The prices we are determining in this decision (as set forth in Appendices A, B and C) are also matters of public record. Under these circumstances, we think that competing carriers will have more than enough information available to them to determine

[150] Of course, the Supreme Court's decision obliged the FCC to reconsider whether the original list of UNEs set forth in Rule 319 satisfies the "necessary and impair" standard of § 251(d)(2) of the Act.

the prices, terms and conditions on which UNEs have been made available to other carriers.

However, despite our decision not to require the filing of UNE tariffs at this time, several parties have strongly urged us to clarify the future purposes for which the prices developed here will be used. For example, Sprint states:

> "At the conclusion of the complex and lengthy process required for the determination of UNE prices, the Commission will have established a set of prices that it has determined to be consistent with the pricing standards of the Act. Thus, it is appropriate, and in fact, necessary, that the Commission utilize these rates as the source for the UNE prices in any future requests for arbitration submitted by CLECs on this issue until such time as a material change in Pacific's underlying costs or other circumstances can be demonstrated. Moreover, if such changes are identified, they should be considered in the context of a generic proceeding. The considerable time and resources required to establish UNE prices consistent with the standards of the Act, as well as the broad implications of such determinations, makes imperative the filing of an application through which the interests of all affected parties can be considered. A statement in this decision as to how the Commission intends to apply and modify UNE prices determined in this proceeding in the future will be of assistance to all parties in their continued efforts to develop competition in local markets." (Sprint Opening Brief, p. 62.)

We agree with Sprint that there is a need to address the future status of the prices we are determining here. Accordingly, we hereby state that the UNE prices determined in this proceeding will serve as the benchmark for network element prices even after expiration of the interconnection agreements into which the prices are being substituted pursuant to Resolution ALJ-174.

Unless the FCC requires an overall review of the TELRIC costs that state commissions have determined for UNEs pursuant to the Act, it is unlikely that we will be able to undertake a general reexamination of network element costs during the next three years.[151] Thus, when interconnection agreements are submitted to us for arbitration, we will normally expect the prices for the elements in the disputed agreements to be the same as those set forth in the appendices to this decision.

However, we also recognize that the TELRIC costs we adopted in D.98-02-106 are based largely on data that has not been updated since 1994, and that there is evidence that some of these costs may be changing rapidly.[152] Accordingly, even though we agree with Sprint that any general reexamination of Pacific's TELRIC costs should take place in a generic proceeding in which all parties can be represented, we also believe that there is a need for an interim procedure to reexamine individual UNE costs where a CLEC or Pacific can demonstrate that there has been a very substantial cost change. We have decided that the best vehicle for doing this is an annual cost reexamination proceeding, which will consider no more than two of the UNEs that have been nominated for reexamination.

The procedure for determining which UNE costs should be reexamined will be as follows. If a requesting carrier believes that a UNE price lower than the one adopted herein is justified for a particular network element based upon a reduction in the costs for that element of at least 20% from the costs

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[151] In D.98-12-079, we also noted that we did not intend to revisit the issue of non-recurring costs for three years. (*Mimeo.* at 18.)

[152] For example, in her reply testimony on behalf of AT&T/MCI, Ms. Murray noted that one of the arguments Dr. Hausman made in favor of an adder to UNE prices to account for the risk of stranded investment was that per-line switching investments have declined significantly since 1993, at an annual rate of 8% per year. (Ex. 616, p. 48.) Pacific has not contested this assertion.

approved in D.98-02-106 (and related compliance filings), the CLEC may nominate that UNE as a candidate for reconsideration. The nomination should be made in a filing that is submitted between February 1st and March 1st of each year beginning in 2001,[153] and that includes a brief summary of the evidence supporting the asserted cost reduction. Similarly, if Pacific believes that a higher price is justified for a particular UNE owing to an increase in the costs for that network element of at least 20% over those approved in D.98-02-106, Pacific may nominate that UNE as a candidate for reexamination during the same February 1-March 1 window.[154] Based upon the nominations submitted, the Commission will choose no more than two UNEs for the annual cost reexamination, which will then be conducted in the latter half of each year, beginning in 2001.[155]

All parties are invited to participate in this annual cost reexamination proceeding. Unless and until we approve a UNE cost change resulting from the annual reexamination proceeding, the prices that parties submit to us for inclusion in arbitrated interconnection agreements should be those set forth in the appendices to this decision.

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[153] Because there are many other telecommunications matters vying for the Commission's limited resources, it is not feasible to hold a UNE cost reexamination proceeding until the year 2001.

[154] Pacific's filing should also be supported with evidence showing that the UNE's costs have increased by at least 20%.

[155] The Commission will not entertain any requests to reconsider the markup for shared and common costs in the annual cost reexamination proceeding. As explained in Section III.E. of this decision, that markup has been computed by dividing the total of Pacific's approved shared and common costs by the total of all TELRIC costs (except collocation costs) that we have approved for Pacific. Thus, reexamination of the 19% markup adopted in this decision would effectively require us to reconsider *all* of Pacific's TELRIC costs. Such a daunting task would be inconsistent with the limited annual cost reexamination proceeding we are establishing here.

VIII. HOW SHOULD PRICE FLOORS FOR PACIFIC'S COMPETITIVE SERVICES BE SET, AND HOW SHOULD THE COMMISSION'S PRICE FLOOR RULES BE APPLIED IN LIGHT OF THE ADOPTION OF THE TELRIC METHODOLOGY AND THE REQUIREMENTS OF THE TELECOMMUNICATIONS ACT OF 1996?

The last major issue considered in Pacific's UNE pricing hearings was the question of price floors. Our decisions over the years have recognized that because of the continuing dominance of ILECs in the local exchange market, it is necessary to set price *floors* as well as prices for network elements, so that the ILECs will not be in a position to thwart new entrants by imposing "price squeezes."[156] As we shall see, a large percentage of the parties' testimony and briefs were concerned with the price floor issue, and the factors that go into determining a price floor are quite complex.

A. Background

The issue of price floors first arose in D.89-10-031, 33 CPUC2d 43 (1989), where we abandoned traditional telecommunications regulation based on rate cases and reasonableness reviews in favor of what we called the New Regulatory Framework (NRF). As part of the NRF framework, we decided that all of Pacific's and GTEC's existing services should be placed in one of three pricing categories:

> "[W]e believe a framework which couples broad operational flexibility and risk with significant pricing flexibility for those services which are discretionary or subject to competitive pressures but which maintains close Commission oversight of

[156] A "price squeeze" is the situation that can result when an ILEC's tariffed rate for a so-called monopoly building block (MBB) is higher than the cost of providing that service. When the ILEC's cost of providing the MBB is lower than the tariffed rate that CLEC competitors must pay for the MBB, then the ILEC is in a position to beat the CLEC's prices for products using the MBB. *See* D.94-09-065, 56 CPUC2d 117, 228 (1994).

> pricing, terms, and conditions of basic monopoly services provides the best balance of encouraging efficient operations while protecting monopoly ratepayers.
>
> "To this end, for pricing purposes we establish three categories of local exchange services similar to those proposed by GTEC. Rates and charges for services in Category I will be set or changed only upon approval by the Commission. Pacific and GTEC will have downward pricing flexibility only (from Commission-approved caps) for services in Category II. Finally, the carriers will be allowed the maximum pricing flexibility allowed by law for those services placed in Category III." (33 CPUC2d at 125.)

We also stated that for Category II services, it was necessary to determine "price floors" that would protect ILEC competitors against predatory pricing, since Category II services were defined as "discretionary or partially competitive services for which the local exchange carrier [LEC] retains significant (though perhaps declining) market power." (*Id.* at 125.) We concluded that until studies of the incremental cost of providing local exchange service could be completed, Category II price floors should be based on direct embedded cost (DEC). (*Id.* at 127.)

In D.89-10-031, we also set forth what we referred to as an "imputation" requirement that was designed to prevent ILECs from engaging in predatory pricing toward their competitors in the emerging local exchange market. We described this imputation requirement as follows:

> "[I]n order to prevent anticompetitive price squeezes, the [LECs] should be required to impute the tariffed rate of any function deemed to be a monopoly building block [MBB] in the rates for any bundled tariffed service which includes that monopoly function. However, because of economic efficiency considerations, the [LECs] should be allowed to propose that tariffed rates reflect any cost differences between provision of the monopoly function as part of a bundled utility service and

> provision of that function on an unbundled basis. Absent such a showing, the bundled rate must be at or above the sum of tariffed rates for the bottleneck building blocks and the costs of nonbottleneck components, even if there are floors for a flexibly priced service lower than the tariffed rates." (*Id.* at 121.)

We next had occasion to consider our imputation requirement in the IRD decision, D.94-09-065. In reviewing the framework we had set forth in D.89-10-031, we noted that imputation serves two related purposes:

> "[I]mputation's primary purpose is to serve as a safeguard against potential anticompetitive abuses by the LECs. It does this in two ways. First, it ensures that the price of the LECs' bundled competitive offering at least recovers the cost of providing the service, so that customers of the LECs' regulated services do not subsidize the competitive services. Second, it promotes fair competition by preventing the LEC from underpricing its bundled competitive offerings to the disadvantage of competitors." (56 CPUC2d at 228.)

We concluded in D.94-09-065, however, that it was necessary to reformulate the imputation test in order to apply it to the toll services that were at issue in IRD. Such a reformulation was necessary, we said, because the cost studies submitted by Pacific and GTEC were not sufficiently unbundled. We described our reformulation of the imputation test -- which has become known as the "contribution" method of imputation -- as follows:

> "[DRA, Pacific and GTEC] propose an imputation formula based on the LRIC of the bundled Category II service plus the 'contribution' the LEC receives from providing the [MBB] component as the tariff rate. Contribution is defined as the difference between the tariff rate of the [MBB] and its LRIC. Pacific contends that this formula is the algebraic equivalent of the imputation standard of D.89-10-031, adjusted for the use of LRIC instead of DEC." (*Id.* at 232.)

After manipulating a series of equations that represented the original imputation rule, we agreed with Pacific that the contribution method was the algebraic equivalent of the original rule. We applied the new contribution method to the toll services at issue, but said:

> "[W]e are frustrated in our desire to progress further [on setting cost-based prices and price floors] due to the LECs' failure to perform LRIC studies on an unbundled basis. We will require such studies to be submitted in our OAND proceeding . . . In that proceeding, the LECs may propose revised price floors based on unbundled LRICs." (*Id.* at 237.)

Our next consideration of price floor issues came in D.96-03-020, one of our principal decisions in the Local Competition docket. In that decision, we set the interim resale discount for Pacific and GTEC and also reclassified, in light of emerging competitive conditions, the status of a number of local exchange services offered by Pacific. In particular, we ruled that, pursuant to the NRF framework, the following local exchange services – which had heretofore been treated as Category I services -- should now be classified as Category II, "partially competitive," services:

- Basic flat residential access line service (1 FR);
- Basic measured residential access line service (1 MR);
- Basic business access line service (1 MB);
- Business and residence ISDN feature;
- Business and residence ZUM usage;
- Business and residence local usage;
- Coin Operated Pay Telephone (COPT) service.

Although D.96-03-020 reclassified these services as Category II, the decision did not establish price floors for them. Instead, D.96-03-020 left that task to this docket, the designated vehicle for determining the LRIC of the basic network components of local exchange service. As noted elsewhere in this decision, the Commission adopted "total service" LRICs – or TSLRICs -- for many local exchange services in D.96-08-021, but the task of deriving price floors from these costs was suspended after the issuance of the FCC's First Report and Order cast doubt upon the legal adequacy of the TSLRIC methodology.[157] In the ALJ Ruling issued in this docket on December 18, 1996, it was decided that the determination of price floors should take place in the supplementary pricing hearings that would be held after this Commission decided whether to use the TSLRIC or TELRIC methodology.[158]

Thus, by the time supplementary pricing hearings in this docket were held in May and June of 1998, it was evident that the setting of price floors would present significant issues. These issues included how TELRIC costs (which have network elements rather than services as their "cost objects") could be used to set service price floors, and which (if any) UNEs should be considered MBBs.[159]

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[157] *See* Administrative Law Judge's Ruling Suspending Briefing Schedule and Inviting Comments on the Impact of the August 8, 1996 First Report and Order of the Federal Communications Commission on Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, issued August 21, 1996, *mimeo.* at 2, 5-6.

[158] December 16, 1998 ALJ Ruling, *mimeo.* at 27-30.

[159] It was evident from discovery disputes that arose during 1997 that parties would raise these issues in their testimony. *See, e.g.*, Administrative Law Judge's Ruling Setting Out Limits of Permissible Discovery In Response to Discussion at July 1, 1997 Hearing, issued August 25, 1997. In that ruling, the assigned ALJ discussed whether, in view of the discussion in the Eighth Circuit's decision in *Iowa Utilities Board* of the "necessary and impair" standard contained in § 251(d)(2) of the Telecommunications Act, demand for UNEs should be presumed, or discovery should be permitted as to the aggregate level of demand for and the demand elasticities of particular UNEs. The ALJ ruled that reasonable discovery should be permitted as to these demand issues. (*Mimeo.* at 4-6.)

It had also become evident that in the two years since issuance of D.96-03-020, new issues related to pricing flexibility had arisen. These new issues included whether -- as contended by the FBC -- the decision in D.96-03-020 to treat Basic Network Functions (BNFs) as Category I services automatically applied to UNEs, or -- as contended by Pacific – that not allowing pricing flexibility for UNEs would be inconsistent with and preempted by the negotiated interconnection agreements contemplated by the Telecommunications Act. Another issue was whether, in light of the Commission's adoption of both TLSRIC costs in D.96-08-021 and TELRIC costs in D.98-02-106, the "contribution" version of the price floor test set forth in D.94-09-065 should be abandoned in favor of the original price floor formula contained in D.89-10-031.

B. Pacific's Position On How To Set Price Floors For the Services Specified in D.96-03-020

1. Dr. Timothy Tardiff's Testimony

As noted above, while the general issue of price floors raises many issues going to the heart of our efforts to promote competition in the local exchange market, the original reason for putting the price floor issue into this docket was the need to set price floors for the services newly-designated as Category II in D.96-03-020.

Dr. Timothy Tardiff was Pacific's principal witness on price floor and imputation issues. Dr. Tardiff contends that under generally-accepted economic principles, the basic rule for setting price floors should be as follows:

> "[P]rocompetitive price floors for [a] retail service should be equal to the forward-looking incremental cost of offering that service. In particular, volume-sensitive prices must at least cover all costs that vary with volume. In addition, the total revenue from a service

> must be sufficient to cover any non-volume sensitive costs attributable to that service alone." (Ex. 122, p. 4.)[160]

Dr. Tardiff emphasizes that shared and common costs should not be included in price floors, and that it is not necessarily a good idea to recover them through a uniform markup over a service's volume-sensitive costs.[161] Dr. Tardiff notes that in competitive markets, prices are driven toward incremental costs, and that requiring regulated firms to include "arbitrary" markups for shared and common costs in their prices is therefore liable to harm both consumers and the firms. Dr. Tardiff explains that such harm can occur in the following ways:

> "Consumers would suffer in one of two ways. First, the artificially higher price floor could divert the benefits of lower prices from consumers to firms that are able to charge more than they otherwise would under the price umbrella created by the artificially high price floor. Alternatively, if competitors of the price-regulated firm prices below the floor, those customers able to take advantage of these prices might benefit, *in the short run*. However, the regulated firm would be harmed in the process and it would be faced with the prospect of either raising prices to those customers dependent on its services or earning inadequate returns on its

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[160] The portion of Dr. Tardiff's price floor approach that deals with the recovery of non-volume sensitive costs is based on the testimony of Dr. Richard Emmerson (Ex. 106), which is considered in Section VIII.B.2., *infra.*

[161] Volume-sensitive, volume-insensitive, shared and common costs are defined on page 5 of Appendix C to D.95-12-016, which adopted the Consensus Costing Principles (CCPs) that have governed the preparation of cost studies in this proceeding. Under CCP No. 3, a volume-sensitive cost must be included in the TSLRIC for the service to which it pertains. Shared and common costs are always volume-insensitive (*i.e.*, they do not vary with changes in the quantity of output for a particular service), but some costs assignable to particular services are also volume-insensitive (*e.g.*, a license fee).

> investment. The consequences of the latter are diminished incentives to invest in its infrastructure, even perhaps to the point of withdrawing from one or more of the markets in which it competes." (*Id.* at 6.)

Dr. Tardiff argues that Pacific "should be free to recover shared and common costs like any other firm, i.e., in response to the market conditions it faces," because firms not subject to ILEC-style regulation "simply do not include arbitrary allocations of shared and common costs in their prices." (*Id.* at 6-7.) For this reason, he urges that price floors in this proceeding should be set using the TSLRIC studies approved in D.96-08-021, because – unlike the TELRIC studies approved in D.98-02-106 – they do not attempt to assign to individual network elements, costs that are shared or common among services.

As proof of his assertion that non-regulated firms do not include allocations of shared and common costs in prices, Dr. Tardiff points to the Transport Incremental Cost Model (TICM), which AT&T used to set price floors for its principal California subsidiary before the latter was designated as a nondominant interexchange carrier[162]. According to Dr. Tardiff, TICM assigns no shared or common costs to the incremental costs of AT&T's competitive services, and "explicitly exclude[s] certain costs that would be considered volume-sensitive under TSLRIC." (Ex. 121-S, p. 7.)

Although Dr. Tardiff believes that the starting point for setting a price floor is the volume-sensitive portion of the TSLRIC for a service, he acknowledges that under D.94-09-065, the contribution from any monopoly building block used to provide the service must also be "imputed to" – *i.e.*, included in -- the service's price floor. This requirement prevents

[162] AT&T's principal California subsidiary, AT&T Communications of California, Inc., was designated as a non-dominant inter-exchange carrier (NDIEC) in D.97-08-060.

anticompetititive price squeezes, Ex. 122, pp. 7-8, and helps to ensure that the most efficient provider can charge the lowest price:

> "The mark-up above the incremental cost of an essential facility is an opportunity cost that the ILEC foregoes when it sells its retail service in lieu of selling the essential facility to a competitor. Therefore, recognizing that cost as part of the price floor ensures that all of the costs imposed on the ILEC in offering its retail product are recognized. The imputation rule also ensures that the provider that can provide the non-essential components of the service most efficiently can charge the lowest price – a safeguard that promotes efficient competition." (*Id.* at 12.)

Although Dr. Tardiff advocates the use of TSLRIC costs for setting price floors, he acknowledges that TELRIC costs are the starting point for determining imputation:

> "TELRIC is the vehicle for setting UNE prices. For those UNEs that are essential inputs for competitors, the UNE price is one part of the formula for determining the contribution to be included in the retail price floor – specifically, appropriate contribution is the difference between the UNE's price and its TSLRIC. That contribution is added to the TSLRIC of the retail service to obtain the price floor required by the IRD imputation rule." (*Id.* at 9.)

In the final part of his discussion of the general principles that should govern price floors, Dr. Tardiff makes a strong argument against determining the price floor for a service by taking the sum of the prices of all UNEs used to provide the service. After reiterating that TSLRIC studies treat as shared or common, costs that TELRIC studies assign directly to network elements[163], Dr. Tardiff states:

> "When the retail service uses UNEs that are not essential inputs for CLECs, the incorrect price floor that is obtained from simply adding UNE prices would include more contribution than competitors are required to pay. This is so because the prices for network elements generally exceed TSLRIC, because those prices have allocated to them shared and common costs, while TSLRIC does not. In contrast, the IRD decision clearly states the correct economic principle that the price floor equalizes the contribution paid by ILECs and CLECs.
>
> "Therefore, for those essential network elements that competitors need in order to provide their retail services, the difference between the UNE price and TSLRIC is a mark-up over cost that recovers some shared and common cost. And, in order for the retail price floor to equalize the contributions paid by ILECs and CLECs, that mark-up is the *only* contribution that must be included in the ILEC's price floors under this Commission's imputation rules." (*Id.* at 10.)

The second part of Dr. Tardiff's testimony is an analysis of which UNEs should be considered MBBs. Dr. Tardiff begins by arguing that under D.89-10-031 and 94-09-065, the term MBB appears to be synonymous with "essential facility," a term with a generally-accepted meaning in both economics and antitrust law. Dr. Tardiff continues that in antitrust analysis, whether a facility is "essential" can be determined only by examining the relevant market, a determination that involves both "a product market dimension and a geographic

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[163] The reason for this, Dr. Tardiff contends, is that "TELRIC studies treat UNEs as if they are the only items being offered for sale by the firm." (*Id.* at 10, n. 9.)

market dimension." (*Id.* at 20.) In Dr. Tardiff's view, the relevant geographic dimension for local exchange competition is cities (since CLECs tend to enter the market on a city-by-city basis), and the relevant products are residential service and business service. He summarizes the basic tests for determining whether a facility is "essential" as follows:

> "Since the decisions in MCI Communications Corp.v. American Telephone and Telegraph Co. [708 F.2d 1081 (7th Cir.), cert. denied, 464 U.S. 891 (1983)] and Norman Hecht, et al. v. Pro-Football, Inc. [570 F.2d 982 (D.C. Cir. 1977), cert. denied, 436 U.S. 956 (1978)], courts have generally considered three prerequisites where the essential facilities doctrine should apply. These prerequisites are:
>
> - A firm operating in some market controls access to a critical input;
> - Access to the critical input under reasonable terms is necessary for competitors to compete in this market; and
> - Access to the critical input can be supplied to competitors under reasonable terms." (Id. at 11.)

Dr. Tardiff continues that, consistent with the approach used in the imputation discussion in D.94-09-065, he used the following practical tests for determining what are essential facilities:

> "A network element is essential when competitors *must* use that element in order to offer a service that is an alternative to an ILEC offering. A network element is not essential if (1) a firm can competitively offer retail services similar to Pacific's *using inputs (facilities) similar to those used by Pacific,* but provided by a company other than Pacific or self-provisioned; or (2) a UNE or facility similar to a UNE is not incorporated in *all* competitive retail alternatives currently offered in the market(s). In determining when this second situation applies, I identify actual competitors, some of which may use

> different production processes than Pacific (e.g., telephony over CATV), thus narrowing the range of essential facilities identified by looking at competitors that employ production processes similar to the ILEC's." (*Id.* at 15; emphasis in original.)[164]

Dr. Tardiff considered whether five of the UNEs designated by the FCC in the original version of 47 C.F.R. § 51.319 should be considered essential facilities: subscriber loops, end-office switching, transport (including tandem switching), directory assistance and operator services. (*Id.* at 22.) After describing the analysis he undertook for each UNE, Dr. Tardiff concludes that only one of these UNEs – subscriber loops – can be considered essential, and then only for residential customers and some small business customers. A brief summary of his analysis for each UNE follows.

Dr. Tardiff concluded that *switches* capable of providing both end-office and tandem switching are non-essential because alternatives are widely available in Pacific's territory. Based on an examination of interconnection agreements, responses to data requests and the December 1997 Local Exchange Routing Guide, Dr. Tardiff concluded that 13 CLECs own a total of 43 local switches in Pacific's service territory, the locations of which he sets forth in his testimony. (*Id.* at 24-26.) Dr. Tardiff notes that these switches (many of which offer both end-office and tandem functions) usually cover a larger

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[164] Dr. Tardiff points out that in D.94-09-065, the Commission concluded that for intraLATA toll, the essential input for IXC high-volume services was dedicated access, not the switched-access facilities that Pacific happened to use in offering its intraLATA toll services. In accordance with this analysis, the Commission required imputation of dedicated access facilities rather than the switched-access facilities. (*Id.* at 15.) From this, Dr. Tardiff concludes that in IRD, "the Commission went beyond examination of alternative services that are provisioned similar to the ILEC's retail offering (the first situation) and considered those alternatives that employed different production processes (the second situation)." (*Id.*)

geographic territory than ILEC switches, so he assumed the CLEC switches could provide service within a 50-mile radius. He notes that his conclusion of non-essentiality is consistent with this Commission's recognition that it is "access to the customers of other providers itself[,] and not the switching[,] that becomes an essential input." (*Id.* at 26.)

Dr. Tardiff also concluded that ***transport*** is not an essential facility. He states that 155 California cities are equipped to provide competitive transport, which can occur via SONET, fiber, microwave and hybrid fiber-coaxial (HFC). Although most CLECs use fiber, HFC is used by Cox and TCI/Viacom, and ICG uses microwave. Those CLECs using fiber have several different strategies. Cox and Time-Warner have concentrated on specific cities with already-existing facilities that can be expanded into growing suburbs, while ICG has leased fiber capacity from municipalities and utilities so that it can cover California from north to south. Dr. Tardiff believes that Pacific's collocation arrangements furnish additional proof that transport facilities are not essential. He notes that at the end of 1997, collocation arrangements were in place at 86 of Pacific's metropolitan central offices, which account for about 75% of Pacific's volumes in those areas. (*Id.* at 35-36.)

Of the five UNEs he studied, Dr. Tardiff devotes the most attention to ***loops***. (*Id.* at 26-35.) He concludes as follows:

> "Loops are clearly not essential for business local services in most urban areas or for medium and large customers with locations outside of urban areas. In the short run, loops may be essential for residential services in many areas[,] and for some small business services in lower density areas." (*Id.* at 26.)

Dr. Tardiff states that 14 CLECs offer competitive wireline alternatives to loops. The technologies of these wireline alternatives consist of

T1.5 digital link (offered by AT&T), fiber (offered by ELI, ICG, MFS, TCG, and Time Warner), HFC (offered by Cox and TCI), and transceivers or antennas (the "wireless fiber" local loop offered by Winstar). Dr. Tardiff states that while CLEC loops are concentrated in large population centers, they are also available elsewhere.

Dr. Tardiff has presented detailed information about the loops available from six of these alternative providers. For example, he notes that AT&T's wireline alternative – which is called Digital Link service -- has experienced rapid growth, and now has local volume equivalent to what would normally be generated by 20,000 to 30,000 business lines. AT&T's Digital Link provides local calling service to large and medium business customers over existing dedicated links on the AT&T network. (Ex. 121-S, p.28.)

Expanding on his transport analysis, Dr. Tardiff claims that ICG offers facilities-based local service in 95 cities in major areas (including San Francisco, Los Angeles, Anaheim, Alameda and San Diego), and is linking its Northern and Southern California networks through leased fiber capacity. ICG has rights to lease 1200 miles of fiber-optic routes from Southern California Edison Company, along with lesser amounts of fiber capacity owned by the Cities of Burbank and Alameda. ICG owns fiber-optic networks in 55 of the 95 cities it serves, and 14 of these cities have fiber loops. (Ex. 122, pp. 28-30.)

According to Dr. Tardiff, MFS and Brooks Fiber have also constructed fiber loops in several cities. MFS owns such loops in San Francisco, Oakland, Alameda, Los Angeles, Anaheim, San Diego and Fresno; it also planned to construct a fiber network in Sacramento during 1998. MFS currently offers local services in 101 cities in 11 Ranally Metro Areas[165] in California, and since its merger with WorldCom, has been concentrating on marketing local switched services to its Southern California business customers. (*Id.* at 30-31.) Brooks Fiber's local loops (which can bypass Pacific except for Centrex service) are available in 16 of the 24 cities Brooks serves, which include San Francisco, Sacramento, Stockton, Fresno and Bakersfield. Brooks offers flat-rate and measured business service in these cities, as well as other business services. (*Id* at 31-32.)

Dr. Tardiff also describes the "wireless" loops being developed by Winstar and the HFC loop equivalents developed by Cox. Winstar presently offers business services to small and medium-size customers in San Diego, San Francisco and Los Angeles, and it is planning to offer such service in Bakersfield. Winstar's wireless loop uses the 38 GHz frequency band, for which the company currently holds 38 licenses in 47 of the top 50 U.S. markets. This wireless loop (which uses antennas and transceivers) can completely bypass Pacific's system. According to Dr. Tardiff, Winstar's loop is the functional equivalent of fiber optic cable in terms of quality and bandwidth provided to the customer. (*Id.* at 32-33.)

Cox, which offers local service principally in the cities of San Diego and Anaheim and their environs, has developed a new HFC architecture that it is beginning to deploy in Orange County. This architecture provides two diverse paths, so that if there is a fiber cut, service can be provided through the

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[165] According to Pacific's Opening Brief, "a 'Ranally Metro Area' is Rand McNally's definition of the developed areas around each important city. Ranally metro areas inlcude one or more central cities, satellite communities, and suburbs but are not restricted to following county boundaries." (Pacific 7/10 Opening Brief, p. 87, n. 299.)

second path during repairs. In other cities such as El Cajon, Cox leases a fiber optic network. (*Id.* at 33-35.)

Based on his analysis, Dr. Tardiff reached the following conclusions about where and for which services Pacific's loops should be considered "essential" in the top 20 cities that comprise the relevant geographic market:

Essential Facility Determination for Loops

Top 20 Cities

	Business Market		Residential Market
City	Medium and Large	Small	
(1)	(2)	(3)	(4)
Anaheim	*Not essential*	*Not essential*	*May be essential*
Bakersfield	*Not essential*	*Not essential*	*May be essential*
Chula Vista	*Not essential*	*May be essential*	*May be essential*
Fremont	*Not essential*	*May be essential*	*Not essential*
Fresno	*Not essential*	*Not essential*	*May be essential*
Glendale	*Not essential*	*Not essential*	*May be essential*
Huntington Beach	*Not essential*	*Not essential*	*May be essential*
Long Beach	*Not essential*	*Not essential*	*May be essential*
Los Angeles	*Not essential*	*Not essential*	*May be essential*
Modesto	*Not essential*	*May be essential*	*May be essential*
Oakland	*Not essential*	*Not essential*	*May be essential*
Oxnard	*Not essential*	*May be essential*	*May be essential*
Riverside	*Not essential*	*May be essential*	*May be essential*
Sacramento	*Not essential*	*Not essential*	*May be essential*
San Bernardino	*Not essential*	*May be essential*	*May be essential*
San Diego	*Not essential*	*Not essential*	*Not essential*
San Francisco	*Not essential*	*Not essential*	*May be essential*
San Jose	*Not essential*	*Not essential*	*May be essential*
Santa Ana	*Not essential*	*Not essential*	*May be essential*
Stockton	*Not essential*	*May be essential*	*May be essential*

Pacific's price floor recommendations follow Dr. Tardiff's analysis, and so result in geographically-deaveraged price floors (but not prices) for services using loops. Pacific argues that "the Commission should require imputation of contribution from Pacific Bell only for small-business and residence customers in those cities where Dr. Tardiff has found that Pacific's facilities 'may be essential'." (Pacific Opening Brief, p. 92.) Consistent with this recommendation, Richard Scholl -- the Pacific witness who supervised the calculation of Pacific's proposed price floors -- calculated two sets of them:

> "Because Dr. Tardiff found that UNEs could be essential in one city and not in another, Mr. Scholl calculated two sets of price floors: a price floor with imputation for those cities where UNEs were monopoly building blocks[,] and a second price floor without imputation for those cities where UNEs were not monopoly building blocks." (*Id.* at 94.)

In the final portion of his testimony, Dr. Tardiff argues that neither directory assistance nor operator services can be considered an essential facility, because several companies can provide these services to wireline and wireless providers. According to Dr. Tardiff, companies providing both directory assistance and operator services include Volt, Metro One Telecommunications and InfoNXX, the last of which provides these services to the seven million wireless customers of Bell Atlantic, US West and AirTouch. Dr. Tardiff also states that TelTrust provides directory assistance and operator services to Cox Communications in California. (*Id.* at 36-37.)

2. Dr. Richard Emmerson's Testimony

Dr. Tardiff relied on the testimony of Dr. Richard Emmerson to demonstrate that setting price floors at the volume-sensitive portion of a service's TSLRIC (plus contribution from any monopoly building blocks) was reasonable *provided* the total revenues from the service are sufficient to cover non-volume sensitive costs attributable to the service.

Dr. Emmerson's testimony, Exhibit 106, provided a series of tests designed to assure that Pacific's proposed price floors include no improper cross-subsidies. After noting that the TSLRIC studies adopted in D.96-08-021 include both volume-sensitive and non-volume sensitive costs for each service, Dr. Emmerson describes his basic cross-subsidy testing approach as follows:

> "Since neither volume-insensitive costs nor shared costs are 'caused' by any particular unit of a service, it is not appropriate to include them as part of the price floor for an individual unit of service. Volume insensitive incremental costs and shared costs should be considered only in a revenue-based cross-subsidy test . . . Essentially, these cross-subsidy tests ensure that (1) total revenues of the service cover all of the volume sensitive and service-specific volume-insensitive costs; and (2) total revenues of a shared family cover both the total incremental costs and the shared costs of that family." (Ex. 106, pp. 3-4.)

Dr. Emmerson acknowledges that testing for cross-subsidies becomes more difficult when one must take into account shared costs, since they are spread among families of services. However, he asserts that tests can also be performed for this purpose:

> "Legitimate concerns over the recovery of shared costs are properly dealt with by testing for cross-subsidies for families of services. The economic concept is precisely the same as that employed for testing cross-subsidy for a single service, except that the focus of the test is on the family of services rather than a single service. In order to pass the test, the revenue from all the services in the family [both recurring and non-recurring] must be greater than or equal to all the costs [both recurring and non-recurring] caused by the services in the family, including shared family costs . . ." (*Id.* at 6-7.)

Dr. Emmerson continues that Pacific properly performed cross-subsidy tests for about 230 individual services, which are summarized in the testimony of Mr. Scholl. He acknowledges that several of these services "do not produce revenues sufficient to cover their full incremental costs," but asserts that in virtually all of the cases where a cross-subsidy was found, the service has "been priced in response to a public policy objective," so the general validity of Pacific's price floor proposal is not undermined. (*Id.* at 8.)

Dr. Emmerson continues that in order to test for cross-subsidies among *families* of services, Pacific was obliged to use some simplifying assumptions, which he describes as follows:

> "Pacific has used an overly strong algorithm in the tests to ensure that families of services do not receive a cross-subsidy.
>
> "As the number of services provided by a company becomes large (*e.g.*, over 20) the number of possible families of services, and therefore the number of possible tests, becomes very large (*e.g.*, over a million). To deal with the large number of possible tests required in theory, Pacific has utilized two techniques to make the cross-subsidy test for families of services tractable. First, Pacific has aggregated approximately 230 services into forty service groups.[166] Second, Pacific has used a technique for allocating shared family costs to the forty service groups.[167] This allocation of costs results in an

[166] Dr. Emmerson acknowledges that not all of these 40 groups of services pass the cross-subsidy test, especially the residence access and public access service groups. However, as with individual services, those that did not pass "typically have been priced in response to a public policy objective." (*Id.* at 10.)

[167] Dr. Emmerson sets forth a formula for this allocation method on pages 10-11 of his testimony, and describes it as "similar to producing a fully distributed cost as a cross-subsidy test." (*Id.* at 10.)

> overstrong cross-subsidy test that can provide sufficient information to determine that prices are subsidy-free but cannot indicate that a cross-subsidy does exist." (*Id.* at 9.)

The Pacific approach that results in an "overstrong" subsidy test involves allocating shared family costs *pro rata* according to the contribution to cost recovery produced by a service group. However, since the resulting allocations depend on the order in which families of services are considered, Dr. Emmerson states that it is necessary to run the tests until one sequence passes, which proves that the families are subsidy-free. Dr. Emmerson states:

> "[A]ny allocation that results in all group allocated costs that are no greater than group contribution levels does indicate that there is no cross-subsidy. If the available contribution exceeds the shared cost for each family throughout at least one sequence of the families (*i.e.*, if there is at least one order in which the families can be tested that will pass the test), then the firm's prices are subsidy-free and no further tests need be performed. *This was the result for Pacific – the overly strong cross-subsidy test was passed.*" (*Id.* at 11-12; emphasis supplied.)

C. The AT&T/MCI Position on Price Floors and Imputation

The position of AT&T/MCI on the proper calculation of price floors and the application of imputation principles is set forth in the testimony of Terry Murray and Dr. Lee Selwyn, and in most respects it is the diametric opposite of Pacific's position.

Ms. Murray begins her price floor discussion by emphasizing that unless the Commission requires ILECs to include the full price of all applicable UNEs in a service's price floor, incumbents like Pacific will invariably have an advantage over new entrants who are forced to buy Pacific's UNEs:

> "Imputation is simply a requirement that the incumbent treat its price to other carriers as its price to itself. This can be done in an *accounting* sense, but not in a true economic sense. No matter what cost the incumbent shows in its books of account when it supplies [UNEs] to itself, the *economic* cost to the incumbent remains the direct economic cost of providing that essential monopoly input function. The amount by which the accounting transaction exceeds the direct economic cost of providing the input function is not a genuine cost to the incumbent, but instead is available to cover some of the indirect (shared and 'common') costs of the incumbent or to generate monopoly profits. Moreover, it is a markup that the incumbent can substitute for markups on other services – in particular, other retail services that it provides in competition with new entrants.
>
> "For the entrants, however, the direct economic cost they face for the same [UNE] that they obtain from the incumbent is the *price* the incumbent charges them, not the direct economic cost that the incumbent experiences. Essentially, the amount by which the price for the [UNEs] exceeds the direct economic cost of supplying them acts like a tax, but it is a 'tax' that only applies to entrants. The amount that is collected in that 'tax' is turned over to the incumbent, which uses those amounts to recover its indirect costs or to earn higher profits overall. Imputation simply adds this 'tax' to the retail price floor, creating pressure to increase retail prices. It does not ensure that incumbents and entrants have the same opportunity to recover their indirect costs in retail prices." (Ex. 616, pp. 62-63.)

Ms. Murray then argues that for two reasons, Pacific's pricing proposals would exacerbate the upward pressure on retail rates that imputation can create. First, she notes that Pacific is urging markups over TELRIC costs that exceed what is necessary (in most cases) to recover its shared and common costs. Second, she notes that Pacific also proposes to exclude many of these markups from its retail price floors on the ground that the elements in question are not essential facilities. Because such pricing would lead to discriminatory results, Ms. Murray argues, the only equitable price floor approach is to require Pacific "to impute both the direct economic cost (TELRIC) and the full markup over cost in the price of each [UNE] into the retail price of every Pacific service that uses the equivalent functionality." (*Id.* at 64-65.)

Dr. Selwyn's direct testimony endorses this view, and adds that the Commission must be sure to include the TSLRICs of the competitive components of a service in its price floor:

> "[The Commission] should require Pacific Bell to impute the sum of the prices for [UNEs] and other inputs a competitor needs to acquire from Pacific to provision the service and add the TSLRIC of the competitive components of Pacific's service to establish the price floor. The 'contribution method' is no longer needed now that unbundled cost studies are available." (Ex. 611, p. 54.)

In his reply testimony, Dr. Selwyn offers a point-by-point rebuttal of Dr. Tardiff's argument that loops, switching and transport should no longer be considered essential facilities. Before setting forth specifics, however, Dr. Selwyn criticizes Dr. Tardiff's analysis for its abstract character, and for its assumption that if competitive alternatives are *beginning* to develop in areas around the state, the availability of alternatives should be assumed *throughout* the state:

> "[F]or all the facts, figures and maps he provides, Dr. Tardiff does not provide any evidence that competitors currently control more than a *de minimis* share of the market for any of the local exchange services that Pacific dominates. Indeed, mere evidence of the *presence* of competitors in no way demonstrates that those competitors are in any position to successfully *compete* in the near future or, more importantly for present purposes, supply [UNEs] in all of the geographic areas that Dr. Tardiff seeks to portray as 'competitive'. Moreover, the evidence that he does provide corroborates the extreme geographic concentration that I have found in my own analysis of the state of competition in California. Large areas of the state . . . not only have no present CLC activity,

> but have no planned future CLC activity either." (Ex. 612, p. 56; footnote omitted.)

Dr. Selwyn's opinion is that under the Eighth Circuit's reasoning in *Iowa Utilities Board,* all of the network elements designated as UNES by the FCC in the First Report and Order should be considered essential facilities. He argues that under the Eighth Circuit's discussion of the "necessary and impair" standard of § 251(d)(2) of the Telecommunications Act (120 F.3d at 813), Pacific is clearly wrong in arguing that facilities are not "essential" if alternatives are starting to become available from providers other than the ILEC.

Dr. Selwyn is especially critical of Dr. Tardiff's claim that there are meaningful competitive alternatives for loops. He points out that according to a recent newspaper report, Pacific installed a total of 1.44 million new lines in California during 1996 and 1997, but that the total number of loops provided by non-incumbent carriers is thought to be less than 20,000 statewide. If one assumes all the non-incumbent loops were installed during the same two years, this would mean Pacific's share of the total loop market exceeded 99.9%. (*Id* at 59.) Dr. Selwyn summarizes his critique of Dr. Tardiff's loop analysis as follows:

> ". . . Dr. Tardiff's analysis depends not upon the actual present level of competition, but on the *potential* for competition. For example, Dr. Tardiff's map depicting loop competition is based upon the assumption that CLC loop facilities can serve areas within one mile of present CLC 'on-net' buildings. In addition, he relies upon anecdotal evidence like Winstar's control of radio spectrum and Brooks Fiber's 'entry strategy' to support his claim that competitors provide loops outside major metropolitan areas.
>
> "Dr. Tardiff looks in some detail at six competitors providing loops to businesses . . . describing their market strategies and, in some cases, proprietary data regarding data usage and

> customer lines. The detail he provides, however, simply confirms the conclusion I stated in my direct testimony: What little competition there is in California is highly concentrated on business services in a few specific metropolitan areas." (*Id.* at 61-62; footnotes omitted.)

Although Dr. Selwyn asserts that switching is an essential element, he is less dismissive of Dr. Tardiff's claim that it is not essential than he is of Dr. Tardiff's arguments about loops. Dr. Selwyn bases his opinion that switching is essential on two factors: (1) the 43 switches owned by CLECs are insignificant when compared with the 783 switches owned by Pacific, and (2) the economic interrelationship between switching and loops. On the latter question, Dr. Selwyn points out that in order for a CLEC to be able to use its own switch with loops that it has leased from an ILEC, the CLEC must be collocated in the central office where the loops originate. Unless the number of loops leased in a particular central office is large, it may not be worthwhile for the CLEC to incur the costs of collocation. Therefore, Dr. Selwyn concludes, where collocation is not economically justified, even a CLEC with a switch has no practical choice but to lease the ILEC's unbundled switching facilities as well. (*Id.* at 64-65.)[168]

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[168] Ms. Murray makes a similar point in her reply testimony. She argues that if a CLEC is to be able combine its own facilities with UNEs purchased from Pacific, it needs collocation and a form of switching called Switch Unbundling Option C, which Pacific offers only on an individually-negotiated basis. Ms. Murray states that Switch Unbundling Option C is necessary if, for example, a CLEC wishes to route traffic differently from how Pacific routes traffic. After noting that AT&T and MCI's negotiations with Pacific for Option C are nowhere near completion, Ms. Murray continues:

> "Until Pacific physically makes switch unbundling option C available at a cost-based price, the 'platform' will remain virtually the only realistic option for new entrants to make use of Pacific's [UNEs].

Footnote continued on next page

Dr. Selwyn also disagrees with Dr. Tardiff that transport is no longer an essential facility. Noting that Dr. Tardiff's claim is based in part on the fact that competitors are collocated in 86 of Pacific's central offices, Dr. Selwyn states:

> "Given that Pacific has approximately 700 central office buildings in California, the presence of collocation in less than 15% of these offices clearly undermines the claim that transport is a non-essential service *everywhere* in the state. As with his other claims, Dr. Tardiff again fails to offer any evidence that competitive providers of transport have made any inroads into Pacific's dominance of this segment. He merely shows that such providers have *some* facilities and strategies for the provision of *some* transport services . . ." (Ex. 612, p. 66.)

Dr. Selwyn offers no specific rebuttal to Dr. Tardiff's claim that directory assistance and operator services cannot be considered essential elements.

AT&T/MCI continue that even under Pacific's interpretation of the Commission's price floor rules, local switching, transport and "distribution" facilities must still be considered essential facilities. Purporting to use the tests set forth in *MCI Communications v. American Tel. & Tel. Co.*, 708 F.2d 1081 (7^{th} Cir.), *cert. denied*, 464 U.S. 891 (1983), AT&T and MCI argue:

> "Significant market power is determinative of the first element of an essential facilities case – control of an essential facility by a monopolist. The economic infeasibility of duplication of the

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"The limited availability of collocation and the nonavailability of switch unbundling option C have significant implications for Pacific's essential facilities analysis. *If the only way that new entrants can make effective use of Pacific's [UNEs] is to buy the entire 'platform,' then every element in that platform is an 'essential' element if even one element can be so classified. Dr. Tardiff's analysis, which looks at each [UNE] on a piecemeal basis, fails to account for this fact.*" (Ex. 616, pp. 69-70; emphasis supplied.)

> local network by AT&T, MCI or other new entrants is largely unchanged since the MCI case. Replication of Pacific's local network, while theoretically possible, is not practical or reasonable. Thus, the second element is met. Element three is met since the ability of Pacific to price squeeze a competitor seeking access to [UNEs] is tantamount to a denial of access. Element four, technical feasibility of providing access, is generally not at issue here." (AT&T/MCI Reply Brief, p. 104; footnote omitted.)

Finally, AT&T/MCI argue that in offering Dr. Tardiff's essential facilities analysis, Pacific is really trying to recategorize as "partially competitive" (*i.e.*, Category II), services that were designated as monopoly services (*i.e.*, Category I) in D.96-03-020. Dr. Selwyn contends that if the Commission were to allow this to happen, the likely result would be price squeezes:

> "If [the five UNEs considered non-essential by Dr. Tardiff] are reclassified to Category II, Pacific would only be required to impute their *costs* into its competitive (bundled) end user services, and would not have to impute their *prices* into its bundled service rates. It could charge competitors above-cost prices for these network resources while including only the TELRIC into its own rates. For example, Pacific could include common overhead costs in the price it charges to competitors, while excluding those common overhead costs from its own bundled service price floor. Moreover, if Pacific were able to supply the network functionality for use with its own bundled service at a lower cost than it incurs when serving a CLC, only that lower cost would have to be captured in setting the bundled service price floor. In short, to the extent that Pacific is successful in convincing the Commission that it should reclassify some or all [UNEs] as Category II non-essential services, it would acquire the ability to create and enforce a serious – perhaps even fatal – price squeeze on its rivals with respect to their use of these essential network functions." (Ex. 612, p. 52.)

D. Position of the FBC on Price Floors and Imputation

The FBC advocates that price floors be set according to the same basic formula advocated by AT&T/MCI.

The FBC witness on price floors was Dr. Marvin Kahn. The FBC Opening Brief summarizes Dr. Kahn's position on how price floors should be set as follows:

> "... Dr. Kahn recommends that the Commission use the imputation methodology originally adopted in D.89-10-031 and carried forward in D.94-09-065. That methodology requires the ILECs to impute the tariffed price of the UNEs into the price floor for retail services. The price floors for retail services are then set at the sum of the tariffed rates for the UNEs used to provide the service plus the TSLRIC of the competitive components of service." (FBC Opening Brief, pp. 30-31.)

The reason why this is the correct formula, Dr. Kahn argues, is that the Commission's adoption of TELRIC has made the "contribution" formula obsolete:

> "While TELRIC minimizes the potential for cross subsidy, it renders the contribution method useless for purposes of meeting imputation, precisely because much of the shared cost associated with UNEs is directly assigned by TELRIC. Because contribution is calculated as the difference between the tariffed price of the UNE and its cost, shared cost or contribution that has been directly assigned to UNEs under TELRIC is not captured using the contribution methodology. As a result, the contribution methodology when used in conjunction with a TELRIC significantly understates the contribution which must be imputed into the price floors for retail services. This understatement results in a price floor which cannot meet the Commission imputation test and which will result in an anticompetitive price squeeze." (Ex. 508, pp. 18-19.)

The FBC also argues that even if Dr. Tardiff's price floor approach[169] is conceptually sound, it would be unworkable in practice. The FBC note that the IRD price floor test "derives its effectiveness as a safeguard from the fact that it is applied prospectively, thereby minimizing from the outset the potential for harm to consumers and competitors associated with anticompetitive pricing by the LECs." (FBC Opening Brief, p. 33.) But, the FBC continues, the Tardiff/Emmerson approach -- with its reliance on revenue tests to ensure that all non-volume sensitive costs are ultimately recovered -- cannot be applied prospectively and is subject to gaming:

> "Dr. Tardiff's revenue based imputation proposal is problematic for a number of reasons. Even if it is assumed that his revenue test is a valid approach to testing for price squeezes, the revenue based test cannot be applied on a prospective basis with any certainty because it must rely upon a complex forecast. Consistent with Pacific's pricing flexibility, the forecast would be of different volumes offered at different prices above the price floor which together yielded revenues greater than or equal to the revenue floor. In addition, it would be still possible for a price squeeze to exist for some portion of the forecast period as long as over the

[169] The FBC summarizes Dr. Tardiff's price floor position (which incorporates Dr. Emmerson's tests for detecting cross-subsidies) as follows:

> "The first prong of the Tardiff test requires that rates for retail services be greater than or equal to a price floor which equals the forward looking volume sensitive cost of the service plus any contribution from monopoly elements used by competitors to provide an equivalent service. [Tr.] at 6649-51. The second prong of the test requires that aggregate revenues for the service equal or exceed a revenue floor equal to the aggregate service volume sensitive and insensitive costs of the service plus contribution. *Id.* at 6[6]50-51. Aggregate revenues in this regard include all revenues from providing the service at tariffed rates as well as revenues from contracts for the services at rates which deviate from the tariff." (FBC Opening Brief, p. 34.)

> total length of the forecast period, revenues were sufficient to equal or exceed the revenue floor. Finally, the forecast, like all forecasts, would be subject to gaming." (*Id.* at 35.)[170]

A further difficulty that the FBC has with the Tardiff/Emmerson approach is that it must be used to test entire families of services. On this score, the FBC states:

> "[T]o demonstrate that an individual service is not receiving a cross subsidy it is necessary, according to Dr. Emmerson, to demonstrate that the aggregate revenues for the service equal or exceed the aggregate service specific volume sensitive and insensitive costs. For families of services, it is necessary to demonstrate that aggregate revenues from the family are sufficient to recover not only the service specific costs of the individual services, but the shared costs of the family as well ... Because the cross subsidy test for a family of services is a revenue test, it, like the test for individual services, cannot be applied meaningfully on a prospective basis. Furthermore, according to Dr. Kahn, the complexity associated with the cross subsidy test for families of services renders it ineffective as a practical tool for detecting cross subsidy." (*Id.* at 38; citation omitted.)

The FBC also points out that, unlike Dr. Emmerson, Mr. Scholl conceded that the cross subsidy tests (for both individual services and families) would have to be rerun if a significant number of rates were changed or new services were introduced. (*Id.* at 39, *citing* Tr. 46: 6895.)

The FBC devotes the final portion of its price floor and imputation discussion to a fierce attack on what it characterizes as Pacific's improper attempt

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[170] The FBC points out that during his cross-examination, Dr. Emmerson conceded that the cross-subsidy tests he described require a forecast, and that this forecast is subject to gaming, at least with respect to new services. (Tr. 6063, *quoted at* FBC Opening Brief, pp. 35-36.)

to "recategorize" UNEs. The FBC argues that the issue of whether to recategorize UNEs "resides in the local competition and NRF dockets, [and] arose in this proceeding via Pacific's testimony as opposed to the provision of notice by the Commission . . ." To consider the issue in this proceeding, the FBC continues, would violate both the requirements of due process and § 1708 of the Pub. Util. Code. (FBC Opening Brief, pp. 40-41.)

The FBC relies upon three basic strands to support this argument. First, the FBCs contend that since the issuance of the original NRF decision, D.89-10-031, the Commission has repeatedly reaffirmed that the forerunners of UNEs – basic service element (BSEs) and basic network functions (BNFs) – are "by definition" monopoly elements that belong in Category I. The FBC argues that this treatment of basic network elements was left undisturbed by the IRD decision (D.94-09-065), and was most recently reiterated in D.96-03-020, 65 CPUC2d 156 (1996), a decision in the local competition docket. (*Id.* at 41-43.) The FBC places particular reliance upon the following passage from D.96-03-020:

> "We will retain Category I status for certain limited services. We shall adopt DRA's proposal to retain Category I status for the following services: public policy payphones, 911 services and basic service elements (BSEs) as well as for basic network functions developed in OANAD . . . Since BSEs represent bottleneck elements of the LEC networks, they do not exhibit the characteristics of partially competitive services and should remain in Category I." (65 CPUC2d at 190.)

Second, the FBC claims that the Commission has specifically stated that the NRF and local competition dockets, not OANAD, are the proper venues for considering recategorization. To support this argument, the FBC relies upon the following passage from D.96-05-036, 66 CPUC2d 274 (1996), a decision holding that it was unnecessary to conduct a second phase of the original NRF proceeding:

> "Several parties noted that the issue of criteria for recategorization of services merits review and could efficiently be resolved in the local competition proceeding . . . Indeed, the Commission has already analyzed several issues related to recategorization in that docket. (See D.96-03-020, mimeo. at 53-59.) The Commission adopts this suggestion and directs the ALJ assigned to that proceeding to so notify the parties. Any generic issues regarding the existing service categories and the recateogorization of services not resolved in the local exchange docket will be taken up in the 1998 NRF review." (66 CPUC2d at 277.)

The third strand of the FBC argument is based on a statement made by the assigned ALJ at the March 16, 1998 PHC in this docket. According to the FBC, the ALJ stated that recatgorization was not an issue for this phase. (FBC Opening Brief, p. 44.) The FBC relies on the following statement:

> "[T]hese hearings do not seem the proper place to seek recategorization of services, and I think that's been said in a couple of rulings.
>
> * * *
>
> "But I've certainly understood that, simply because we had so many issues here, that issue of recategorization to be outside the scope of this proceeding." (Tr. 937-38.)

The FBC continues that nothing in the ALJ's written rulings concerning the scope of the UNE pricing phase contradicts this statement. The FBC notes that both the March 4, 1997[171] and March 27, 1998 ALJ rulings were silent on recategorization as a potential issue, and that the December 18, 1996 ruling which directed Pacific to submit TELRIC studies limited the parties'

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[171] Administrative Law Judge's Ruling Deciding Issues Raised at January 28, 1997 Prehearing Conference, Granting One-Week Extension of Time for Filing Opening Comments, and Setting Schedule for Proceeding, issued March 4, 1997.

testimony on imputation to the questions of (1) how shared and common costs should be accounted for in price floors, and (2) how the imputation rules should be modified in the event the Commission chose the TELRIC methodology for setting UNE prices. (*Mimeo.* at 27-30.)[172] Hearing issues cannot be created or disposed of by implication, the FBC contends, yet in its view Dr. Tardiff's testimony concerning which network elements are essential attempts to do precisely that. (FBC Opening Brief, pp. 43-50.)

E. Sprint's Position

Sprint's position on price floors is set forth in the testimony of Dr. David Rearden. Like AT&T/MCI and the FBC, Dr. Rearden advocates that the price floor for Pacific's services should be the sum of the prices of the UNEs needed to produce the service, "plus any ILEC specific incremental costs." (Ex. 401, p. 16.) Dr. Rearden offers the following succinct summary of why he believes his price floor formula is correct:

> "This formulation has two advantages. One, it creates a 'level playing field' between the ILEC and the CLECs. Two, it easily allows the ILEC to flexibly respond to entry with retail price competition.
>
> * * *
>
> "This price floor creates the conditions for effective competition by preventing the ILEC from underpricing its retail services relative to its wholesale inputs. Both the ILEC and the CLEC 'pay' the same input prices for UNEs used by

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[172] The FBC concedes, however, that the "essentiality" issue was discussed in an April 29, 1997 discovery ruling dealing with Pacific's efforts to obtain planning documents about AT&T's proposed "wireless loop." *See* Administrative Law Judge's Ruling Granting In Part and Denying In Part The Motion of AT&T Communications of California, Inc. For A Protective Order Concerning Discovery, *mimeo.* at 4-7, issued April 29, 1997.

> the CLEC. The factor that makes this a critical condition is that entry is likely to be possible for some market segments only if the CLEC is able to use the [UNE platform]. If CLECs must use inputs priced above TELRIC to recover joint and common costs but the ILEC can price down to TELRIC, then the possibility exists for the ILEC to price services below the level possible for entrants." (*Id.* at 16-17.)

Dr. Rearden argues that this formula would not unduly constrain Pacific in meeting competition, for if a CLEC is able (by self-provisioning some elements) to price below this floor, Pacific has the option of either (1) lowering UNE prices by accepting a lower markup for shared and common costs, or (2) in the longer-run, demonstrating that its incremental costs have diminished. (*Id* at 17-18.)

Complementing Dr. Rearden's testimony, Sprint argues (at page 53 of its Opening Brief) that Dr. Tardiff's proposal to let Pacific price down to the volume-sensitive portion of a service's TSLRIC is inconsistent with the following statement from D.89-10-031, which indicates that price floors should include some shared and common costs:

> " [I]n the event that incremental cost analysis progresses to the point that a local exchange carrier requests modifications to price floors to reflect this theoretically efficient price [*i.e.*, the point at which price is equal to the incremental cost of the least efficient provider whose output is needed to balance supply and demand], *such a floor should provide also for the recovery of some amount of overheads.* We will reserve judgment regarding the appropriate amount of overheads to be included in incremental cost-based floors until such a proposal is before us." (33 CPUC2d at 128; emphasis added.)[173]

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[173] Sprint's brief also offers the following economic explanation for why it is reasonable to require price floors to include some shared and common costs:

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On the issue of imputation, Dr. Rearden does not explicitly advocate abandonment of the "contribution" approach set forth in D.94-09-065. However, that is clearly his view, as his formulation of what he considers a proper imputation test makes clear:

> "We would calculate the hypothetical revenues from prices charged to CLECs for UNEs (which includes the joint and common cost adder – maximum of 15%) and compare it to all revenues from a given retail service offered by [Pacific]. If the latter is higher, [Pacific's] proposed prices pass imputation. This indicates that the prices are not anticompetititve. If not, then the proposed price or prices fails imputation and it or they must be raised." (Ex. 401, p. 18.)

Finally, Sprint is very critical of Dr. Tardiff's "essential facilities" analysis, although for somewhat different reasons than those offered by AT&T/MCI and the FBC. Sprint notes that in assessing the current state of competition, Dr. Tardiff claims to have used the kind of approach employed by the U.S. Department of Justice (DOJ) and the Federal Trade Commission (FTC) in antitrust litigation. However, Sprint continues, Dr. Tardiff was forced to admit on cross-examination that his analysis departed in some significant respects from the DOJ-FTC approach, especially in not considering the amount of sunk costs that new entrants would have to incur, or how long it would take these new entrants to become profitable. (Sprint Opening Brief, pp. 55-57.) These

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> "The purpose of price floors is to allow competitors who are at least as efficient as Pacific an opportunity to win business in the market. By definition, a competitor with larger economies of scope is more efficient. If Pacific is permitted to price down to its marginal cost before competition has taken root, it may prevent or deter entry by an equally efficient competitor who has not reached the economies of scope of the UNEs required to provide the retail service at issue." (Sprint Opening Brief, p. 59; footnotes omitted.)

shortcomings, Sprint argues, mean that in most cases Dr. Tardiff offered only a catalogue of potential competitors, and that the Commission should therefore disregard his conclusion that only residential loops are essential UNEs. (*Id* at 57-58.)

F. Positions of Other Parties

TURN, Cox, the California Payphone Association (CPA) and the Office of Ratepayer Advocates (ORA) also addressed price floor issues in their briefs.

TURN is especially critical of Pacific's proposals for variable loop price floors, and of the validity of Dr. Emmerson's tests for detecting cross-subsidies. TURN presents an extensive summary of Dr. Tardiff's cross examination that shows, TURN argues, that the witness lacked personal knowledge of the state of the *potential* competition on which he based his recommendation that the loop should be considered non-essential in most areas. (TURN Opening Brief, pp. 4-8.) TURN criticizes Dr. Emmerson's cross-subsidy testimony for tolerating a situation in which customers without competitive alternatives could end up paying unreasonably large amounts of shared and common costs for those UNEs deemed non-essential under Pacific's proposal. (*Id.* at 8-10.) TURN's position is that the Commission should adhere to its determination in D.96-03-020 that all basic network functions are essential.

Cox argues that the Commission should no longer use the "expedient" contribution method for calculating imputation, because the Commission has now approved fully-litigated long run incremental cost studies that were not available at the time of the IRD decision. Thus, Cox – like AT&T/MCI, the FBC and Sprint – argues that the price floor for a service should be computed by summing the tariffed rates of the UNEs used in providing the service. Cox goes further, however, arguing that price floors should also include the retailing costs associated with Pacific's bundled services. (Cox Reply Brief, pp. 6-9.)

The sole issue addressed in CPA's opening brief is the need to set price floors for COPT service. CPA criticizes Mr. Scholl's testimony for not proposing such a price floor. CPA did not file a reply brief.

ORA agrees with the FBC and Sprint that the Commission should use the original formulation of the imputation requirement set forth in D.89-10-031; *viz.*, the "tariffed price" of each UNE in a service should be imputed into the price floor for that service. (ORA Reply Brief, pp. 31-32.)

G. Discussion

1. Summary of Price Floor Conclusions

As the foregoing summary of the parties' positions indicates, the questions of (1) which set of cost studies should be used to set price floors, (2) whether the contribution method for determining imputation remains valid, (3) which UNEs should be considered MBBs, and (4) how the contribution from MBBs should be determined (if the contribution method continues to be used), were among the most hotly contested issues in the pricing hearings. They are also issues of state law and regulatory jurisdiction, since in its First Report and Order, the FCC stated that it was leaving the issue of imputation up to the States. (¶¶ 848-850.)

While we acknowledge that there is legitimate room for debate on several of these issues, we have decided that a variant of the price floor approach urged by Pacific best balances the competing interests we must weigh. First, since the contribution method of imputation contained in D.94-09-065 is the algebraic equivalent of the imputation test we first set forth in D.89-10-031, we have concluded that the contribution method remains valid and should be used here, especially since it can fill in certain gaps that even our rigorously-litigated

TSLRIC and TELRIC cost studies have. Second, since the price floors being set here are for services, we agree with Pacific that the starting point for these price floors should be the TSLRIC studies approved in D.96-08-021, because those studies have *services* as their cost object. Third, we agree with Pacific that as to the competitive elements of those services – *i.e.*, every aspect of the service except those elements designated as MBBs – Pacific should *not* be required to include any shared or common costs in the price floors, since firms in competitive markets would not be obliged to do so. Thus, except with respect to MBBs, we will allow Pacific to price down to the *volume-sensitive* TSLRIC costs of the service.[174]

As for monopoly building blocks, we agree with Pacific that our descriptions over the years of what constitutes an MBB make clear that the concept is very close to an "essential facility" under antitrust law. We also agree with Pacific that – as the Supreme Court's decision in *AT&T-Iowa* makes clear -not every element designated as a UNE by the FCC in the First Report and Order can be considered an essential facility.

However, we firmly *disagree* with Pacific and Dr. Tardiff that only loops serving residential and small business customers can now be considered MBBs. For the reasons set forth below, we believe that for the next

[174] Although we have concluded that Pacific should be allowed to price down to the volume-sensitive portion of the TSLRICs for the services at issue, it is not because we are entirely persuaded of the validity of Dr. Emmerson's cross-subsidy tests. As explained further in Section VIII.G.2., *infra*, we have decided that the best guarantee against improper cross-subsidies is to use TELRIC-based prices as the starting point for determining contribution. As explained in the text, the TELRIC methodology – by assigning shared and common costs to network elements as much as possible – adequately reduces the cross-subsidy risk that using TSLRIC-based prices could lead to. *See* D.98-02-106, *mimeo.* at 19-20; D.96-08-021, *mimeo.* at 21.

few years, the loop, switching and white page listings must all be considered MBBs, since they are all essential to the provision of local exchange service, and since alternatives to them are only beginning to become available in the market.[175] As a corollary of this conclusion, we reject Pacific's suggestion that the price floor for the loop should vary depending on whether it is considered essential or non-essential for a particular regional market or service.

Finally, even though we disagree with Pacific as to what constitute MBBs, we agree with Dr. Tardiff that for the loop, switching and white page listings, the appropriate contribution should be calculated by subtracting the volume-sensitive portion of the TSLRICs of these MBBs from their respective TELRIC-based prices (*i.e.*, the adopted TELRIC cost for the MBB plus 19%). By calculating contribution in this way, we ensure that the non-competitive elements of the services for which we are setting price floors include an appropriate measure of shared and common costs (as required by D.89-10-031), and that both Pacific and competing CLECs will effectively end up paying the same price for these essential elements.[176]

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[175] As explained later in the text, we consider white page listings to be essential only for the basic access line services, *i.e.*, 1 FR, 1 MR and 1 MB service.

However, we do not think it is appropriate to impute switching minutes-of-use (a sub-element of switching) into access line services, since the full price of switching is being imputed to Pacific's toll price floors. If we were to include switching minutes-of-use in access line services as well, we would be requiring Pacific to recognize the same contribution twice.

[176] It should be noted that the price floors for usage products (*i.e.*, ZUM and local usage) are set at TSLRIC, because no contribution from an MBB is imputed to them. The reason for this is the "bill and keep" arrangements between the ILECs and the CLECs. If these bill and keep arrangements were not in effect, it would be appropriate to treat interconnection termination as an MBB for these usage products.

2. The Contribution Method of Imputation Remains Valid And Should be Used in Conjunction with the TSLRIC Studies Adopted in D.96-08-021.

As noted above, most of the non-ILEC parties have argued that the contribution method for determining imputation should be abandoned. The FBCs urge abandonment because they contend that the contribution method does not fit with the TELRIC methodology adopted in D.98-02-106:

> "[T]he use of TELRIC renders the Commission's contribution methodology useless for imputation purposes because much of the shared cost associated with UNEs is directly assigned by TELRIC. Because contribution is calculated as the difference between the tariffed price of the UNE and its cost, shared costs or contribution that has been directly assigned to UNEs under TELRIC is not captured using the contribution methodology. As a result . . . the contribution methodology when used in conjunction with TELRIC significantly understates the contribution which must be imputed into price floors for retail services. This understatement results in a price floor which cannot meet the Commission's imputation test and which will result in an anticompetitive price squeeze." (FBC Opening Brief, p. 30.)

AT&T/MCI urge abandonment of the contribution method not only for this reason, but also because they believe that the contribution method is unnecessary now that the Commission has fully-litigated long-run incremental cost studies. AT&T/MCI state:

> "Now that unbundled cost studies have been adopted by the Commission, there is no longer any reason to allow use of the expedient 'contribution' method of imputation. While the 'contribution' method would automatically reflect any cost differences between providing an [UNE] on an unbundled basis and providing that same element as part of a bundled service, the Commission has stated that reflecting such

> differences in imputation will only be permitted if the incumbent *shows that there are cost differences.* The cost studies adopted by the Commission provide absolutely no basis upon which to conclude that such cost differences exist." (AT&T/MCI Opening Brief, p. 67.)

While these positions may seem appealing at first glance, neither AT&T/MCI, the FBC nor any other party has come to grips with the fact that in D.94-09-065, we agreed with Pacific's contention that the contribution method of imputation is the *algebraic equivalent* of the imputation standard adopted in D.89-10-031. (56 CPUC2d at 232-33.) After rearranging the imputation equation from D.89-10-031, we stated in D.94-09-065 that "the contribution method is equivalent to the general imputation formula we have already adopted." (*Id.* at 233.) In view of the equivalency of the two methods, it is incumbent on those seeking abandonment of the contribution method to show why it is less preferable, and that is something they have failed to do. As Dr. Tardiff tartly puts it in his reply testimony, "suggestions that the Commission should abandon the contribution approach are tantamount to asking it to repeal the laws of arithmetic." (Ex. 124, p. 2.)

Moreover, there is an additional complication with the CLEC argument that price floors should be computed by summing the "tariffed rates" of the UNEs making up the service, and this complication is rooted in the nature of TELRIC itself. As we explained in D.98-02-106, while TSLRIC and TELRIC studies are both based on forward-looking long-run incremental costs, they differ in how they account for shared and common costs and retail costs. TELRIC studies have individual network elements as their cost objects (*i.e.*, subject of study), and assume that the firm producing the elements sells nothing else. As a corollary of these assumptions, TELRIC studies treat as costs of the network elements, costs that would be considered "shared" or "common" under the

TSLRIC approach. Moreover, TELRIC studies do not include retail costs, which are incurred only in selling services. (D.98-02-106, *mimeo.* at 19-22.)

As Pacific points out, the problem with using what Pacific calls the "Adding the UNEs"[177] approach to imputation is that it results in price floors which include far more shared and common costs than any firm in a competitive environment would have to bear:

> "[T]he Adding the UNEs Approach would inflate the price floor for Pacific's retail service by improperly including too much of Pacific's shared and common costs in the price floor. This would occur because proponents of this approach make no distinction between UNEs which are MBBs and UNEs which are not. Therefore, they would add the prices of all UNEs Pacific used to provide the retail service, even though these UNEs were not MBBs. Since UNE prices are based on TELRIC costs, which include some shared and common costs, some shared and common costs would be imputed to Pacific's price floors, even though competitors were not required to pay those shared and common costs because alternatives to Pacific's UNEs are available. This would give Pacific's competitors a clear competitive advantage in pricing their retail services. To be on equal competitive footing, Pacific should only have to impute the shared and common costs CLECs are *required* to pay, namely the shared and common costs recovered in the price of an MBB." (Pacific Reply Brief, pp. 52-53.)[178]

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[177] Pacific uses the term "Adding the UNEs" as short-hand for "set[ting] price floors based on the price for all UNEs used to provide a service, plus the TSLRIC of the competitive components of that service." This is the price floor approach advocated by AT&T/MCI, the FBC and Sprint. (Pacific Reply Brief, p. 52.)

[178] Pacific argues that antitrust courts share its concern. It cites the following passage from *MCI Communications v. American Tel. & Tel. Co.* as support for the view that it should be able to price down to its long-run incremental cost:

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We also think that Dr. Tardiff is on point when he criticizes the "Adding the UNEs" approach for assuming, in effect, that resale is the only viable entry strategy for a CLEC. Dr. Tardiff states:

> "Essentially, the proponents of the adding-up rule view local competition as consisting of a single wholesale provider of network elements (the ILEC) and a number of retail providers that buy these elements and perform retailing functions. This viewpoint is perhaps most clearly articulated in Dr. Rearden's testimony [Ex. 401] when he opines that a CLEC may require a full platform of UNEs to enter some market segments (p. 17).
>
> "Pretending that retail competition consists only of firms adding retail functions to a platform of network elements purchased from a monopoly provider would, at best, optimize competition for that retail function only, but in the process distort competition among facilities-based providers of network elements. In effect, the situation would be one of promoting efficient resellers, while ignoring other types of entrants. This would truly be a case of the 'tail wagging the dog,' because retail functions account for only a small fraction of total costs." (Ex. 124, pp. 5-6; footnotes omitted.)

In addition to being the mathematical equivalent of our original imputation formula and ensuring that only the shared and common costs of non-competitive elements are included in price floors, the contribution

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"Because of the elasticity of demand in competitive markets, any rate substantially above LRIC would cause AT&T to lose business against an equally efficient competitor and, hence, decrease AT&T's total revenue from competitive markets. There would thus be less revenue available from competitive services to contribute to the firm's joint and common costs, and monopoly customers would be required to provide a greater share of these costs." (708 F.2d at 1124, *quoted at* Pacific Reply Brief, pp. 54-55.)

approach enables us to overcome discontinuities between the TSLRIC studies we adopted in D.96-08-021 (which concern services), and the TELRIC studies that we adopted in D.98-02-106 and that are the basis for UNE pricing. As Pacific states:

> "Despite [the] rigorous examination and identification of TSLRICs [in D.96-08-021], there is still not a perfect mapping of competitive and non-competitive components for all of those services. Even AT&T/MCI, who were intimately involved in the litigation of the TSLRIC studies, admit this fact. The contribution method allows price floors to be set accurately despite this imperfection.
>
> "Neither Pacific nor the Commission is to blame for the imperfect breakdown of retail service cost studies into competitive and non-competitive components. Pacific's studies are based on 'disaggregated pieces' of its network. As agreed to in the Consensus Costing Principles by many of the parties in this proceeding, including AT&T/MCI, those disaggregated pieces were 'not precisely defined,' but referred to a 'higher level of aggregation than "nuts and bolts" items such as line cards, but (typically) a lower level of aggregation than tariffed LEC services.'
>
> "The inability to precisely define disaggregated pieces and divide them into competitive and non-competitive components is the product of a rapidly changing industry and laws and regulations governing that industry. The regulatory definition of network components and, thus, service components[,] was changed by the Telecommunications Act of 1996 and the FCC's First Report and Order . . . The Commission recognized the occurrence of these changes in D.98-02-106. Fortunately, however, changing the definition of individual service components does not affect the validity of the TSLRIC cost for the entire service. Thus, it can be used with the contribution method of imputation to set accurate price floors." (Pacific Reply Brief, pp. 48-49; footnotes omitted.)

Because the contribution method results in the imputation of no more shared and common costs than are appropriate,[179] and also allows us to set price floors for the services at issue here using cost studies that have services as their cost object, we have concluded that it should be used.[180]

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[179] Setting price floors based on the "Adding the UNEs" approach would be akin to building a new car from repair parts purchased at their full retail price. It could create very comfortable price umbrellas for inefficient new entrants, thus harming consumers.

[180] In its comments on the PD, CCTA argues that our decision to continue using the contribution method of imputation constitutes legal error, because "the PD ignores the evidentiary record in this proceeding and the Commission's previous determination in D.94-09-065 that the contribution method was *interim* in nature and its use was to be terminated after unbundled cost studies were determined herein." (CCTA Opening Comments, p. 11.)

To support its argument, CCTA relies on two passages from the IRD decision. In the first, we noted that "the contribution formula will help us overcome some of the shortcomings of the LECs' cost studies; our use of this formula, however, should not be seen as condoning the LECs' failure to follow the principle that [MBBs] should be unbundled." (56 CPUC2d at 233.) In the second passage, we stated that "we will require [unbundled LRIC] studies to be submitted in our OAND proceeding . . . In that proceeding, the LECs may propose price floors based on unbundled LRICs. For services for which unbundled cost studies are not now available, and only until costs are developed on an unbundled basis, Pacific and GTEC may use the [contribution formula] we have discussed . . ." (*Id.* at 237.)

These passages do not preclude us from continuing to use the contribution method. First, as noted in the text, the contribution method allows us to overcome gaps that exist in both the TSLRIC and TELRIC studies. Second, as demonstrated in the IRD decision and reiterated above, the contribution method is the *algebraic equivalent* of the imputation standard adopted in D.89-10-031. In view of this, CCTA's assertion that such equivalence is "irrelevant", or that our decision to continue using the contribution method reflects "unfounded bias", is bizarre. (CCTA Opening Comments, pp. 12-13.) CCTA is simply unwilling to acknowledge that an administrative agency has discretion in its choice of analytical methods when it turns out that one of two equivalent methods cannot live up to the expectations the agency originally had for it. Use of the contribution method therefore does not constitute legal error.

It is important to point out, however, that we have not reached this conclusion because we are necessarily persuaded by Dr. Emmerson's arguments that prices based on Pacific's TSLRIC studies can be shown not to give rise to improper cross-subsidies. One difficulty with Dr. Emmerson's approach is that it assumes if shared family expenses are recovered from a *family* of services as a whole, there is no improper cross-subsidy. Thus, Dr. Emmerson is satisfied even if *one* service within a family recovers *all* of the shared family costs, and the other services recover *none* of these costs.

Dr. Emmerson also acknowledges that in their pure form, his tests would require many millions of computations. To simplify the computational task, he approves of Pacific's practice of placing its 230 services into 40 "service groups," which he states are based on a "natural aggregation" of services. (Ex. 106, p. 9.) He also approves of Pacific's practice of allocating its 20 shared family cost categories among the 40 service groups according to a *pro rata* method based on the contribution from each group, a result he likens to producing a fully-distributed cost. (*Id.* at 10-11.)

Although Dr. Emmerson claims to be satisfied with the tests that Pacific conducted using these simplifying assumptions, it is evident that they involve a large element of subjectivity, and that verifying them each time approval for a new price floor is sought would be an overwhelming task.[181] Moreover, Dr. Emmerson has not explained why Pacific should be able to

[181] We are also skeptical of the rationale Dr. Emmerson has given for assigning a zero contribution to situations in which service groupings produce a negative contribution. Dr. Emmerson's explanation that this is proper because "the services and service groupings that receive a cross-subsidy are already known at this stage of the analysis," *id.* at 12-13, is unconvincing.

recover shared family costs from purchasers of its UNEs, while not also being required to do so from its retail customers, a dichotomy his tests would permit.[182]

We think that computing contribution beginning with the TELRIC-based price of the three UNEs we deem to be essential is a better protection against improper cross-subsidy than Dr. Emmerson's complicated tests. As noted above, a key aspect of TELRIC is that it assigns to the individual network elements, costs that are considered "shared" or "common" under the TSLRIC methodology. As a result of this difference, the total of shared and common costs in the TELRIC studies we approved in early 1998 is about $800 million less than the total of shared and common costs in the TSLRIC studies we approved in the Summer of 1996. *See* D.98-02-106, *mimeo.* at 19-20. By beginning with TELRIC-based prices, we therefore ensure that the resulting contribution includes a reasonable share of TSLRIC shared and common costs, the absence of which Dr. Emmerson's cross-subsidy tests are designed to detect. The fact that we are also requiring Pacific to impute contribution from the loop and switching (which account for a substantial percentage of Pacific's direct costs), and that we are rejecting Pacific's proposal to treat the loop as essential only for certain customer groups in certain geographic areas, means in practical terms that the risk of improper cross-subsidies here is greatly reduced.

As noted in Section VIII.A., the only price floors that we are setting in this decision are for certain local exchange services that were designated as Category II in D.96-03-020. (65 CPUC2d at 190.) However, this does not mean that the price floor formula described above is intended to apply only to those nine services. In the future, we will expect Pacific to use this price

[182] Dr. Emmerson concedes that under his approach, shared family expenses will not necessarily be recovered from services such as 1 MB and Centrex.

floor formula (*i.e.*, the volume-sensitive portion of a service's TSLRIC, plus the contribution from MBBs used to provide the service) when it proposes a price floor for a service newly reclassified as a Category II service, or for new customer-specific contracts or express contracts pursuant to the procedures laid out in the IRD decision (56 CPUC2d at 238-242).[183] We will not, however, require Pacific to submit new price floors for existing contracts that have already been approved pursuant to these procedures.

3. Not All UNEs Should Be Considered Monopoly Building Blocks, Because Only Some UNEs Are Essential Facilities

One of the most hotly-contested issues in the price floor debate was whether or not all of the UNEs designated by the FCC in its First Report and Order should be considered monopoly building blocks. As the preceding section indicates, this debate was closely intertwined with whether the contribution method of imputation should continue to be used.

One of the reasons for this vigorous debate is that our decisions over the years have never precisely defined what constitutes an MBB. The reason we were not specific, of course, was that at the times D.89-10-031 and D.94-09-065 were decided, adequate cost studies for unbundled network elements were not available. For example, after laying out the basic principles of unbundling and imputation for the post-NRF world in D.89-10-031, we said:

[183] In its comments on the PD, Pacific asks that we make clear that where new contracts are submitted with price floors computed according to this decision, existing price floors for a service (such as Centrex or toll) will remain in effect until any protests of the new contracts are resolved. (Pacific Opening Comments, pp. 15-16.) Pacific fears that unless such a clarification is made, its contracts "could be placed in abeyance pending review and resolution of [unmeritorious] protests." (*Id.* at 15.) Pacific's concern is a valid one, and we have modified the relevant OP accordingly.

> "Because of the wide variety of utility services and functions, we are not ready at this time to pass judgment on which functions are or are not [MBBs], nor is the record sufficient to determine whether factors exist which would militate against application of the principles of unbundling and nondiscriminatory access to any specific [MBB]. As a result, these principles should be applied on a case-by-case basis." (33 CPUC2d at 121.)

However, we agree that our characterizations of MBBs over the years are strongly suggestive of what antitrust law calls an "essential facility." Thus, in a section of D.89-10-031 entitled "Unbundling of Monopoly Service Elements," we noted that:

> "[T]he need for unbundling, uniform pricing, and nondiscriminatory availability of the [LECs'] *monopoly bottleneck building blocks* (MCI's terminology) or *essential services and facilities* (AT&T's terminology) was raised by many competitors and potential competitors . . ." (*Id.* at 119; emphasis supplied.)

Five years later in the IRD decision, we opened our discussion of the imputation issue with the following description of the MBB concept:

> "The foundation for telecommunications in this country remains to a large degree the public switched network developed and owned by the LECs. Consequently, companies operating in relatively competitive telecommunications areas, such as IECs, are frequently compelled to purchase services from the monopoly LECs *when no other company offers the service and no reasonable alternatives to the service are available.* Of particular concern are the *essential services called [MBBs] or bottleneck functions.*" (56 CPUC2d at 227; emphasis supplied.)

We agree with Pacific that whatever the precise theoretical contours of an MBB may be, the concept we were expressing in these decisions is very close to the antitrust concept of an "essential facility." In its important 1983 opinion in *MCI Communications v. American Tel. & Tel. Co., supra,* the Seventh Circuit described the elements necessary to establish liability under the essential facilities doctrine as follows:

> "The case law sets forth four elements necessary to establish liability under the essential facilities doctrine: (1) control of the essential facility by a monopolist; (2) *a competitor's inability practically or reasonably to duplicate the essential facility;* (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility [to the competitor]." (708 F.2d at 1132-33; emphasis supplied.)

In *MCI v. AT&T,* the Seventh Circuit found that AT&T (prior to divestiture) was liable under this doctrine because of its refusal to interconnect MCI with the local distribution facilities of the Bell operating companies, a refusal that made it impossible for MCI to offer foreign exchange (FX) and common control switching arrangement (CCSA) service to customers. In the part of its discussion most germane to the issues here, the Court noted that the Bell companies' local distribution networks should be considered "essential facilities" because

> ". . . MCI could not duplicate Bell's local facilities. Given present technology, local telephone service is generally regarded as a natural monopoly and is regulated as such. *It would not be economically feasible for MCI to duplicate Bell's local distribution facilities (involving millions of miles of cable and line to individual homes and businesses),* and regulatory authorization could not be obtained for such an uneconomical duplication." (*Id.* at 1133; emphasis supplied.)

Although this is not an antitrust case, the above description is very close to the language we used in D.89-10-031 and D.94-09-065 to describe

MBBs. The situation that the Seventh Circuit was describing in 1983 is also, of course, the reason why we have endorsed unbundling principles since D.89-10-031, and why the Telecommunications Act of 1996 embraces them, too.

4. Under the First Report and Order and *AT&T- Iowa*, Not All Unbundled Network Elements Are Essential Facilities

It is evident from a review of the opinions of both the U.S. Supreme Court and the Eighth Circuit in *Iowa Utilities Board* that not all of the network elements designated as UNEs in the First Report and Order constitute essential facilities. Further, the non-ILEC parties in this proceeding are simply wrong when they assert that this Commission's prior decisions declare all UNEs to be monopoly building blocks for imputation purposes.

In its January 25, 1999 opinion in *AT&T-Iowa,* the U.S. Supreme Court vacated 47 C.F.R. § 51.319, the rule setting forth the FCC's list of network elements to be unbundled. Although the Court declined to hold that § 251(d)(2) of the Act, the statutory basis for the rule, codified the "essential facilities" doctrine, it had no difficulty in concluding that the First Report and Order had failed to give adequate consideration to the "necessary and impair" standard contained in § 251(d)(2).

The Supreme Court began its analysis with the following summary of the FCC's interpretation of the statutory provision:

> "In the general statement of its methodology set forth in the First Report and Order, the [FCC] announced that it would regard the 'necessary' standard as having been met regardless of whether 'requesting carriers can obtain the requested proprietary element from a source other than the incumbent,' since '[r]equiring new entrants to duplicate unnecessarily even a part of the incumbent's network could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act.' First Report and

> Order ¶ 283. And [the FCC] announced that it would regard the 'impairment' standard as having been met if 'the failure of an incumbent to provide access to a network element would decrease the quality, or increase the financial or administrative cost of the service a requesting carrier seeks to offer, compared with providing that service *over other unbundled elements in the incumbent LEC's network,' id.*, ¶285 (emphasis added) – which means that comparison with self-provision, or with purchasing from another provider, is excluded." (119 S.Ct. at 735.)

The Court held that this highly elastic interpretation of § 251(d)(2)'s language amounted to virtually no standard at all:

> "The Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbent's network. That failing alone would require the Commission's rule to be set aside. In addition, however, the Commission's assumption that *any* increase in cost (or decrease in quality) imposed by the denial of a network element renders access to that element 'necessary,' and causes the failure to provide that element to 'impair' the entrant's ability to furnish its desired services is simply not in accord with the ordinary and fair meaning of those terms." (*Id.*)[184]

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[184] Although the Supreme Court did not discuss the Eighth Circuit's rationale for upholding the FCC's interpretation of § 251(d)(2), it is apparent from the Eighth Circuit's discussion of the "necessary and impair" standard – which Dr. Selwyn, among others, relies on -- that that court also did not understand the FCC to be holding that all network elements designated as UNEs in the First Report and Order should be considered "essential":

> "[W]e think the FCC reasonably determined that the 'necessary' and 'impairment' standards in subsection 251(d)(2) do not require an inquiry into whether a competing carrier could obtain the element from another source. Subsection 251(c)(3) requires incumbent LECs to provide competing carriers with fairly generous unbundled access to their

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Clearly, the Supreme Court's discussion of § 251(d)(2) does not support the view that all of the UNEs included in the original version of 47 C.F.R. § 51.319 are essential to local competition, or should be considered MBBs.

5. This Commission Has Not Held That, For Purposes of Imputation, All UNEs Must Be Considered Monopoly Building Blocks

The claim that this Commission has independently ruled that all UNEs are monopoly building blocks fares no better than the claim that the FCC has.[185] Although the FBC and other parties have cited several cases to support this argument, the decision on which they place their principal reliance is D.96-03-020. In that decision, as noted above, we set interim resale discounts for Pacific and GTEC and also redesignated as Category II, or "partially competitive," most local exchange services. Previously, virtually all local exchange services had been treated as Category I, or "monopoly," services. We justified these recategorizations on the ground that D.96-03-020 and other

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network elements in order to expedite the arrival of competition in local telephone markets. Allowing incumbent LECs to evade their unbundling duties whenever a network element could be obtained elsewhere would eviscerate unbundled access as a means of entry and delay competition, because many network elements could theoretically be duplicated eventually. The Act, however, provides for unbundled access to incumbent LECs' network elements as a way to jumpstart competition in the local telecommunications industry." (120 F.3d at 811.)

[185] In discussing this argument, we leave aside for the moment the fact that § 251(d)(2) appears to preempt the States' power to determine which network elements must be unbundled. Although the First Report and Order allowed the States to designate for unbundling additional elements beyond those set forth in 47 C.F.R. § 51.319, no one has disputed, either before the Supreme Court or the Eighth Circuit, that § 251(d)(2) strips the States of whatever power they may previously have had to designate a *shorter* list of elements for unbundling than the FCC's.

decisions in the Local Competition proceeding had created a partially competitive market. (65 CPUC2d at 189-90.) However, we continued:

> "We will retain Category I status for certain limited services. We shall adopt DRA's proposal to retain Category I status for the following services: public policy payphones, 911 services, and basic service elements (BSEs) as well as for basic network functions developed in OANAD . . . Since BSEs represent bottleneck elements of the LEC network, they do not exhibit the characteristics of partially competitive services and should remain in Category I." (*Id.* at 190.)

Several things are noteworthy about this passage. First, it was issued on March 13, 1996, barely a month after passage of the Telecommunications Act, and five months before issuance of the First Report and Order. Unsurprisingly, therefore, it makes no mention of the "unbundled network elements" that § 251(c)(3) of the Act obliges ILECs to make available to "requesting carriers." Second, the passage refers to "basic network functions developed in OANAD" without specifying what they are. This, too, is not surprising, since it was not until two weeks after the issuance of D.96-03-020 that the ALJ assigned to this docket issued a ruling setting forth which basic network functions (BNFs) would be considered in the 1996 pricing, tariffing and unbundling hearings because they were "integral to local competition."[186] Third, there are two references in the passage to "retaining" Category I treatment for BNFs. The use of this verb does not preclude the possibility, and indeed

[186] Administrative Law Judge's Ruling Setting Forth the Scope of Issues To Be Decided In Pricing, Tariffing and Unbundling Hearings, issued March 25, 1996 (March 25, 1996 ALJ Ruling), *mimeo.* at 5. At another point in this ruling, the ALJ stated that the 1996 hearings would deal with those BNFs "needed to enable meaningful local competition to begin on January 1, 1997." (*Id.* at 2.) In other words, the purpose of the 1996 hearings was not to consider *all* BNFs, but only those deemed essential for local competition.

suggests the likelihood, that recategorization of BNFs will occur later upon an appropriate showing.[187]

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[187] As noted in Section VIII.D., *supra,* the FBC contend that Pacific's price floor evidence is an improper attempt at recategorization because, in D.96-05-036, 66 CPUC2d 274 (1996), the Commission held that the Local Competition and NRF dockets would be the exclusive forums for considering recategorization issues. The FBC rely on the following passage from D.96-05-036:

> "Several parties noted that the issue of criteria for recategorization of services merits review and could efficiently be resolved in the local competition proceeding . . . Indeed, the Commission has already analyzed several issues related to recategorization in that docket. (See D.96-03-020, mimeo. at 53-59.) The Commission adopts this suggestion and directs the ALJ assigned to that proceeding to so notify the parties. Any generic issues regarding the existing service categories and the recategorization of services not resolved in the local exchange docket will be taken up in the 1998 NRF review." (66 CPUC2d at 277.)

For several reasons, this passage does not support the broad argument that the FBC bases upon it. First, D.96-05-036 was a procedural decision that concluded a second formal phase of the NRF proceeding was unnecessary; it did not make forever immutable decisions about where particular issues could be considered.

Second, while the quoted passage certainly does suggest that our intention in mid-1996 was to consider recategorization issues in a docket other than OANAD, the quoted language does not preclude such consideration. As we stated in D.98-02-106, it is well within our discretion to decide the order in which this Commission decides issues, *mimeo.* at 94, and that discretion extends to venues as well. For example, we recategorized local transport service as Category II in this docket after concluding that competition was developing rapidly in the transport market. D.95-04-073, 59 CPUC2d 389, 408-410 (1995). In D.99-06-053, we recently granted Pacific's request to recategorize from Category II to Category III its Interexchange Carrier Directory Assistance service, its Operator Assistance Services Billing alternatives services, and its business and residential Inside Wire Repair services. We are also considering recategorization requests by Pacific in other applications. *See, e.g.,* A. 98-05-038, 98-07-020, 98-07-029. Thus, there is ample precedent for considering recategorization issues in proceedings other than the Local Competition and NRF dockets when circumstances warrant it.

Of course, the preceding discussion assumes for the sake of argument that Pacific's evidence on which UNEs are essential amounts to an improper attempt at

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Of course, when the FCC issued its First Report and Order, it set forth in Rule 319 (47 C.F.R. § 51.319) a list of network elements to be offered on an unbundled basis that was similar to, but also different from, the list of elements specified as potential candidates for unbundling in the March 25, 1996 ALJ Ruling. In light of the differences between the FCC's list and our own, it is a fair question whether the designation of BNFs as Category I "services" in D.96-03-020 retained any validity after the First Report and Order.[188] But in light of the differences, the non-ILEC parties certainly cannot claim that D.96-03-020 precludes consideration of which network elements should be considered MBBs for imputation purposes.

Moreover, other rulings in this docket support Pacific's contention that this Commission has never ruled that all the UNEs specified in Rule 319 would automatically be considered essential for imputation purposes. In an April 29, 1997 discovery ruling,[189] for example, the assigned ALJ refused to

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recategorization. As stated in the text, we do not agree with this characterization, and think the FBC are confusing service categorization with imputation.

[188] Indeed, Pacific raised this very point at a discovery hearing held on July 1, 1997. Although the ALJ stated in a subsequent written ruling that discovery on the demand elasticities for UNEs would be permitted because "a UNE's inclusion on the FCC's list does not necessarily depend upon a judgment that the element is 'essential' or 'indispensable'," the ALJ also stated parenthetically that "Pacific is under a good-faith duty to apply the categorization decisions in D.96-03-020 as much as possible to the FCC's list of UNEs." (Administrative Law Judge's Ruling Setting Out Limits of Permissible Discovery In Response To Discussion at July 1, 1997 Hearing, issued August 25, 1997, *mimeo.* at 4-5 & n. 6.) Clearly, such an admonition would not have been necessary if it were evident that all the UNEs set forth in 47 C.F.R. § 51.319 were MBBs.

[189] Administrative Law Judge's Ruling Granting in Part and Denying in Part the Motion of AT&T Communications of California, Inc. For A Protective Order Concerning Discovery, issued April 29, 1997 (April 29, 1997 ALJ Ruling).

grant Pacific access to AT&T internal planning documents that discussed deployment plans for a new "wireless loop." Pacific contended that these documents were relevant because they called into question whether traditional copper-fiber loops could still be considered MBBs, and therefore whether it would "be appropriate to apply the Commission's imputation rules to them." (*Mimeo.* at 4.) Noting that this contention was at "the far edge of relevance, and is inconsistent with prior rulings of both this Commission[[190]] and the [FCC]," the ALJ denied the requested discovery. However, the ALJ noted that his ruling might be subject to reconsideration in the future, because "in *Iowa Utilities Board v. FCC*, GTEC, Pacific [and the other RBOCs] are contending that the FCC overstepped its authority in prescribing the list of network elements to be unbundled in 47 C.F.R. § 51.319, because Congress intended the FCC to have such a prescriptive power only with respect to true 'bottleneck' facilities." (*Mimeo.* at 7.) In light of the fact that the Supreme Court has vacated the FCC's original list of UNEs on essentially these grounds, AT&T/MCI, Sprint and the FBC cannot reasonably claim that our decision to assess in the 1998 hearings which UNEs should be considered MBBs for imputation purposes came as any surprise.

Finally, it should be noted that Pacific is correct when it argues that it is not seeking recategorization of the services involved here. As Pacific states, price floors are set only for Category II services, and D.96-03-020 designated as Category II the services for which price floors are now being set.

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[190] Later discussion in the April 29, 1997 ALJ Ruling makes it clear that the reference to prior Commission rulings is to the March 25, 1996 ALJ Ruling, which – the ALJ noted – had expressed the view that "copper loops are a 'bottleneck' network element." (*Mimeo.* at 6.)

Thus, recategorization of these services is not at issue, and parties arguing to the contrary appear to be confusing recategorization with imputation. (Pacific Reply Brief, pp. 61-62.)

6. The Parties Had Adequate Notice That The Issue of Which UNEs Should Be Treated As MBBs Would Be Considered in the Pricing Hearings

In its comments on the PD, CCTA argues that our decision herein to consider which UNEs constitute MBBs is a violation of both Pub. Util. Code § 1708 and the requirements of due process. (CCTA Opening Comments, pp. 1-9.) The violations of these constitutional and statutory provisions have occurred, according to CCTA, because the issue of which UNEs constitute MBBs was not properly noticed for the 1998 hearings by the Commission, but was instead unilaterally injected into the case by Pacific's testimony.

Although this same argument was made in the FBC's post-hearing briefs,[191] CCTA's separate comments on the PD cite additional cases in support of its position, and we believe that these cases merit some discussion.

CCTA's Opening Comments place special reliance on D.97-05-091. In that case, the Commission granted a petition for modification to delete from D.96-02-072 --a decision in Phase II of the Local Competition docket -- a finding that the "provision of subscriber listings by the LEC" was *not* an "essential service". The FBC contends that modification was granted because of the Commission's failure to provide notice that this would be an issue in the Local Competition proceeding, and argues that the same result is required here:

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[191] As noted in Section I.B., CCTA was a member of the FBC and joined in its post-hearing briefs.

> "The context of the essential facility determination in this proceeding is equally infirm. Just like the directory listings proceeding, Pacific made unilateral claims on an unnoticed issue. Thus, just as D.97-05-091 had to delete its essential facility finding based on a failure of the Commission to give proper notice, an opportunity to be heard and develop a proper record, the PD must delete its essential facility determinations herein." (CCTA Opening Comments, pp. 4-5.)

We have carefully examined D.97-05-091, and we believe that the circumstances of that case are quite distinguishable from the ones here. In D.97-05-091, we based our decision that modification of D.96-02-072 was required partly on a lack of notice, but more on the fact that there was no evidence to support the conclusion that the provision of subscriber listings was not an essential facility. After agreeing with the petitioning party that an "essential facilities" determination is inevitably "a fact-laden endeavor," (*mimeo.* at 7), we pointed out that the challenged conclusion of law had been proposed by Pacific in its comments on the draft rules that were issued on April 26, 1995, and had not been tested in any kind of evidentiary proceeding. We said:

> "[A] complete factual record to support [the conclusion that the provision of subscriber listings is not an essential service] was not developed in Phase II. Although Pacific presented claims in its Phase II comments that the directory publishing industry was competitive, such unilateral claims by one party do not constitute a complete record regarding the competitiveness of the directory publishing industry, nor whether LEC directory listings are an 'essential facility.' A complete record requires that all parties have a notice of an opportunity to be heard based on due process." (*Id.* at 9.)

In this case, unlike D.97-05-091, there can be no doubt about the adequacy of the record on which we have based our conclusions about which

UNEs constitute MBBs. As noted in Sections VIII.G.7. and VIII.G.8., our conclusions on these issues rest not only on the testimony of Dr. Tardiff, but also on the reply testimony of AT&T/MCI witness Dr. Lee Selwyn. On the critical issues of whether the loop and switching should be considered MBBs, we have agreed with Dr. Selwyn rather than Dr. Tardiff.

We also think that although the group of Commission decisions and ALJ rulings that laid out the issues for hearing in this phase could have been improved, they were adequate to give notice to CCTA and every other party that they should be prepared to litigate the question of which UNEs in the original version of FCC Rule 319 constituted MBBs or "essential facilities".

To begin with, the December 18, 1996 ALJ Ruling – which CCTA attempts to rely upon as rigidly limiting the scope of the imputation issues here – noted the concerns of the CLC Group that the TELRIC methodology did not appear to mesh well with the contribution method of imputation approved in D.94-09-065. The ALJ Ruling suggested that the CLC Group's concern "may only be a semantic problem," but agreed that whether the Commission ultimately chose TELRIC or TSLRIC for pricing purposes, "the Commission's imputation rules should reflect an awareness of whether the 'contribution' calculated under the chosen methodology is likely to be large or small," and that if TELRIC was chosen, "the parties will be free to address in their supplementary testimony the extent to which the imputation rules must be adjusted to take account of these developments." (December 18, 1996 Ruling, *mimeo.* at 29-30.) If anything should have been clear from this discussion, it was that the Commission was not inclined to abandon the contribution method of imputation set forth in D.94-09-065, and that the issue of how to apply it would receive a full reappraisal in the event the TELRIC costing methodology was chosen.

After we decided to use TELRIC costs for pricing in D.98-02-106, the assigned ALJ convened a PHC for the purpose of determining how the approved TELRIC costs should be "translated" into prices. In his March 4, 1998 ruling convening the PHC,[192] the ALJ set forth a "preliminary list of issues" that had been complied from D.98-02-106 and ALJ rulings issued since December 1996. The parties were specifically invited to add to this list, if necessary, in their PHC statements. (*Mimeo.* at 2-3.) Six PHC statements were filed, including one by the FBC.

In the PHC statement that it submitted on March 11, 1998, Pacific – after noting the many legal and regulatory changes that had occurred since the 1996 pricing hearings -- clearly stated its intention to litigate the "essentiality" of the various UNEs, because in its view D.94-09-065 required contribution only from "essential facilities", and not all UNEs could be considered "essential".[193] Pacific reiterated this position at the PHC after the

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[192] Administrative Law Judge's Ruling Convening Prehearing Conference To Discuss Issues For Supplementary Pricing Hearings, issued March 4, 1998.

[193] After noting the many changes in the regulatory landscape since 1996, Pacific's PHC statement gave the following description of how Pacific intended to update its price floor and imputation testimony:

> "We will identify what facilities are 'essential facilities' for purposes of applying the Commission's imputation rule. We will also propose and justify specific price floors for measured business service, measured and flat residential service, zoned-usage measurement (ZUM) service, and local usage. Since it would be inappropriate from an economic standpoint to include shared and common costs in price floors, we will propose a cross-subsidy test which will allow the Commission to ensure that a family of services will recover the costs shared by services within the family. At the conclusion of the proceeding, the Commission would adopt actual price floors for the services identified in Pacific's testimony." (Pacific PHC Statement, p. 10.)

assigned ALJ asked Pacific's counsel, Mr. Dawson, to summarize the scope of his proposed price floor testimony. In his response, Mr. Dawson stated:

> "We read IRD as saying that . . . what you impute are [MBBs], and there needs to be a determination in this case what would qualify as a[n] [MBB] under the IRD standards. Our reading of IRD is that a[n] [MBB] is pretty close to the antitrust concept of essential facilities.
>
> ALJ MCKENZIE: And not necessarily coincident with an unbundled network element; is that right?
>
> MR. DAWSON: Correct. Correct." (March 16, 1998 PHC Tr., p. 938.)

After this colloquy, the ALJ indicated that he thought such testimony was reasonably within the scope of the December 18, 1996 Ruling, and he did not suggest that an inquiry into which UNEs were "essential" was outside the proper bounds of testimony:

> "I think it's a fair point that . . . we have said in the prior rulings, and specifically in the December 18, 1996 ruling, that . . . reconsidering the imputation rules now is an issue before us, if only, Mr. Casciato, for a point that AT&T and MCI also raised in their [PHC] statement, [that] you probably need to use one . . . costing methodology to set your prices and another to set your price floors; and I think . . . if it's those kind of issues Mr. Dawson's proposing to address and – and it sounds like he is – that does sound reasonably within the scope of what we are doing." (*Id.* at 939.)

Under these circumstances, CCTA cannot reasonably claim that it failed to receive notice that the issue of which UNEs were "essential" was likely to be litigated in the pricing hearings. Pacific made its position plain in its

March 11, 1998 statement and at the PHC, and the ALJ refused to rule its proposed testimony off-limits.[194] In view of this situation, the prudent course of action for CCTA and every other party was to be prepared to submit testimony on the issue of which UNEs should be considered MBBs (*i.e.*, "essential"). As

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[194] Thus, the situation here is quite different from the one in D.94-10-040, 56 CPUC2d 621 (1994), another case on which CCTA relies. In that decision we granted rehearing of D.94-04-043, which had granted cellular carriers permission to extend the Commission's temporary tariff procedure to new services. The extension was granted in response to a suggestion made by PacTel Cellular in its comments on the Assigned Commissioner's Ruling (ACR) that led to D.94-04-043. We held that rehearing was required because the ACR gave no hint that extending the temporary tariff procedure to new services was under consideration, and because it specifically directed parties "to restrict their comments to issues raised in this ruling and not . . . [to] argue for broadening the scope of this Ruling or proposing additional flexibility." (56 CPUC2d at 622.) Under these circumstances, we concluded that parties had not received adequate notice that extending the temporary tariff procedure to new services would be an issue.

D.94-10-040 is an illustration of the principle, well-established in federal law, that in the context of a rulemaking resolved on written comments, parties should not be deemed to have notice of an issue merely because another party mentions the issue in passing in its comments. In rejecting a claim that such mention constituted adequate notice in *Small Ref. Lead Phase-Down Task Force v. U.S.E.P.A.*, 705 F.2d 506 (D.C. Cir. 1983), the D.C. Circuit said:

> "[The agency's] construction would ill-serve the purposes behind the notice requirement. It would turn notice into an elaborate treasure hunt, in which interested parties, assisted by high-priced guides (called 'lawyers'), must search the record for the buried treasure of a possibly relevant comment. Inevitably, many parties will not attempt this costly search and many others will fail in their search. The agency will not get the informed feedback it needs, the parties will feel unfairly treated, and there will be a meager record for us to review." (705 F.2d at 550.)

Clearly, the situation that worried the D.C. Circuit is very different from the one here. In this case, the issues were resolved after hearings, the party claiming lack of notice was given a very clear statement (both orally and in a PHC statement) of the issue its opponent intended to raise, and the assigned ALJ ruled that proposed testimony on the issue was not outside the scope of the general questions he had designated for hearing.

noted above, Dr. Selwyn *did* submit such testimony on behalf of AT&T/MCI, and we have found that testimony to be persuasive with respect to certain UNEs. Furthermore, CCTA was given a full opportunity to cross-examine Dr. Tardiff on his "essential facilities" analysis, and CCTA's counsel took advantage of that opportunity. (Tr. 45: 6643-75.) For all of these reasons, CCTA's lack-of-notice argument is without merit.

7. Loops Should Be Considered Monopoly Building Blocks For Imputation Purposes

Having concluded that the contribution method of imputation should be used here, that our prior decisions do not require that all UNEs be treated as monopoly building blocks, and that the parties had adequate notice of the issue, the time has arrived to decide which network elements should be considered MBBs. As indicated in Section VIII.G.1., we have concluded such treatment is appropriate for the loop, the port (i.e., switching) and the white pages listing. Accordingly, we will impute the difference between the TELRIC-based price of these elements and the volume-sensitive portion of their respective TSLRICs into the price floors of services that use these elements.

Before setting forth our reasoning behind these determinations, we must acknowledge that in light of the Supreme Court's decision in *AT&T-Iowa*, the list of UNEs is now in transition. Although the FCC released the text of its Revised UNE List Order on November 5, 1999, it has asked for comments on the order, and judicial appeals seem certain to follow.

Notwithstanding the uncertainty that continues to surround the list of network elements that ILECs must offer on an unbundled basis, we do not believe it would be appropriate to delay our price floor determinations until the "finality" of the FCC's new list has been established. As noted above, the

First Report and Order makes imputation a matter of state law and regulation,[195] so the question of which network elements should give rise to contribution is not technically dependent upon FCC decisions. More importantly, however, we are satisfied that the loop, the port and white page listings will continue to satisfy the "necessary and impair" standard for some time to come. As indicated below, we believe that in California, these elements will be essential for local exchange competition for the next several years.

As to the loop, we cannot agree with Dr. Tardiff that it is essential only for residential customers and small business customers in lower-density areas. Although Dr. Tardiff has attempted to demonstrate that fiber loops offered by ICG, MFS, Brooks Fiber and Cox are meaningful alternatives to the copper loops offered by Pacific, (Ex. 122, pp. 28-32), it seems obvious from the summaries Dr. Tardiff presented that these fiber-loop alternatives are, with few exceptions, available only to business customers in California's larger cities. Dr. Tardiff did not offer an estimate of how many business lines are actually using these fiber loops, and he was forced to concede on cross-examination that his conclusion that *residential* loops are not essential in San Diego was based on an announcement by Cox that it eventually planned to offer telephony services over its cable television system in that city. (Tr. 44:6596-98.)

The evidence that Dr. Tardiff presented with respect to Winstar's "wireless loop" and AT&T's Digital Link service is even thinner. With respect to Winstar, Dr. Tardiff states only that its wireless alternatives to Pacific's system (which are based on transceivers and antennas) are available in 14 cities

[195] First Report and Order, ¶¶ 848-850.

within the Los Angeles, San Francisco and San Diego metropolitan areas. (Ex. 122, p. 32-33.) For AT&T's Digital Link service, Dr. Tardiff asserts that it has "experienced rapid growth," but then acknowledges that AT&T's monthly local volume on this service is equivalent to only about 20,000-30,000 business lines. (Ex. 121-S, p. 28.)

In view of the thinness of Dr. Tardiff's evidence on loops, it is difficult to disagree with Dr. Selwyn's conclusion that "Dr. Tardiff's analysis depends not upon the actual present level of competition, but on the *potential* for competition." (Ex. 612, p. 61.) In our view, the most telling evidence presented here – which Pacific did not refute – is that in 1996 and 1997, Pacific installed 1.44 million new lines in California, while the number of loops being provided by CLECs totaled only about 20,000. (*Id.* at 59.) This means that in 1996-97, Pacific's share of the total loop market remained at over 99%.

Even though we may safely assume that more CLEC loops will be provided in the future, the evidence presented by Dr. Tardiff is too thin to justify an overall conclusion that at the present time, loops are not essential. We agree with Dr. Selwyn that "from a policy perspective[,] there is a far less risk associated with classifying loops as 'essential' when [some] competition is actually present than there is in treating loops as 'non-essential' if in fact no [significant] alternatives actually exist." (*Id.* at 60.)

Nor do we think it would be productive for us to undertake an area-by-area determination of whether loops are essential for large business, small business and residential customers in each area. In view of our decision in D.98-02-106 that we could not adopt geographically-deaveraged costs based on the inadequate record before us, *mimeo.* at 93-94, and our decision in

Section IV.B.5. herein not to adopt AT&T's proposal for a residential loop surcredit financed from the CHCF-B,[196] we are also unwilling to adopt the geographically-varying *price floors* for loops advocated by Dr. Tardiff and Mr. Scholl. We agree with TURN that if we were to adopt their proposal, the resulting pricing floors could be used by Pacific to discourage new entrants in high-density areas:

> ". . . Pacific wants the ability to establish lower price floors for markets where it anticipates competition, with the commensurate ability to lower prices to these price floors on very short notice. For services provided in these areas, Pacific would impute no contribution, while contribution would be included in the prices CLCs must pay for UNEs. This would place CLCs at an unfair competitive disadvantage. If Pacific were to succeed in having UNEs such as loops declared non-essential in areas with *potential* competition, Pacific would have the

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[196] In its comments, TURN contends that the PD failed to address the principal issue raised in TURN's testimony; *viz.*, the need to account for Pacific's draw under the CHCF-B in setting the price floor for basic residential service. After reiterating that Pacific is entitled to draw "more than $300 million per year" to "help recover the cost of providing basic service," TURN states:

> "[T]he Commission should either credit [CHCF-B] revenues on a per line basis [*i.e.*, $2.64] against the price floor, . . . or make it clear in its decision that those revenues will be taken into account if and when the Commission acts to reprice local service based on the price floors applied here." (TURN Opening Comments, p. 2.)

We have reexamined the argument in TURN's testimony (which seeks to account for the same funds at which the AT&T/MCI loop surcredit proposal is directed), and we conclude that it is without merit. If price floors were being set here on the basis of embedded costs, it would make sense to take account of the high-cost subsidy, because an embedded methodology should properly reflect all the inherent subsidies in establishing retail prices. However, the price floors being established here are based on TSLRIC, a forward-looking cost methodology. TSLRIC-based costs do not include subsidies, so reflecting Pacific's CHCF-B draw would be inappropriate.

ability to stave off competitive entry by allowing the rates for its services to plummet to the bottom of their no-contribution price floors, thereby discouraging competitors from entering the market." (TURN Opening Brief, pp. 7-8.)

8. Switching Should Be Considered A Monopoly Building Block for Imputation Purposes

Although it is a closer case than loops, we have also concluded that switching (i.e., the port) should be considered an MBB for imputation purposes. Although Dr. Tardiff is correct that the number of CLEC switches in California is growing, we are not persuaded by his argument that "these switches generally provide coverage over a much wider area than ILEC switches." (Ex. 122, p. 24.) Rather, we find persuasive Dr. Selwyn's argument that the need in many areas to lease the incumbent carrier's loops makes it essential to purchase the incumbent's switching as well, because in such cases collocation is likely to be uneconomic, at least initially. Dr. Selwyn states:

> "One must also recognize the interrelationship between switching and the loop facilities to which the switch ports are connected . . . [E]xcept in a handful of high-density areas, entrants have no choice but to utilize incumbent loops in order to furnish retail services to their customers. In order for a CLC to utilize its own switch in conjunction with an incumbent loop, it must maintain a physical or virtual collocation presence in each incumbent wire center out of which [UNE]-loops are utilized, so that it can cross-connect and multiplex all of the [UNE]-loops it uses in that building to a switch located somewhere on CLC premises. The costs of maintaining such a presence may be prohibitive where the total number of unbundled loops involved is relatively small. In those instances, the only feasible means by which the competitor can furnish end user services is through the use of the incumbent's unbundled switch facilities. Thus, even though *in theory*

> a competitor can purchase and operate a switch of its own, in practical terms *if there is no alternative to the incumbent with respect to the loop, there may well be no feasible alternative to the incumbent with respect to switching either.*" (Ex. 612, pp. 64-65; emphasis in original.)

We recognize that in time, this situation may change. As Dr. Tardiff stated in his testimony, CLECs currently own 43 switches in California, and the number is growing. This Commission is also considering collocation costs in a separate phase of this proceeding, and issues concerning the availability of collocation space are being considered in the Local Competition docket. The combination of more CLEC switches and greater access to collocation may in time weaken the force of the argument made by Dr. Selwyn.[197] For now, however, we think that switching should be considered an essential facility, and that contribution equal

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[197] In its comments on the PD, Pacific strenuously argues that the switching UNE should not be considered an MBB because of the advent of cageless collocation and the Extended Link. Pacific states:

> "[T]he advent of cageless collocation and the Extended Link *ends* the possibility that switching is an essential facility anywhere in the state. Where there is collocation, any CLEC may purchase a link from the collocated CLEC, and then transport the circuit to its own centrally-located switch. Easier yet, any CLEC may purchase an Extended Link from Pacific and route its customer's line to its switch in that manner." (Pacific Opening Comments, pp. 13-14.)

While these predictions may warrant a change in the treatment of switching if future developments bear them out, they are not sufficient to persuade us that at the present time, switching should not be treated as an MBB. The effects of the FCC's recent order on cageless collocation are only beginning to be felt, and we are still evaluating comments on this issue in our Local Competition docket. Similarly, while we directed Pacific in D.98-12-069 to offer an Extended Link as part of its § 271 showing, *mimeo.* at 149, there has been no showing that as of yet, purchases of this product are sufficiently widespread to have had any significant competitive impact.

to the difference between the switching UNE's TELRIC-based price and the volume-sensitive portion of its TSLRIC should be imputed into the price floor of non-access line Category II services that use switching.[198]

As noted in Section VIII.G.1., *supra*, we do not believe that switching minutes-of-use should be imputed into the three access line services, 1 MB, 1 FR and 1 MR. Since switching minutes-of-use based on TELRIC are already imputed into Pacific's toll price floors, requiring such imputation again in access line services would be forcing Pacific to recognize this contribution twice.

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[198] In their comments, both Pacific and CCTA take issue with how contribution from the switching UNE was computed in the PD. CCTA argues that it is impossible to compute such contribution, because the TSLRIC studies for Pacific that we approved in D.96-08-021 did not include a cost for the port. (CCTA Opening Comments, p. 15.) Pacific argues that the TSLRIC port cost reflected in the PD's price floors failed to include any operating expenses. (Pacific Opening Comments, p. 14.)

While we agree that corrections must be made to the TSLRIC port cost that was assumed in the PD's price floors, we disagree with CCTA that it is impossible to derive such a cost from the existing record. The contribution for the switch port reflected in the PD was based on the capital costs for digital circuit equipment reported in Pacific's TSLRIC study for the local loop. After reviewing CCTA's Opening Comments, our staff determined that the specific digital circuit account at issue included electronic costs but did *not* include port costs. Staff therefore developed a TSLRIC port cost based upon the TELRIC costs of the port element that we adopted for Pacific in D.98-02-106. Staff did this by adding back 9.5% to reflect the retail expenses that should be included in the port cost under the TSLRIC methodology.

We do not believe that any change in port costs is justified based on Pacific's objection. Pacific did not include any operating expenses for ports in the TSLRIC studies that it submitted on January 31, 1996, so none are included in the TSLRIC port costs used to compute contribution here.

9. The White Pages Listing Should Be Considered A Monopoly Building Block For Access Line Services

Among the services for which we are setting price floors here are the three basic access line services: basic flat residential access line service (1 FR), basic measured residential access line service (1 MR), and basic business access line service (1 MB). For these services, white page listings constitute a monopoly building block[199]

The data used to produce white page listings is obviously very expensive and difficult to reproduce. Without a single source for white page listings, each CLEC would have to produce its own, an obviously inefficient situation that would greatly reduce the utility of CLEC white pages (and eventually, any white pages). It was presumably for this reason that access to white page listings was included as an item on the 14-point competitive checklist under § 271 of the Telecommunications Act (§ 271(c)(2)(B)(viii)), and why the FCC included access to white page listings as an unbundled network element in the First Report and Order. On this subject, the FCC stated:

> "We find that the databases used in the provision of both operator call completion services and directory assistance must be unbundled by [ILECs] upon a request for access by a competing provider. In particular, the directory assistance database must be unbundled for access by requesting carriers. Such access must include both entry of the requesting carrier's customer information into the database, and the ability to read such a database, so as to enable requesting carriers to provide operator services and directory assistance concerning [ILEC] customer

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[199] We do not consider white page listings to be an MBB for ISDN, COPT, business and residence ZUM usage or business and residence local usage, for all of which we are also setting price floors in this decision.

> information. We clarify, however, that the entry of a competitor's customer information into an [ILEC's] directory assistance database can be mediated by the [ILEC] to prevent unauthorized use of the database. We find that the arrangement ordered by the California Commission concerning the shared use of such a database by Pacific Bell and GTE is one possible method of providing such access." (First Report and Order, ¶ 538; footnote omitted.)

We agree with the FCC's conclusion, and so will require that contribution based on white page listings be imputed into the price floors of the access line services at issue here.[200] The computation is a relatively straight-forward one, since we adopted a separate TELRIC for white page listings in D.98-02-106.[201]

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[200] Our treatment here of white page listings as an MBB for the three basic access line services is not meant to prejudge what rate is appropriate under § 222(e) of the Telecommunications Act for providing directory listings to third-party publishers. That question is currently being considered in our Local Competition docket.

[201] Although the computation is straight-forward, both CCTA and Pacific took issue with the treatment of white pages contribution reflected in the PD.

CCTA suspects that contribution for the white pages listing cannot be computed, because a TSLRIC cost for white pages was not identified in the calculations underlying the PD's price floors. (CCTA Opening Comments, p. 16.)

Pacific argues that the white pages listing should reflect "zero contribution" – *i.e.*, not be treated as an MBB -- because in its negotiated interconnection agreements, Pacific and the CLECs have agreed that there should be a "no charge" price for the white pages listing. However, if the Commission continues to believe that MBB treatment of the white pages listing is justified, Pacific points out that the TSLRIC cost of white pages must be deducted from the $0.40 price for this element shown in Appendix A. (Pacific Opening Comments, p. 14.)

We disagree with Pacific that a "zero contribution" approach is justified based on negotiated interconnection agreements, but CCTA is wrong to suggest that the record lacks sufficient data from which to compute the contribution at issue here. The TSLRIC

Footnote continued on next page

The price floors we are adopting for the services at issue here are set forth in a Compliance Reference Document (CRD), the redacted version of which is attached to this decision as Appendix D. As in D.98-02-106, the full, unredacted contents of this CRD will be made available only to parties who have entered into an appropriate nondisclosure agreement with Pacific. (*Mimeo.* at 9-10). The form of this nondisclosure agreement is set forth in the Administrative Law Judges' Ruling Concerning Proposed Protective Order of GTE California Incorporated, issued on November 16, 1995 in this docket (November 16, 1995 ALJs' Ruling). Parties entitled who are entitled to access to the unredacted version of the CRD because they have signed such a nondisclosure agreement with Pacific may obtain a copy of the CRD by contacting the Telecommunications Division.

IX. WHEN SHOULD THE FINAL RECURRING AND NON-RECURRING CHARGES FOR UNEs ADOPTED IN THIS DECISION GO INTO EFFECT?

The PD that was served on May 10, 1999 simply provided that Pacific and the parties with which it had entered into arbitrated interconnection agreements should "substitute" the final recurring and non-recurring charges adopted in this decision for the interim charges set forth in the interconnection agreements. In response to comments from several parties that there was a need for more precision on this issue, the revised PD that was made available on August 5, 1999 directed Pacific to prepare amendments to the interconnection agreements reflecting the final prices, and to file these amendments pursuant to

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studies for Pacific that we approved with modifications in D.96-08-021 included a study for white page listings. Due to a cell referencing error in the calculations that supported the PD's price floors, our staff inadvertently neglected to subtract this TSLRIC cost. That error has been corrected in the computations that support the price floors shown on the unredacted version of Appendix D adopted herein.

the advice letter process within 30 days after the effective date of the decision. The revised PD also provided that, if these amendments were not protested, they would go into effect 5 days after filing.

Because we are now adopting final UNE prices only six weeks before the end of 1999, Y2K implementation issues have arisen. In the comments it filed on November 10, 1999 concerning Commissioner Hyatt's proposed alternate decision, Pacific describes these problems and its proposed solution as follows:

> "Unfortunately, if the final decision is voted out on November 18, [the advice letter process proposed in the revised PD] will cause Y2K problems for Pacific. The new prices would become effective about December 23. However, Pacific, like most other businesses, has a freeze on any reprogramming of their computer systems during this period. This includes the [approximately 11,000] billing changes that will come out of the OANAD decision. If there are no major glitches, we expect that reprogramming can resume in mid-January, 2000. Accordingly, if the final decision is voted out November 18, Pacific would be willing to do billing adjustments back to December 23, provided it can obtain a waiver of any impacts such adjustments would create on its performance measurements in the 271 proceeding." (Pacific's 11/10/99 Comments, pp. 6-7.)

In their opening comments on Commissioner Haytt's proposed alternate decision, ICG and NEXTLINK urge that the final rates we are adopting herein should take effect immediately. After noting that Pacific had requested in its June 4, 1999 opening comments that the rate changes in the May 10 PD not take effect until October 4, 1999 (Pacific's next regularly-scheduled date for billing program changes), ICG and NEXTLINK assert that Pacific has had plenty of time since June to prepare for the billing changes.

Further, "if Pacific *still* claims that it cannot put the new rates into effect immediately, the Commission should require Pacific to make the new rates effective as of the date of the decision, regardless of when Pacific implements them, and then require Pacific to provide a true-up of rates back to the date of the decision." (ICG/NEXTLINK 11/10/99 Comments, pp. 4-5 & n. 13; emphasis in original.)

We have concluded that both Pacific and ICG/NEXTLINK raise valid points, and that the best solution is to adopt an approach that addresses both of their concerns. Accordingly, although we will still require Pacific to submit advice letters reflecting the necessary rate and contract changes within 30 days, we agree that because of the Y2K moratorium, Pacific should have until March 1, 2000 to complete all of the necessary billing program changes. We also agree that this delay should not count against the performance measurements applicable to Pacific in the ongoing § 271 proceeding, inasmuch as the delay is attributable to the Y2K programming moratorium, which is applicable to many businesses.

However, we agree with ICG and NEXTLINK that it is appropriate to require Pacific to make billing adjustments reflecting the recurring and non-recurring charges adopted herein back to November 18, 1999; *i.e.*, the effective date of this decision. In view of the long pendency of the PD, we agree that competitors should have the benefit of the final prices we are adopting herein immediately, even though it may take some time for Pacific to complete all of the adjustments necessary to reflect these final prices in bills. The conclusions of law and ordering paragraphs have been revised to reflect our new approach.

Findings of Fact

1. On February 19, 1998, the Commission issued D.98-02-106, which adopted TELRIC costs for Pacific for the UNEs specified in 47 C.F.R. § 51.319.

2. On March 4, 1998, the assigned ALJ issued a ruling convening a PHC to discuss issues likely to arise at the supplementary pricing hearings held to determine how the TELRIC costs adopted by the Commission should be translated into prices for Pacific's UNEs.

3. On March 16, 1998, the PHC to discuss issues for the supplementary pricing hearings was held.

4. At the March 16 PHC, the assigned ALJ ruled that parties should submit new testimony on all issues for the supplementary pricing hearings, owing to the many changes that had occurred in telecommunications regulation since the 1996 pricing hearings.

5. On March 27, 1998, the assigned ALJ issued a ruling dealing with issues discussed at the March 16 PHC, and describing issues the ALJ wanted the parties to address in their hearing testimony.

6. On April 8, 1998, parties filed their opening testimony on all hearing issues.

7. On April 28, 1998, parties filed their reply testimony on all hearing issues.

8. On May 4, 1998, various parties filed extensive motions to strike portions of the opening and reply hearing testimony.

9. On May 11, 1998, parties filed responses to the motions to strike hearing testimony.

10. On May 15, 1998, the assigned ALJ issued a ruling dealing with certain hearing issues and ruling on the motions to strike the testimony of Dr. Jerry Hausman and portions of the motion to strike the testimony of Dr. Lee Selwyn.

11. The supplementary pricing hearings for Pacific began on May 18 and ended on June 10, 1998.

12. Parties filed their opening briefs concerning hearing issues on July 10, 1998.

13. All parties except ORA filed their reply briefs concerning hearing issues on July 31, 1998.

14. With the permission of the assigned ALJ, ORA filed a reply brief on hearing issues on August 3, 1998.

15. On January 25, 1999, the United States Supreme Court issued its decision in *AT&T Corp v. Iowa Utilities Board (AT&T-Iowa).*

16. The ALJ's PD was served on all parties on May 10, 1999.

17. Opening comments on the PD were filed on June 4, 1999, and reply comments on June 9, 1999.

18. In *AT&T*-Iowa, the Supreme Court held that the FCC's rulemaking power under § 201(b) of the 1934 Telecommunications Act extends to the local competition provisions set forth in §§ 251 and 252 of the Telecommunications Act of 1996.

19. In *AT&T-Iowa,* the Supreme Court held that § 2(b) of the Communications Act of 1934 does not prohibit the FCC from promulgating regulations implementing the local competition provisions in §§ 251 and 252 of the Telecommunications Act of 1996.

20. In *AT&T-Iowa,* the Supreme Court vacated FCC Rule 319 (47 C.F.R. § 51.319) on the ground that the FCC had failed to give adequate consideration to the requirement of § 251(d)(2) that access to proprietary network elements should be given only if "necessary," and if failure to give access to a particular network element would "impair," competing carriers from offering telecommunications services.

21. In *AT&T-Iowa*, the Supreme Court ruled that the definition of "network element" in the 1996 Telecommunications Act was broad enough to justify the FCC's inclusion of OSS, operator services, directory assistance and vertical switching functions within the list of network elements that must be offered on an unbundled basis, assuming the requirements of § 251(d)(2) could be met with respect to these elements.

22. In *AT&T-Iowa*, the Supreme Court ruled that the FCC had not acted improperly in requiring that ILECs make UNEs available to competing carriers without any requirement that these competing carriers own facilities of their own.

23. In *AT&T-Iowa*, the Supreme Court held that the FCC had acted within its jurisdiction in promulgating Rule 315(b), which prohibits ILECs from separating, except upon a competing carrier's request, network elements that the ILEC combines for itself.

24. In *AT&T-Iowa*, the Supreme Court reinstated the FCC's "pick and choose" rule, finding that because it tracked the language of § 252(i) of the 1996 Act almost exactly, it was the most readily apparent interpretation of the statute.

25. SBC, the corporate parent of Pacific, has agreed that Pacific will continue to honor the terms of its existing interconnection agreements, including the combination provisions thereof, while the FCC is reconsidering Rule 319 to determine which network elements satisfy the "necessary and impair" standard of § 251(d)(2). Moreover, Pacific has failed to seek renegotiation within the time provided for in its interconnection agreements in the situation where a judicial decision allows but does not require Pacific to discontinue providing any network element, service or combination provided for in the interconnection agreements.

26. Pacific proposes that the price for each UNE should be set no lower than its adopted TELRIC cost, plus a markup of 22% to cover shared and common costs.

27. The markups proposed by Pacific in setting UNE prices range from 22% over adopted TELRIC costs to 9900% over adopted TELRIC costs.

28. Pacific's claim that there is a risk of stranded, unrecoverable investment in providing UNEs is based on the concern that a CLEC purchasing UNEs may suddenly decide to stop serving its customers through UNEs and begin serving them instead through the CLEC's own facilities, once the CLEC has enough customers to make such a switch economic.

29. The risk of stranded, unrecoverable investment described in Finding of Fact (FOF) 28 can allegedly be eliminated through an adder calculated by multiplying the investment component of a UNE's TELRIC by a factor of 3.3, as described by Dr. Hausman. The price of a UNE is then determined by taking the sum of (a) the aforesaid adder, (b) the element's TELRIC, and (c) a markup to cover shared and common costs.

30. An alternative method of reducing the alleged risk of stranded, unrecoverable investment described in FOF 28 is to require the CLEC purchasing UNEs from an ILEC to enter into a contract to purchase the UNEs for a fixed term rather than month-to-month.

31. Pacific's pricing witnesses did not propose markups for UNEs that reflected the adder described in FOF 29, because these witnesses did not believe that the Commission would accept such high markups.

32. Pacific's witnesses did not offer any concrete proposals for making UNEs available to CLECs through fixed-term contracts.

33. Demand for UNEs is only one of the reasons why Pacific is likely to build plant in the future, and thus is only one of the reasons why such plant might become stranded.

34. Regulatory requirements seem likely to play at least as important a role in the future investment decisions of ILECs as the demand for UNEs by CLECs.

35. To the extent that CLECs must advance construction costs for new facilities that they order, it is unlikely that UNEs will be ordered in geographic areas that are unprofitable or only marginally profitable.

36. It is unlikely that plant installed to satisfy demand for UNEs in less-populated geographic areas will become stranded, because the most intense local exchange competition in the near future is likely to be for business customers and high-volume residential customers, most of whom are found in low-cost, densely settled geographic areas.

37. In the densely populated areas where most of the competition for business and residential customers is likely to occur in the near future, Pacific's risks of stranded investment are more likely to be connected with the provision of retail service than with the provision of UNEs.

38. For the purpose of recovering shared and common costs, Pacific advocated a markup of 22% over the TELRIC costs adopted in D.98-02-106, to be applied uniformly to all UNEs.

39. Most of the UNE prices proposed by Pacific fell somewhere between the price that would have been justified under the approach described in FOF 29 and TELRIC plus 22%.

40. Many of the UNE prices proposed by Pacific are close to those set forth in Pacific's current tariffs and interconnection agreements.

41. The degree of wholesale competition that now exists between Pacific and CLECs is small.

42. All non-ILEC parties agreed that Pacific's UNE prices should be set by imposing a uniform markup to cover shared and common costs over the TELRICs adopted in D.98-02-106. The only exception to this was for residential loops, which AT&T/MCI wanted to price below the applicable TELRIC.

43. The non-ILEC parties differed sharply over the extent of the uniform markup appropriate to cover Pacific's shared and common costs, with recommendations ranging from 3% to 15%.

44. Pacific's net revenues from Yellow Pages have been taken into account in setting the revenue requirement that was used to determine the price of basic residential service.

45. AT&T/MCI and Pacific agree that in the situation where a CLEC serves residential customers through a combination of its own facilities and UNEs purchased from Pacific, anomalies can arise from the fact that UNE prices are being set in this proceeding on a statewide-average basis, while funding for Universal Service under the CHCF-B is apportioned on a geographically-deaveraged basis.

46. AT&T/MCI propose to deal with the anomalies described in FOF 45 by applying a surcredit of $2.64 to each loop UNE that is purchased.

47. Pacific proposes to deal with the anomalies described in FOF 45 by dividing the CHCF-B subsidy between the CLEC and Pacific according to a formula that focuses on the cost of the loop.

48. Even with the anomalies described in FOF 45, the current absence of geographically-deaveraged UNE prices does not result in a windfall for Pacific under the Universal Service funding rules adopted in D.96-10-066.

49. Neither AT&T nor MCI has applied to become a carrier-of-last-resort under the rules set forth in D.96-10-066.

50. The anomaly described in FOF 45 will disappear once geographically-deaveraged UNE prices are set.

51. In its June 10, 1999 Order in *Iowa Utilities Board*, the Eighth Circuit has formally reinstated the requirement of geographically-deaveraged UNE prices set forth in the First Report and Order (47 C.F.R. § 51.507(f)).

52. The FCC has granted a stay of the requirement for geographically-deaveraged UNE prices that will remain in effect until May 1, 2000.

53. This Commission expects to institute a proceeding in the near future for the purpose of developing geographically-deaveraged UNE prices.

54. D.98-02-106 did not adopt TELRIC costs for DS-1 line ports, 4-wire entrance facilities, the DS-3 entrance facility without equipment, unbundled loops provided over digital loop carrier and delivered to the entrant as a digital facility, SS7 links, digital cross-connect systems (DCS), and LIDB and 800 database queries.

55. Pacific's TELRIC studies for dedicated transport reflect the benefits of SONET technology.

56. The loop conditioning costs in the ADSL tariff filed by Pacific with the FCC reflect embedded rather than forward-looking costs.

57. In its decision in *Iowa Utilities Board*, the Eight Circuit concluded (at 120 F.3d 813) that the FCC could not prohibit ILECs from tearing apart combinations of UNEs that the ILECs use themselves, because § 251 (c)(3) of the Act does not require ILECs to offer UNEs on a combined basis, and because prohibiting the disassembly of UNE platforms could obliterate the distinction in the Telecommunications Act between access to UNEs at cost-based rates (on the one hand) and the purchase at wholesale rates of the ILEC's retail services (on the other).

58. In the Spring of 1998, Pacific entered into partially-secret Memoranda of Understanding with AT&T, MCI and Sprint which provided that in exchange for the agreement of these carriers to change from the CABS billing system to the CRIS billing system, Pacific would continue to provide AT&T, MCI and Sprint with the UNE combinations specified in their respective interconnection agreements at the rates specified in said agreements, notwithstanding the legal right that Pacific claimed it had under the Eight Circuit decision in *Iowa Utilities Board* to discontinue providing such UNE combinations.

59. The Memorandum of Understanding between Pacific and AT&T provided that Pacific would continue to provide UNE combinations upon the terms set forth therein regardless of any regulatory, legislative or judicial change or ruling, unless such continued performance was expressly prohibited by such a change or ruling.

60. Pacific's Memoranda of Understanding with MCI and Sprint contained provisions comparable although not identical to the provision described in FOF 59.

61. Of the five "points of access" proposed by Pacific, one depends upon extending UNEs requiring cross-connection to a point of termination in a CLEC's collocation cage, and a second requires extending UNEs requiring cross-connection to the common frame in a collocation common area.

62. It is possible that degradation of telephone service might result from combining UNEs in the manner required under the points-of-access proposal described in FOF 61.

63. In remand proceedings before the Eighth Circuit following *AT&T-Iowa,* the parties have disagreed whether the Eight Circuit's vacation of FCC Rules 315(c)-(f) was challenged in the petitions for certiorari filed in the Supreme Court, and assuming it was, whether the reasoning given by the Supreme Court

for reinstating Rule 315(b) applies to Rules 315(c)-(f) as well. In its June 10, 1999 Order in *Iowa Utilities Board*, the Eighth Circuit has asked for briefing on these issues.

64. Only Pacific attempted to submit model tariff language with its testimony, in the form of a generic appendix that Pacific proposed to include with future interconnection agreements.

65. The parties who participated in the pricing hearings disagreed over whether this Commission has authority under the Telecommunications Act to require that UNE prices be set forth in tariffs.

66. In D.89-10-031, the Commission concluded that it was necessary to set price floors for Category II (partially-competitive) services.

67. In D.89-10-031, the Commission required LECs to set price floors by imputing into the tariffed rate for any bundled service, the tariffed rate of any function deemed a monopoly building block (MBB) that is necessary to provide the bundled service.

68. In D.94-09-065, the Commission approved an alternative form of imputation known as the "contribution" method, under which the price floor for a service equals the sum of (a) the long run incremental cost (LRIC) of the bundled Category II service, and (b) the difference between the tariffed rate of any MBB used in the service and the MBB's LRIC. The second factor is called the "contribution" from the MBB.

69. D.96-03-020 reclassified certain local exchange services as Category II services, and ruled that price floors for these services would be set in the OANAD proceeding after TSLRICs were adopted for them. The services so reclassified were: basic flat rate residential access line service (1 FR), basic measured residential access line service (1 MR), basic business access line service (1 MB), business and residence ISDN feature, business and residence ZUM

usage, business and residence local usage, and coin operated pay telephone service.

70. The ALJ ruling issued in this docket on December 18, 1996 determined that price floors for the services set forth in FOF 69 would be set in the pricing hearings following the Commission's decision choosing between the TSLRIC and TELRIC methodologies.

71. The prices of firms in competitive markets do not include arbitrary allocations of shared and common costs.

72. The volume-sensitive portion of the TSLRIC costs adopted in D.96-08-021 do not include any shared or common costs.

73. The fiber loops characterized by Dr. Tardiff as alternatives to Pacific's copper loops are, as a general matter, available only to business customers in California's larger cities.

74. Dr. Tardiff offered no estimate of how many business lines in California actually use fiber loops.

75. Dr. Tardiff failed to demonstrate that either the "wireless loop" offered by Winstar or the "Digital Link" service offered by AT&T is available to a significant number of Pacific's customers.

76. In 1996-1997, Pacific's share of the total market for loops in its service area exceeded 99%.

77. At the present time, a CLEC that leases loops in a central office where it is not economic for the CLEC to collocate has no practical choice but to lease switching from the ILEC providing the loops.

78. At the present time, CLECs are collocated in only 86 of the 700-plus central office buildings that Pacific has in its service territory, which is less than 15% of such central offices.

79. The competitive impacts of the Extended Link service ordered in D.98-12-069, and of the cageless collocation recently ordered by the FCC, cannot yet be determined with any certainty.

80. The data used to produce white page listings is expensive and difficult to produce.

81. Without a single source for white page listings, the utility of both CLEC and ILEC white pages would be reduced.

82. Access to white page listings is one of the items on the 14-point competitive checklist included in § 271 of the Telecommunications Act.

83. Transport that is competitive with Pacific's is widely available in California. Most of this alternative transport occurs through fiber, although it is also offered via HFC, microwave and SONET.

84. Directory assistance and operator services are available from a significant number of vendors other than Pacific.

85. Pacific's price floor approach assumes that the total revenues from a service are sufficient to cover the non-volume sensitive costs attributable to the service.

86. Pacific proposes to use a series of cross-subsidy tests to ensure that each service's non-volume sensitive costs are recovered as described in FOF 85.

87. The cross-subsidy tests advocated by Pacific involve a large degree of subjectivity in placing services into "service groups," and in determining how the 20 shared family cost categories should be allocated among the 40 service groups.

88. Verifying that Pacific's proposed cross-subsidy tests were satisfied each time approval was sought for a new price floor would be a very labor-intensive task for Commission staff and the affected parties.

89. D.89-10-031 states that the price floor for an ILEC service should include some of the overheads applicable to the service.

90. Because of Y2K concerns, many businesses including Pacific are imposing a moratorium on computer programming in their firms during December 1999 and January 2000.

Conclusions of Law

1. It will take some time for the full implications of *AT&T-Iowa* to work their way through the interconnection agreements that have been approved and the UNE costs and prices that have been determined since 1996.

2. It is not appropriate to adopt geographically-deaveraged UNE prices at this time in light of the facts that (a) this Commission did not adopt geographically-deaveraged costs in D.98-02-106, (b) the FCC has granted a stay of the requirement in the First Report and Order for geographically-deaveraged UNE prices, and (c) this Commission expects to commence a proceeding in the near future to develop geographically-deaveraged UNE prices.

3. Dr. Hausman's proposal for an adder on UNE prices to account for the risk of future stranded investment is ultimately based on the assumption that the TELRIC methodology does not adequately distinguish between fixed and sunk costs. As such, it represents an improper collateral attack on the decision in D.98-02-106 to use TELRIC costs for UNE pricing.

4. Dr. Hausman's proposal for an up-front adder on UNE prices to account for the risk of future stranded investment is inconsistent with how this Commission ruled in Ordering Paragraph (OP) 7 of D.96-09-089 that it would handle similar stranding claims arising from "franchise impacts."

5. Dr. Hausman's proposal for an adder on UNE prices to account for the risk of future stranded investment is inconsistent with the interpretation of § 252(d)(1) of the Telecommunications Act set forth in Judge Illston's May 11,

1998 summary judgment ruling in *AT&T Communications of California, Inc. v. Pacific Bell, et al.*, from which this Commission is not appealing.

6. For the reasons set forth in FOFs 33-37, it is unlikely that Pacific will incur any stranded investment in the near future that is solely attributable to its obligation to provide UNEs to requesting telecommunications carriers.

7. Dr. Hausman's proposal to include an adder in the price of UNEs to account for the alleged risk of future stranded investment, as described in FOF 29, should not be adopted.

8. It would not be reasonable to set prices for the existing list of UNEs based on speculation about which network elements the FCC will retain as UNES after the Revised UNE List Order becomes final.

9. The UNE prices proposed by Pacific should not be adopted because they are highly subjective, are not based on any consistent markup approach, and would confer an unreasonably large amount of pricing discretion on Pacific.

10. The price for each UNE offered by Pacific should be equal to the TELRIC of the element as determined in D.98-02-106 and subsequent compliance filings, plus a markup to cover the shared and common costs approved by this Commission. This markup should be uniform for all UNEs.

11. The total of non-recurring costs adopted in D.98-12-079, $375 million, should be included in the denominator of the fraction used to compute the uniform markup.

12. In determining the fraction used to compute the uniform markup in this decision, there has been no double-counting of Pacific's non-recurring costs.

13. It would be unreasonable to include retail costs in the denominator of the fraction used to compute the uniform markup (as advocated by AT&T/MCI), because no retail costs were included in the shared and common costs approved for Pacific in D.98-02-106 and subsequent compliance filings.

14. It would be unreasonable to include the total forward-looking costs for all of Pacific's Category III and non-regulated services in the denominator of the fraction used to compute the uniform markup, as advocated by AT&T/MCI, because (1) these services have their own separate shared and common costs, and (2) the common costs attributable to these services were removed from the common cost total approved in D.98-02-106 and subsequent compliance filings.

15. The markup formula advocated by the FBC should not be adopted because it ignores the shared and common cost determinations made in D.98-02-106 and subsequent compliance filings.

16. The ARMIS data relied on by Sprint to support its recommendation of a 15% markup is historical cost data, rather than the forward-looking cost data required by the TELRIC methodology.

17. Sprint's experience as a local exchange service provider is of little relevance in determining the shared and common costs that a large firm like Pacific is likely to incur.

18. Sprint's recommendation of a 15% uniform markup to recover shared and common costs should not be adopted.

19. The uniform markup that Pacific should be allowed to add to its TELRIC costs for the purpose of recovering shared and common costs should be computed by dividing the total shared and common TELRIC costs adopted for Pacific's UNEs ($996 million) by the sum of (a) the total direct TELRIC costs approved for these UNEs ($4.814 billion), plus (b) the total NRCs adopted in D.98-12-079 ($375 million).

20. The uniform markup computed as set forth in Conclusion of Law (COL) 19 should be rounded to the nearest whole percentage point, which results in a uniform markup of 19%.

21. Non-recurring charges for UNEs should be determined by adding the 19% uniform markup described in COLs 19 and 20 to the non-recurring costs approved in D.98-12-079.

22. In those situations where a CLEC orders UNEs or combinations from Pacific via LEX or a form of EDI, and such UNEs or combinations are subject to the flow-through obligations set forth on *mimeo.* pages 3-4 of Appendix B of D.98-12-069, the non-recurring charges applicable to such UNEs or combinations should be the fully-mechanized non-recurring charges set forth in Appendix B hereto.

23. Whether it is appropriate to apply the fully-mechanized non-recurring charges set forth in Appendix B to other UNEs or combinations ordered from Pacific via LEX or a form of EDI should be determined in the OSS/NRC phase of this proceeding.

24. Pub. Util. Code § 728.2(a) does not require that Pacific's Yellow Page net revenues be taken into account when setting UNE prices.

25. Since Pacific's Yellow Page net revenues have already been taken into account in D.89-12-048 in setting the revenue requirement used to determine Pacific's basic residential rates, taking such net revenues into account again when setting the price for the UNE residential loop would amount to improper double-counting.

26. If Pacific's Yellow Page net revenues were to be taken into account in setting the price for the UNE residential loop, there would be no way of guaranteeing that residential ratepayers would benefit from this.

27. Adoption of the AT&T/MCI proposal for a $2.64 surcredit on loops financed through the CHCF-B would violate § 252(d)(1) of the Telecommunications Act, because it would result in loop UNE prices that are less than the cost of providing such loops.

28. The CHCF-B funds that AT&T/MCI propose to use to finance the $2.64 loop surcredit have already been used in D.98-07-033 for a permanent offset of certain Pacific rates.

29. The principal policy flaw in the AT&T/MCI proposal for a $2.64 surcredit applicable to the loop UNE is that it would convert an explicit subsidy intended to benefit residential customers in high-cost areas into an implicit subsidy that purchasers of UNEs could use to compete anywhere.

30. The principal flaw in the Pacific proposal described in FOF 47 is that, because most of the costs of providing basic residential service in high-cost areas are accounted for by the loop, the Pacific proposal would result in Pacific's receiving the lion's share of CHCF-B funding in most cases, even though the stated objective of the proposal is to allocate CHCF-B funding equitably between Pacific and a CLEC that provides service using some of its own facilities.

31. The adopted TELRIC cost for End Office Switching Trunk Port Termination, which Pacific refers to as the switch portion of its "Supertrunk" offering, should be used as a proxy for the DS-1 line side port.

32. Based on the record before us, the most reasonable method for developing a TELRIC cost for the DS-3 entrance facility *without* equipment, which we will adopt, is to back the costs of remote circuit equipment out of the adopted TELRIC cost for a DS-3 entrance facility *with* equipment.

33. The AT&T/MCI proposal for developing a TELRIC cost for unbundled loops provided over digital loop carrier (DLC) and delivered to the entrant as a digital facility, by using a combination of fiber and fiber electronics from the adopted TELRIC costs for the DS-1 loop and the DS-1 EISCC, is reasonable and should be adopted.

34. The adopted TELRIC costs for STP transport and transport elements that could serve as SS7 links, should be used to derive TELRIC costs for SS7 links and link mileage.

35. The adopted TELRIC costs for the 4-wire entrance facility should be used to set the UNE price of the 4-wire entrance facility.

36. The UNE price of a 2-wire entrance facility should be set by dividing the UNE price of the 4-wire entrance facility in half.

37. The adopted TELRIC costs for the DS-1 EISCC should be used as a proxy for the DCS cross-connect, and the multiplexing cost of a single DCS channel should be set at one twenty-fourth of the adopted TELRIC for the DS-1 multiplexing function.

38. For the time being, it is reasonable to set UNE prices for LIDB queries and 800 database queries by using the adopted TSLRIC costs for such queries.

39. Recurring prices for the elements described in COLs 31-38 should be set at the costs found reasonable therein plus a 19% markup to cover shared and common costs.

40. The non-recurring charge for DLC loops should be based upon the non-recurring charge for 2-wire loops.

41. The non-recurring charge for the DS-1 switch port should be based upon the non-recurring charge for the DS-1 trunk port.

42. A CLEC ordering DCS service and paying the non-recurring charges for DCS shown in Appendix B is entitled to have 24 DS-0 channels available to it at the DCS bank ordered, but should not be permitted to distribute these DS-0 channels to different locations.

43. The rule set forth in the preceding COL should also apply where DS-1 signals are multiplexed into DS-3, and where either DS-3 or DS-1 signals are de-multiplexed.

44. Pacific should be required to derive and submit, pursuant to the G.O. 96-A advice letter process, TELRIC costs for LIDB queries and 800 database queries. This advice letter submission should be subject to protest.

45. Pacific should be allowed to recover reasonable loop conditioning costs when it furnishes digital-capable copper loops to carriers that provide digital subscriber line service, and those carriers provide their own electronics for the loop.

46. Pacific's proposal to recover the loop conditioning charges for copper loops specified in its ADSL tariff on file with the FCC should not be adopted, because the loop conditioning charges in the FCC tariff are based on embedded costs rather than forward-looking costs.

47. Until the Commission can adopt TELRIC-based costs for loop conditioning, Pacific should be allowed to recover as conditioning charges for all 2-wire loops used to provide digital subscriber line service, the non-recurring charge applicable to an ISDN loop.

48. For ADSL-ready loops that require no additional conditioning, the non-recurring charge should be that applicable to analog loops.

49. The monthly recurring charge for a loop used to provide ADSL service should be that applicable to a 2-wire copper loop, and the monthly recurring charge for a loop used to provide IDSL service should be that applicable to an ISDN loop.

50. The evidence cited in Covad's Opening Comments to justify a reduced price for the ISDN loop UNE should not be considered, because it is outside the record of this proceeding.

51. In *AT&T-Iowa*, the Supreme Court held that the issue raised by the ILECs about the opportunities for arbitrage between purchasing UNEs and purchasing resale service is of minimal concern, because the universal service subsidies

included in resale rates must be phased out pursuant to § 254 of the Telecommunications Act, so any opportunities for arbitrage will be only temporary.

52. In *AT&T-Iowa*, the Supreme Court held that FCC Rule 315(b) represents a reasonable construction of § 251(c)(3) of the Telecommunications Act, which is ambiguous on the question of whether leased network elements may or must be separated, because Rule 315(b) is rooted in § 251 (c)(3)'s nondiscrimination requirement.

53. In view of the reinstatement of FCC Rule 315(b) in *AT&T-Iowa*, Pacific and other ILECs are obliged to provide to requesting telecommunications carriers, network elements that are already pre-assembled or combined on a "platform" that the ILEC uses itself.

54. Under FCC Rule 315(b), an ILEC that provides a UNE platform to a requesting telecommunications carrier is not entitled to a "recombination" fee or "regluing" charge for doing so.

55. In a case where a telecommunications carrier requests an ILEC to provide it with an existing UNE platform (*i.e.*, the "as is migration" situation), the appropriate compensation the ILEC should receive is the sum of the service order charges adopted herein applicable to each UNE included in the platform.

56. In the case where a requesting telecommunications carrier purchases separate unbundled network elements and requests the ILEC to combine them, the appropriate compensation the ILEC should receive for performing this combining work is the sum of the stand-alone non-recurring charges adopted herein for each of the UNEs being combined.

57. In the case where a telecommunications carrier initially requests an ILEC platform (*i.e.*, the "as is migration" situation), and then later requests that additional features or services be combined with the platform, the appropriate

compensation the ILEC should receive for combining the additional features or services with the platform is the sum of the stand-alone non-recurring charges adopted herein for each additional feature or service ordered from the ILEC.

58. Notwithstanding the current uncertainty surrounding the status of FCC Rules 315(c)-(f), this Commission has authority under Pub. Util. Code § 709.2(c)(1) to order ILECs to combine separate UNEs upon the request of a telecommunications carrier, or to order an ILEC to combine additional UNEs with an existing UNE platform.

59. The Supreme Court's decision in *AT&T-Iowa*, which reinstates FCC Rule 315(b), does not prohibit the continued performance of Pacific's obligation as described in FOFs 58-59 to continue providing UNE combinations.

60. If Pacific were to continue performing its obligation as described in FOFs 58-59 to provide UNE combinations to AT&T, while refusing to provide UNE combinations to other CLECs with which it has entered into interconnection agreements on the ground that the list of network elements it must offer on an unbundled basis is uncertain, such refusal would give rise to a claim of unlawful discrimination under §§ 251(c)(3), 251(c)(2) and 252(i) of the Telecommunications Act.

61. This Commission has power under Resolution ALJ-174 to reform interconnection agreements for the purpose of preventing or eliminating unlawful discrimination.

62. Owing to the potential for discrimination created by the Memoranda of Understanding described in FOFs 58-59, and pursuant to this Commission's powers to reform interconnection agreements to prevent unlawful discrimination and to order ILECs to combine UNEs pursuant to Pub. Util. Code § 709.2(c)(1), Pacific should be required to provide UNE combinations to requesting telecommunications carriers whose interconnection agreements with Pacific

provide for such combinations, in consideration of the compensation described COLs 55-57, for the remaining term of such agreements or for as long as such agreements remain in effect.

63. Pacific should be required to provide UNE combinations to any requesting telecommunications carrier covered by the preceding COL whose interconnection agreement with Pacific was entered into prior to January 25, 1999.

64. The Supreme Court's decision in *AT&T-Iowa* to reinstate the FCC's "pick and choose" rule may render moot the controversy about whether the prices, terms and conditions for UNEs should be set forth in tariffs.

65. Pending further clarification from the FCC, it appears that the documents ILECs may be required to file to comply with the "pick and choose" rule will be very similar in form and content to tariffs.

66. In view of the facts that (a) the FCC may revise or clarify the "pick and choose" rule in the near future, (b) many of Pacific's existing interconnection agreements will begin to expire at the end of 1999, (c) existing interconnection agreements must be available for public inspection pursuant to § 252(h) of the Telecommunications Act, and (d) the prices set forth in this decision are matters of public record, it is unnecessary and would not be a good use of the Commission's or the parties' resources to require the filing at this time of tariffs or tariff-like documents for UNEs.

67. Absent direction to the contrary from the FCC, it is unlikely that this Commission will be able to undertake a general reexamination of the TELRIC costs adopted in D.98-02-106 and D.98-12-079 during the next three years.

68. Barring a general reexamination of TELRIC costs, this Commission should hold, beginning in the year 2001, an annual proceeding to reexamine UNE

recurring costs that are alleged to have changed substantially from the costs adopted in D.98-02-106 (and related compliance filings).

69. In each such proceeding, the Commission should reexamine the costs of no more than two UNEs. The network element costs to be reexamined should be chosen by the Commission from nominations made either by Pacific or by a CLEC. The nominations should be contained in a filing made between February 1st and March 1st of each year, beginning in 2001. The party making the nomination should offer a summary of the evidence showing that there has been a change in the recurring costs for the element of at least 20% from the costs adopted for that element in D.98-02-106 (and related compliance filings).

70. Unless and until the Commission determines, pursuant to the procedure outlined in the preceding COL, that there has been a change in the recurring costs of a particular UNE covered by D.98-02-106 (and related compliance filings), the price for such UNE in any future interconnection agreement submitted to this Commission for arbitration pursuant to § 252(b) of the Telecommunications Act should be taken from the prices set forth in the appendices to this decision.

71. The imputation requirement set forth in D.89-10-031 and D.94-09-065 acts as a safeguard against anticompetitive ILEC behavior in two ways: (a) it ensures that the price of an ILEC's bundled competitive service recovers at least the cost of providing the service, thus preventing cross-subsidization, and (b) it prevents the ILEC from underpricing the bundled competitive service, which would harm competitors of the ILEC.

72. The "contribution" method of imputation described in D.94-09-065 is the algebraic equivalent of the original imputation formula set forth in D.89-10-031.

73. Because the contribution method of imputation is the algebraic equivalent of the original imputation formula, it would be appropriate to use the

contribution method for setting price floors here, especially since the contribution method can fill in certain gaps in the TSLRIC and TELRIC costs that this Commission has adopted.

74. Setting price floors for the services here by taking the sum of the prices of all UNEs used in providing the service would result in price floors that include far more shared and common costs than are appropriate in a competitive environment.

75. Using the volume-sensitive portion of the TSLRIC of a service (plus contribution) to set the price floor for the service would allow the Commission to overcome the fact that the competitive and non-competitive components of the services at issue here have not been completely defined.

76. For the reasons set forth in COLs 72-75, the contribution method of imputation should be used in setting price floors for the services specified in FOF 69.

77. For the reasons set forth in FOFs 86-88, the tests advocated by Dr. Emmerson for detecting cross-subsidies in Pacific's services should not be relied upon.

78. The risk of cross-subsidy in the price floors adopted herein will be reduced by starting with the TELRIC-based UNE price in computing contribution, since the TELRIC methodology assigns directly to network elements many costs that would be considered "shared" or "common" under the TSLRIC methodology.

79. The correct method of computing the contribution from MBBs to be imputed into Pacific's price floors is to subtract from the TELRIC-based price of each UNE found to be an MBB, the volume-sensitive portion of the TSLRIC of the MBB.

80. The price floor for each service at issue here should be set equal to the sum of (a) the contribution computed as set forth in COL 79, plus (b) the volume-sensitive portion of the TSLRIC for the service.

81. The test for determining what constitutes an MBB should be considered the same as for determining what constitutes an "essential facility" under antitrust law; *i.e.*, the economic infeasibility for the competing carrier of duplicating the essential facility practicably or reasonably, whether through purchase or self-provision.

82. It is clear under *AT&T-Iowa* that not all of the UNEs set forth in the original version of FCC Rule 319 can be considered MBBs.

83. D.96-03-020 does not hold that all of the UNEs set forth in the original version of FCC Rule 319 should be considered MBBs.

84. This Commission has never ruled that all of the UNEs set forth in the original version of FCC Rule 319 should be considered MBBs.

85. The parties to this proceeding were given sufficient notice that the issue of which UNEs should be classified as MBBs would be considered in the pricing hearings.

86. Those parties arguing that Pacific is improperly seeking recategorization of services in its price floor testimony appear to be confusing imputation with categorization.

87. It would not be appropriate to delay setting price floors until after the FCC's Revised UNE List Order becomes final.

88. At the present time, the loop should be considered an MBB for purposes of determining imputation via the contribution method.

89. In view of our decision in D.98-02-106 not to adopt geographically-deaveraged costs or prices for UNEs, and our decision herein not to adopt the AT&T/MCI proposal for a surcredit on loops financed through the

CHCF-B, the geographically-deaveraged price floors advocated by Pacific, which depend on a determination of whether or not the loop is essential in a particular geographic area, should not be adopted.

90. At the present time, switching (*i.e.*, the port) should be considered an MBB for purposes of determining imputation via the contribution method.

91. Contribution from switching minutes-of-use should not be imputed into the three access line services at issue here (*i.e.*, 1 MB, 1 FR and 1 MR), because switching minutes-of-use are already imputed into Pacific's toll price floors.

92. At the present time, white page listings should be considered an MBB for purposes of determining contribution for the 1 MB, 1 FR and 1 MR services.

93. None of the other UNEs set forth in the version of FCC Rule 319 that the Supreme Court set aside in *AT&T-Iowa* should be considered an MBB.

94. The determination in COL 90 is not intended to prejudge any of the issues being considered in the Local Competition proceeding about the price to be charged pursuant to § 222(e) of the Telecommunications Act for providing directory listings to third-party publishers.

95. The price floor formula set forth in COL 80 should be used by Pacific in the future whenever it proposes a price floor for a newly-recategorized Category II service, or for a customer-specific contract or express contract pursuant to the procedures outlined in D.94-09-065 (56 CPUC2d at 238-242).

96. In view of the widespread moratorium on computer programming attributable to Y2K concerns, it is reasonable to allow Pacific until March 1, 2000 to complete the billing program changes necessary to reflect the UNE prices adopted herein.

97. Provided that Pacific makes promptly all adjustments necessary to reflect in bills that the effective date of the UNE prices adopted herein is the effective date of this decision, it is reasonable not to count the delay in making the billing

program changes described in the preceding COL against Pacific in the performance measurements applicable to Pacific in the ongoing proceeding being conducted pursuant to § 271 of the Telecommunications Act.

ORDER

IT IS ORDERED that:

1. The monthly recurring prices for unbundled network elements (UNEs) offered by Pacific Bell (Pacific) that are set forth in Appendix A to this decision satisfy the requirements of Sections 251(c)(2), 251(c)(3), and 252(d)(1) of the Telecommunications Act of 1996 and are hereby adopted.

2. The non-recurring charges associated with the UNEs offered by Pacific, which charges are set forth in Appendix B to this decision, satisfy the requirements of Sections 251(c)(2), 251(c)(3), and 252(d)(1) of the Telecommunications Act of 1996 and are hereby adopted.

3. Pursuant to Commission Resolution ALJ-174 (adopted June 25, 1997), Pacific shall prepare amendments to all interconnection agreements between itself and other carriers that were reached through arbitration by this Commission. Such amendments shall substitute the monthly recurring UNE prices set forth in Appendix A, and the non-recurring charges set forth in Appendix B, for the interim UNE prices and non-recurring charges set forth in such interconnection agreements. Such amendments shall be filed with the Commission's Telecommunications Division, pursuant to the advice letter process set forth in Rules 4.3.1 and 4.3.2 of Resolution ALJ-174, within 30 days after the effective date of this order. Unless protested, such amendments shall become effective 5 days after filing.

4. Pacific shall prepare amendments to all interconnection agreements between itself and other carriers that were reached through arbitration by this

Commission and that provide for interim UNE combination charges. Such amendments shall use the illustrative examples of UNE combinations set forth in Appendix C to determine the appropriate UNE combination charges that should supersede, pursuant to Commission Resolution ALJ-174, the interim UNE combination charges set forth in such agreements. Such amendments shall be filed with the Commission's Telecommunications Division, pursuant to the advice letter process set forth in Rules 4.3.1 and 4.3.2 of Resolution ALJ-174, within 30 days after the effective date of this order. Unless protested, such amendments shall become effective 5 days after filing.

5. Pacific may have until March 1, 2000 to complete the billing program changes necessary to reflect in bills the monthly recurring prices and non-recurring charges for UNEs adopted in this order. Upon completion of said billing program changes, Pacific shall notify the Director of the Telecommunications Division in writing that all of the necessary billing program changes have been completed.

6. The monthly recurring prices and non-recurring charges for UNEs adopted in this order shall be effective as of November 18, 1999, and Pacific shall make all billing adjustments necessary to ensure that this effective date is accurately reflected in bills applicable to UNEs.

7. The price floors for the Pacific services set forth in the Compliance Reference Document (CRD), a redacted version of which is attached to this decision as Appendix D, satisfy the requirements of Decision (D.) 89-10-031, D.94-09-065, D.96-03-020 and this decision with respect to price floors and are hereby adopted. The unredacted version of the price floor CRD shall be made available only to parties with whom Pacific has entered into a nondisclosure agreement consistent with the terms of the November 16, 1995 Administrative Law Judges' Ruling in this docket.

8. Within 20 days after the effective date of this order, Pacific shall submit to the Commission's Telecommunications Division (TD) for its approval, and shall serve upon all parties to this proceeding, an advice letter consistent with General Order (G.O.) 96-A that contains Total Element Long Run Incremental Costs (TELRICs) for 800 database queries and Line Identifier Database (LIDB) queries, as required by Conclusion of Law (COL) 44 of this order. Upon the request of TD, Pacific shall produce workpapers that show how it has derived these TELRICs, and shall serve such workpapers on those parties to this proceeding who request them. This advice letter shall be subject to protest in accordance with G.O. 96-A.

9. Pacific shall commence preparing loop conditioning cost studies based on the TELRIC methodology, and shall submit such studies for review in such proceeding(s) as the Commission, any Commissioner or any assigned Administrative Law Judge shall direct.

10. Pursuant to COLs 62 and 63, Pacific shall continue providing combinations of UNEs to any party with whom Pacific entered into an interconnection agreement reached through arbitration prior to January 25, 1999 that required Pacific to provide such combinations. This obligation to continue providing UNE combinations in accordance with the terms of such interconnection agreements (as modified by Ordering Paragraph 4) shall continue for the remaining term of any such interconnection agreement, or for as long as such interconnection agreement remains in effect.

11. Unless the Commission undertakes a general reexamination of TELRIC costs no later than February 1, 2001, then the Commission shall, beginning in the year 2001, conduct an annual proceeding to reexamine the recurring costs of no more than two UNEs. The UNEs to be reexamined shall be chosen by the Commission from among those nominated by Pacific or carriers with which

Pacific has entered into interconnection agreements. The nominations shall be set forth in filings made between February 1st and March 1st of each year. If the filing is made by a carrier that has signed an interconnection agreement with Pacific, such filing shall set forth a summary of the evidence alleged to show that the costs of the nominated UNE(s) have declined by at least 20% from the costs approved for such UNE(s) in D.98-02-106 (and related compliance filings). If the filing is made by Pacific, then such filing shall set forth a summary of the evidence alleged to show that the costs of the nominated UNE(s) have increased by at least 20% from the costs approved for such UNE(s) in D.98-02-106 (and related compliance filings).

12. The annual cost reexamination proceeding authorized in the preceding Ordering Paragraph shall not consider any claim that the 19% markup for shared and common costs adopted in COLs 19 and 20 should be changed.

13. When proposing price floors in the future for services that have been newly recategorized as Category II services, or for customer-specific contracts or express contracts pursuant to the procedures outlined in D.94-09-065 (56 CPUC2d at 238-242), Pacific shall use the price floor formula set forth in COL 80. Existing price floors shall remain in effect until new price floors computed pursuant to this decision have been established.

14. The August 3, 1998 motion of AT&T Communications of California, Inc., AT&T Local Services on behalf of TCG Los Angeles, TCG San Diego, and TCG San Francisco (collectively, AT&T), and MCI Telecommunications Corporation (MCI) to file one business day late the redacted version of the joint AT&T/MCI reply brief, is hereby granted.

15. The August 5, 1998 motion of Cox California Telcom II, L.L.C. to file its reply brief one business day late, is hereby granted.

16. The June 9, 1999 motion of Covad Communications Company that its opening comments on the Proposed Decision (PD) be accepted for filing notwithstanding inadvertent service errors, is hereby granted.

17. The June 10, 1999 motion of Northpoint Communications, Inc. that its June 9, 1999 reply comments on the PD be accepted for filing, is hereby granted.

18. The October 15, 1999 emergency petition of AT&T to set aside submission, and to take comments on issues raised by Pacific in connection with the conditions imposed by the Federal Communications Commission in its October 6, 1999 opinion and order approving the proposed merger of Ameritech Corp. and SBC Communications, Inc. (FCC 99-279), is hereby denied.

This order is effective today.

Dated November 18, 1999, at San Francisco, California.

RICHARD A. BILAS
President
HENRY M. DUQUE
JOSIAH L. NEEPER
JOEL Z. HYATT
CARL W. WOOD
Commissioners

Appendix A.

Summary of Unbundled Network Elements Recurring Prices

Elements	Pacific Bell Monthly UNE Price
Link	
Basic or Assured Link (2-Wire)	$11.70
PBX Trunk Option	$2.18
Coin Option	$2.93
ISDN Option	$4.44
Digital 1.54 Mbps (DS-1)	$94.43
4-Wire Link	$37.28
4-Wire CO Facility Interface Connection	$15.35
Entrance Facilities	
Voice Grade (4W)	$46.90
DS1	$153.46
DS3	$1,837.18
Multiplexing	
DS0 / DS1	$255.58
DS1 / DS3	$287.88
Switching	
Ports	
2-Wire Ports	$2.88
Coin Port	$3.81
Centrex Port	$4.37
DID Port	$4.18
DID Number Block	$1.00
ISDN Port	$14.10
Switch Features	
Call Forward Variable	$0.57
Busy Call Forwarding	$0.56
Delayed Call Forwarding	$0.56
Call Waiting	$0.56
Three Way Calling	$0.57
Call Screen	$0.63
Message Waiting Indicator	$0.56
Repeat Dialing	$0.65
Call Return	$0.65
Call Forward Busy/Delay	$0.56
Speed Calling 8	$0.56
Speed Calling 30	$0.56

Appendix A.

Summary of Unbundled Network Elements Recurring Prices

Intercom	$0.62
Intercom Plus	$0.62
Remote Access to Call Forward	$0.60
Direct Connect -shared	$0.56
Direct Connect -unshared	$0.56
Select Call Forwarding	$0.60
Call Trace	$0.57
Speed Call 6	$0.56
Call Restriction	$0.88
Distinctive Ringing	$0.56
Directed Call Pickup	$0.57
WATS Access per Port	$0.56
WATS Access per Group	$1.73
Caller ID	$0.73
Caller ID Blocking	$0.58
Call Hold	$0.56
Remote Call Forwarding	$0.93
Hunting	$0.29
DNCF	$0.96

Switch Usage

Interoffice – Originating		
	setup per attempt	$0.00594
	holding time per MOU	$0.00184
Interoffice – Terminating		
	setup per call	$0.00700
	holding time per MOU	$0.00187
Intraoffice		
	setup per call	$0.01399
	holding time per MOU	$0.00362
Tandem Switching		
	setup per attempt	$0.00075
	setup per completed message	$0.00113
	holding time per MOU	$0.00067
Tandem Switching (overflow)		
	setup per attempt	$0.00552
	setup per completed message	$0.00952
	holding time per MOU	$0.00565

Trunk Port Termination

End Office Termination	$20.99
Tandem Termination	$142.82

Appendix A.

Summary of Unbundled Network Elements Recurring Prices

<u>InterofficeTransmissionFacilities</u>		
Switched Transport - Shared		
	Fixed Mileage per MOU	$0.001259
	Variable Mileage per MOU per Mile	$0.000021
Switched Transport - Shared - Overflow		
	Fixed Mileage per MOU	$0.011360
	Variable Mileage per MOU per Mile	$0.000021
Switched Transport - Common		
	Fixed Mileage per MOU	$0.001330
	Variable Mileage per MOU per Mile	$0.000021
Dedicated Transport – Voice Grade		
	Fixed Mileage	$3.22
	Variable Mileage per Mile	$0.19
Dedicated Transport - DS1		
	Fixed Mileage	$32.32
	Variable Mileage per Mile	$1.84
Dedicated Transport - DS3		
	Fixed Mileage	$372.70
	Variable Mileage per Mile	$35.72
<u>Expanded Interconnection Service Cross Connect (EISCC)</u>		
Voice Grade/ISDN		
	EISCC	$0.44
	Jack Panel	$1.79
DS0		
	EISCC	$26.07
	Jack Panel	$5.60
DS1		
	EISCC	$16.52
	Jack Panel	$2.49
	Repeater	$24.15
DS3		
	EISCC	$45.80
	Jack Panel	$25.88
	Repeater	$101.36

Appendix A.

Summary of Unbundled Network Elements Recurring Prices

White Page Listings				
	CLEC Listings			$0.40
Operator Services				
	Directory Assistance per Call			$0.39494
	Operator Services per work second			$0.02952
SS7				
	STP Port			$263.76
Additional Elements				
SS7				
	SS7 Links			
		Voice Grade		
			Fixed Mile	$3.22
			Variable Mile	$0.19
		DS-1		
			Fixed Mile	$32.32
			Variable Mile	$1.84
Database Query				
	800 Database - per Query			$0.00219
	Line Identifier Database (LIDB) - per Query			$0.00256
Entrance Facility				
	2-Wire Voice Grade			$23.45
	DS-3 without Equipment			$724.04
Unbundled Loops provided over DLC to an Entrant as a Digital Facility				
	per Digital Facility			$24.41
	per Voice Line Activated			$5.71
Digital Cross-Connect System (DCS)				$16.52
	Multiplexing			
		DS-0 / DS-1 per Channel		$10.65
		DS-1 / DS-3 per Channel		$12.00
Switching				
	Ports			
		DS-1 Port		$20.99

Shared Common Allocator: 19.00%

Nonrecurring Charges* for Pacific Bell

Appendix B.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
BASIC SWITCHING FUNCTION								
1AESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
1AESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA & DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
1AESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
5ESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
5ESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA & DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
5ESS CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
DMS100 CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
DMS100 CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA & DA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00
DMS100 CLC SWITCH SERVICE ESTABLISHMENT (PER CLC, PER SWITCH) OA TRUNK GROUP (CESAR/LEX - COMPLEX)	$277.98	$133.76	$187.54	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
CROSS CONNECT								
EISCC - BASIC VG/ISDN - INITIAL (CESAR/LEX - SIMPLE)	$2.08	$3.29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - BASIC VG/ISDN - INITIAL (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - BASIC VG/ISDN - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.81	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - BASIC VG/ISDN - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS0 - INITIAL (CESAR/LEX - SIMPLE)	$2.08	$3.29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS0 - INITIAL (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS0 - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.81	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS0 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS1 - INITIAL (CESAR/LEX - SIMPLE)	$2.08	$3.29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS1 - INITIAL (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS1 - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.81	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS1 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS3 - INITIAL (CESAR/LEX - SIMPLE)	$2.08	$3.29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS3 - INITIAL (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS3 - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.81	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
EISCC - DS3 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
UNBUNDLED SERVICE CROSS CONNECT (DS0) - INITIAL (CESAR/LEX - SIMPLE)	$2.08	$3.29	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS

	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
UNBUNDLED SERVICE CROSS CONNECT (DS0) - INITIAL (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
UNBUNDLED SERVICE CROSS CONNECT (DS0) - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.81	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
UNBUNDLED SERVICE CROSS CONNECT (DS0) - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
DIGITAL CROSS CONNECT SERVICE - DCS								
MULTIPLEXING DS1/DS0 (CESAR/LEX - SIMPLE)	$4.05	$4.05	$0.00	$0.00	$80.12	$36.13	$0.00	$0.00
MULTIPLEXING DS1/DS0 (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$80.12	$36.13	$0.00	$0.00
MULTIPLEXING DS3/DS1 (CESAR/LEX - SIMPLE)	$4.05	$4.05	$0.00	$0.00	$84.17	$36.32	$0.00	$0.00
MULTIPLEXING DS3/DS1 (MECHANIZED)	$0.16	$0.16	$0.00	$0.00	$84.17	$36.32	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
DNCF (DIRECT NUMBER CALL FORWARDING)								
DNCF - CENTREX - INITIAL (MANUAL/FAX - COMPLEX)	$71.39	$54.01	$56.59	$52.07	$0.00	$0.00	$0.00	$0.00
DNCF - CENTREX - INITIAL (CESAR/LEX - COMPLEX)	$44.91	$26.06	$28.32	$23.90	$0.00	$0.00	$0.00	$0.00
DNCF - CENTREX - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - CENTREX - ADDITIONAL (MANUAL/FAX - COMPLEX)	$4.05	$2.63	$2.29	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - CENTREX - ADDITIONAL (CESAR/LEX - COMPLEX)	$4.05	$2.63	$2.29	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - CENTREX - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - DID - INITIAL (MANUAL/FAX - COMPLEX)	$71.39	$54.01	$56.59	$52.07	$0.00	$0.00	$0.00	$0.00
DNCF - DID - INITIAL (CESAR/LEX - COMPLEX)	$44.91	$26.06	$28.32	$23.90	$0.00	$0.00	$0.00	$0.00
DNCF - DID - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - DID - ADDITIONAL (MANUAL/FAX - COMPLEX)	$4.05	$2.63	$2.29	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - DID - ADDITIONAL (CESAR/LEX - COMPLEX)	$4.05	$2.63	$2.29	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - DID - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF - POTS - INITIAL (MANUAL/FAX - SIMPLE)	$56.52	$51.55	$52.11	$49.54	$0.00	$0.00	$0.00	$0.00
DNCF - POTS - INITIAL (CESAR/LEX - SIMPLE)	$29.74	$23.94	$24.51	$22.04	$0.00	$0.00	$0.00	$0.00
DNCF - POTS - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS

	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
DNCF – POTS - ADDITIONAL (MANUAL/FAX - SIMPLE)	$3.24	$2.66	$2.97	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF – POTS - ADDITIONAL (CESAR/LEX - SIMPLE)	$2.89	$2.66	$2.97	$0.00	$0.00	$0.00	$0.00	$0.00
DNCF – POTS - ADDITIONAL (MECHÀNIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
FEATURES, IN ADDITION TO SELECTED PORT								
CENTREX STATION FEATURES - INITIAL (MANUAL/FAX - SIMPLE)	$3.24	$0.00	$46.53	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX STATION FEATURES - INITIAL (CESAR/LEX - SIMPLE)	$3.24	$0.00	$18.81	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX STATION FEATURES - INITIAL (MECHANIZED)	$0.16	$0.00	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX STATION FEATURES - ADDITIONAL (MANUAL/FAX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX STATION FEATURES - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX STATION FEATURES - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
CENTREX SYSTEM FEATURES (MANUAL/FAX - SIMPLE)	$3.24	$0.00	$46.53	$0.00	$21.27	$15.61	$21.27	$0.00
CENTREX SYSTEM FEATURES (CESAR/LEX - SIMPLE)	$3.24	$0.00	$18.81	$0.00	$21.27	$15.61	$21.27	$0.00
CENTREX SYSTEM FEATURES (MECHANIZED)	$0.16	$0.00	$0.16	$0.00	$21.27	$15.61	$21.27	$0.00
CUSTOM CALLING FEATURE - INITIAL (MANUAL/FAX - SIMPLE)	$3.24	$0.00	$46.53	$0.00	$0.00	$0.00	$0.00	$0.00
CUSTOM CALLING FEATURE - INITIAL (CESAR/LEX - SIMPLE)	$3.24	$0.00	$18.81	$0.00	$0.00	$0.00	$0.00	$0.00
CUSTOM CALLING FEATURE - INITIAL (MECHANIZED)	$0.16	$0.00	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
CUSTOM CALLING FEATURE - ADDITIONAL (MANUAL/FAX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
CUSTOM CALLING FEATURE - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS

	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
CUSTOM CALLING FEATURE - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - INITIAL (MANUAL/FAX - SIMPLE)	$3.24	$0.00	$46.53	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - INITIAL (CESAR/LEX - SIMPLE)	$3.24	$0.00	$18.81	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - INITIAL (MECHANIZED)	$0.16	$0.00	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - ADDITIONAL (MANUAL/FAX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
HUNTING - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - INITIAL (MANUAL/FAX - SIMPLE)	$3.24	$0.00	$46.53	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - INITIAL (CESAR/LEX - SIMPLE)	$3.24	$0.00	$18.81	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - INITIAL (MECHANIZED)	$0.16	$0.00	$0.16	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - ADDITIONAL (MANUAL/FAX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - ADDITIONAL (CESAR/LEX - SIMPLE)	$0.81	$0.00	$2.02	$0.00	$0.00	$0.00	$0.00	$0.00
REMOTE CALL FORWARDING - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
INTEROFFICE TRANSMISSION FACILITIES (IOF) DEDICATED TRUNK TRANSPORT								
DIGITAL TRUNK TRANSPORT DS1 - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$44.91	$0.00	$42.48	$67.62	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS1 - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$18.81	$0.00	$14.77	$67.62	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS1 - INITIAL (MECHANIZED)	$0.73	$0.73	$0.00	$0.00	$67.62	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS1 - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS1 - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS1 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$44.91	$0.00	$42.48	$67.25	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$18.81	$0.00	$14.77	$67.25	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - INITIAL (MECHANIZED)	$0.73	$0.73	$0.00	$0.00	$67.25	$35.81	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
DIGITAL TRUNK TRANSPORT DS3 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$57.35	$29.97	$0.00	$0.00
VG TRUNK TRANSPORT - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$44.91	$0.00	$42.48	$62.05	$20.05	$0.00	$0.00
VG TRUNK TRANSPORT - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$18.81	$0.00	$14.77	$62.05	$20.05	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
VG TRUNK TRANSPORT - INITIAL (MECHANIZED)	$0.73	$0.73	$0.00	$0.00	$62.05	$20.05	$0.00	$0.00
VG TRUNK TRANSPORT - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$40.05	$13.65	$0.00	$0.00
VG TRUNK TRANSPORT - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$40.05	$13.65	$0.00	$0.00
VG TRUNK TRANSPORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$40.05	$13.65	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
INTEROFFICE TRANSMISSION FACILITIES (IOF) ENTRANCE FACILITY								
DS1 - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$48.15	$0.00	$42.48	$68.87	$43.77	$0.00	$0.00
DS1 - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$22.25	$0.00	$14.77	$68.87	$43.77	$0.00	$0.00
DS1 - INITIAL (MECHANIZED)	$0.32	$0.32	$0.00	$0.00	$68.87	$43.77	$0.00	$0.00
DS1 - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$58.41	$39.48	$0.00	$0.00
DS1 - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$58.41	$39.48	$0.00	$0.00
DS1 - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$58.41	$39.48	$0.00	$0.00
DS3 (W/ EQUIPMENT) - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$48.15	$0.00	$42.48	$114.90	$43.48	$0.00	$0.00
DS3 (W/ EQUIPMENT) - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$22.25	$0.00	$14.77	$114.90	$43.48	$0.00	$0.00
DS3 (W/ EQUIPMENT) - INITIAL (MECHANIZED)	$0.32	$0.32	$0.00	$0.00	$114.90	$43.48	$0.00	$0.00
DS3 (W/ EQUIPMENT) - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$74.60	$38.19	$0.00	$0.00
DS3 (W/ EQUIPMENT) - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$74.60	$38.19	$0.00	$0.00
DS3 (W/ EQUIPMENT) - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$74.60	$38.19	$0.00	$0.00
DS3 (W/O EQUIPMENT) - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$48.15	$0.00	$42.48	$69.10	$44.79	$0.00	$0.00
DS3 (W/O EQUIPMENT) - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$22.25	$0.00	$14.77	$69.10	$44.79	$0.00	$0.00
DS3 (W/O EQUIPMENT) - INITIAL (MECHANIZED)	$0.32	$0.32	$0.00	$0.00	$69.10	$44.79	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
DS3 (W/O EQUIPMENT) - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$58.41	$38.39	$0.00	$0.00
DS3 (W/O EQUIPMENT) - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$58.41	$38.39	$0.00	$0.00
DS3 (W/O EQUIPMENT) - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$58.41	$38.39	$0.00	$0.00
VOICE GRADE - INITIAL (MANUAL/FAX - COMPLEX)	$72.75	$48.15	$0.00	$42.48	$21.85	$7.56	$0.00	$0.00
VOICE GRADE - INITIAL (CESAR/LEX - COMPLEX)	$46.65	$22.25	$0.00	$14.77	$21.85	$7.56	$0.00	$0.00
VOICE GRADE - INITIAL (MECHANIZED)	$0.32	$0.32	$0.00	$0.00	$21.85	$7.56	$0.00	$0.00
VOICE GRADE - ADDITIONAL (MANUAL/FAX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$9.36	$5.03	$0.00	$0.00
VOICE GRADE - ADDITIONAL (CESAR/LEX - COMPLEX)	$5.66	$2.43	$0.00	$0.00	$9.36	$5.03	$0.00	$0.00
VOICE GRADE - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$9.36	$5.03	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
LINK								
4 WIRE - INITIAL (MANUAL/FAX - COMPLEX)	$63.06	$49.90	$53.09	$47.50	$28.84	$10.41	$11.40	$0.00
4 WIRE - INITIAL (CESAR/LEX - COMPLEX)	$35.09	$21.57	$24.00	$19.61	$28.84	$10.41	$11.40	$0.00
4 WIRE - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$28.84	$10.41	$11.40	$0.00
4 WIRE - ADDITIONAL (MANUAL/FAX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$18.95	$7.43	$0.00	$0.00
4 WIRE - ADDITIONAL (CESAR/LEX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$18.95	$7.43	$0.00	$0.00
4 WIRE - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$18.95	$7.43	$0.00	$0.00
ASSURED - INITIAL (MANUAL/FAX - SIMPLE)	$57.53	$48.94	$52.25	$47.42	$18.66	$8.54	$15.43	$0.00
ASSURED - INITIAL (CESAR/LEX - SIMPLE)	$29.93	$21.03	$24.33	$19.58	$18.66	$8.54	$15.43	$0.00
ASSURED - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$18.66	$8.54	$15.43	$0.00
ASSURED - ADDITIONAL (MANUAL/FAX - SIMPLE)	$3.24	$1.85	$2.02	$0.00	$12.53	$5.75	$0.00	$0.00
ASSURED - ADDITIONAL (CESAR/LEX - SIMPLE)	$3.24	$1.85	$2.02	$0.00	$12.53	$5.75	$0.00	$0.00
ASSURED - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$12.53	$5.75	$0.00	$0.00
BASIC - INITIAL (MANUAL/FAX - SIMPLE)	$57.53	$48.94	$52.25	$47.42	$18.56	$8.57	$15.50	$0.00
BASIC - INITIAL (CESAR/LEX - SIMPLE)	$29.93	$21.03	$24.33	$19.58	$18.56	$8.57	$15.50	$0.00
BASIC - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$18.56	$8.57	$15.50	$0.00
BASIC - ADDITIONAL (MANUAL/FAX - SIMPLE)	$3.24	$1.85	$2.02	$0.00	$12.67	$5.77	$0.00	$0.00
BASIC - ADDITIONAL (CESAR/LEX - SIMPLE)	$3.24	$1.85	$2.02	$0.00	$12.67	$5.77	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
BASIC - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$12.67	$5.77	$0.00	$0.00
DIGITAL DS1 COPPER - INITIAL (MANUAL/FAX - COMPLEX)	$63.06	$49.90	$53.09	$47.50	$104.59	$13.44	$0.00	$0.00
DIGITAL DS1 COPPER - INITIAL (CESAR/LEX - COMPLEX)	$35.09	$21.57	$24.00	$19.61	$104.59	$13.44	$0.00	$0.00
DIGITAL DS1 COPPER - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$104.59	$13.44	$0.00	$0.00
DIGITAL DS1 COPPER - ADDITIONAL (MANUAL/FAX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$58.25	$10.73	$0.00	$0.00
DIGITAL DS1 COPPER - ADDITIONAL (CESAR/LEX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$58.25	$10.73	$0.00	$0.00
DIGITAL DS1 COPPER - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$58.25	$10.73	$0.00	$0.00
DIGITAL DS1 FIBER - INITIAL (MANUAL/FAX - COMPLEX)	$63.06	$49.90	$53.09	$47.50	$108.56	$17.38	$0.00	$0.00
DIGITAL DS1 FIBER - INITIAL (CESAR/LEX - COMPLEX)	$35.09	$21.57	$24.00	$19.61	$108.56	$17.38	$0.00	$0.00
DIGITAL DS1 FIBER - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$108.56	$17.38	$0.00	$0.00
DIGITAL DS1 FIBER - ADDITIONAL (MANUAL/FAX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$61.00	$14.67	$0.00	$0.00
DIGITAL DS1 FIBER - ADDITIONAL (CESAR/LEX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$61.00	$14.67	$0.00	$0.00
DIGITAL DS1 FIBER - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$61.00	$14.67	$0.00	$0.00
ISDN LINK - INITIAL (MANUAL/FAX - COMPLEX)	$63.06	$49.90	$53.09	$47.50	$18.55	$8.57	$15.50	$0.00
ISDN LINK - INITIAL (CESAR/LEX - COMPLEX)	$35.09	$21.57	$24.00	$19.61	$18.55	$8.57	$15.50	$0.00
ISDN LINK - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.00	$18.55	$8.57	$15.50	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
ISDN LINK - ADDITIONAL (MANUAL/FAX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$12.67	$5.68	$0.00	$0.00
ISDN LINK - ADDITIONAL (CESAR/LEX - COMPLEX)	$3.69	$3.64	$1.94	$0.00	$12.67	$5.68	$0.00	$0.00
ISDN LINK - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$12.67	$5.68	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
LOCAL SWITCHING CAPABILITY, SWITCHING PORT								
BASIC 2 WIRE PORT - INITIAL (MANUAL/FAX - SIMPLE)	$51.55	$47.74	$47.74	$41.67	$7.82	$4.09	$0.04	$0.00
BASIC 2 WIRE PORT - INITIAL (CESAR/LEX - SIMPLE)	$23.84	$20.03	$20.43	$13.96	$7.82	$4.09	$0.04	$0.00
BASIC 2 WIRE PORT - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.16	$7.82	$4.09	$0.04	$0.00
BASIC 2 WIRE PORT - ADDITIONAL (MANUAL/FAX - SIMPLE)	$2.02	$1.62	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
BASIC 2 WIRE PORT - ADDITIONAL (CESAR/LEX - SIMPLE)	$2.02	$1.62	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
BASIC 2 WIRE PORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$5.80	$1.99	$0.04	$0.00
CENTREX PORT - INITIAL (MANUAL/FAX - COMPLEX)	$69.67	$47.74	$47.74	$41.67	$7.82	$4.09	$0.04	$0.00
CENTREX PORT - INITIAL (CESAR/LEX - COMPLEX)	$41.96	$20.03	$20.03	$11.33	$7.82	$4.09	$0.04	$0.00
CENTREX PORT - INITIAL (MECHANIZED)	$0.49	$0.49	$0.49	$0.49	$7.82	$4.09	$0.04	$0.00
CENTREX PORT - ADDITIONAL (MANUAL/FAX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
CENTREX PORT - ADDITIONAL (CESAR/LEX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
CENTREX PORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$5.80	$1.99	$0.04	$0.00
CENTREX SYSTEM ESTABLISH (NO SERIVE ORDER COSTS)	$0.00	$0.00	$0.00	$0.00	$26.72	$15.61	$26.72	$0.00
COIN PORT - INITIAL (MANUAL/FAX - SIMPLE)	$51.55	$47.74	$47.74	$41.67	$7.82	$4.09	$0.04	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
COIN PORT - INITIAL (CESAR/LEX - SIMPLE)	$23.84	$20.03	$20.43	$13.96	$7.82	$4.09	$0.04	$0.00
COIN PORT - INITIAL (MECHANIZED)	$0.16	$0.16	$0.16	$0.16	$7.82	$4.09	$0.04	$0.00
COIN PORT - ADDITIONAL (MANUAL/FAX - SIMPLE)	$2.02	$1.62	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
COIN PORT - ADDITIONAL (CESAR/LEX - SIMPLE)	$2.02	$1.62	$2.02	$0.00	$5.80	$1.99	$0.04	$0.00
COIN PORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$5.80	$1.99	$0.04	$0.00
DID NBR BLOCK (MANUAL/FAX - COMPLEX)	$69.67	$47.74	$47.74	$41.67	$27.71	$18.22	$0.00	$0.00
DID NBR BLOCK (CESAR/LEX - COMPLEX)	$41.96	$20.03	$20.03	$11.33	$27.71	$18.22	$0.00	$0.00
DID NBR BLOCK (MECHANIZED)	$0.49	$0.49	$0.49	$0.49	$27.71	$18.22	$0.00	$0.00
DID PORT - INITIAL (MANUAL/FAX - COMPLEX)	$69.67	$47.74	$47.74	$41.67	$20.03	$11.73	$0.04	$0.00
DID PORT - INITIAL (CESAR/LEX - COMPLEX)	$41.96	$20.03	$20.03	$11.33	$20.03	$11.73	$0.04	$0.00
DID PORT - INITIAL (MECHANIZED)	$0.49	$0.49	$0.49	$0.49	$20.03	$11.73	$0.04	$0.00
DID PORT - ADDITIONAL (MANUAL/FAX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$9.51	$3.99	$0.04	$0.00
DID PORT - ADDITIONAL (CESAR/LEX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$9.51	$3.99	$0.04	$0.00
DID PORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$9.51	$3.99	$0.04	$0.00
ISDN PORT - INITIAL (MANUAL/FAX - COMPLEX)	$69.67	$47.74	$47.74	$41.67	$19.50	$11.69	$0.04	$0.00
ISDN PORT - INITIAL (CESAR/LEX - COMPLEX)	$41.96	$20.03	$20.03	$11.33	$19.50	$11.69	$0.04	$0.00
ISDN PORT - INITIAL (MECHANIZED)	$0.49	$0.49	$0.49	$0.49	$19.50	$11.69	$0.04	$0.00
ISDN PORT - ADDITIONAL (MANUAL/FAX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$9.51	$3.99	$0.04	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
ISDN PORT - ADDITIONAL (CESAR/LEX - COMPLEX)	$2.02	$2.02	$2.02	$0.00	$9.51	$3.99	$0.04	$0.00
ISDN PORT - ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$9.51	$3.99	$0.04	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
NETWORK INTERFACE DEVICE (NID)								
NID TO NID CROSSCONNECT - SIMPLE (MANUAL/FAX - SIMPLE/COMPLEX)	$46.53	$0.00	$0.00	$0.00	$38.54	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - SIMPLE (CESAR/LEX - (SIMPLE/COMPLEX))	$17.73	$0.00	$0.00	$0.00	$38.54	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - SIMPLE (MECHANIZED)	$0.16	$0.00	$0.00	$0.00	$38.54	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX INITIAL (MANUAL/FAX - SIMPLE/COMPLEX)	$46.53	$0.00	$0.00	$0.00	$60.32	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX INITIAL (CESAR/LEX - (SIMPLE/COMPLEX))	$17.73	$0.00	$0.00	$0.00	$60.32	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX INITIAL (MECHANIZED)	$0.16	$0.00	$0.00	$0.00	$60.32	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX ADDITIONAL (MANUAL/FAX - SIMPLE/COMPLEX)	$0.00	$0.00	$0.00	$0.00	$15.01	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX ADDITIONAL (CESAR/LEX - (SIMPLE/COMPLEX))	$0.00	$0.00	$0.00	$0.00	$15.01	$0.00	$0.00	$0.00
NID TO NID CROSSCONNECT - COMPLEX ADDITIONAL (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$15.01	$0.00	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
SIGNALING AND DATABASE CAPABILITIES								
SS7 LINK- INITIAL (CESAR/LEX - COMPLEX)	$35.09	$21.57	$24.00	$19.61	$164.68	$54.21	$0.00	$0.00
STP PORT - INITIAL (CESAR/LEX - COMPLEX)	$41.96	$20.03	$20.03	$11.33	$123.34	$43.73	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record
TRUNK PORT TERMINATION								
END OFFICE DEDICATED (DS1) - INITIAL SYSTEM (MANUAL/FAX - COMPLEX)	$80.03	$53.81	$0.00	$44.91	$103.90	$31.26	$0.00	$0.00
END OFFICE DEDICATED (DS1) - INITIAL SYSTEM (CESAR/LEX - COMPLEX)	$54.74	$28.52	$0.00	$19.62	$103.90	$31.26	$0.00	$0.00
END OFFICE DEDICATED (DS1) - INITIAL SYSTEM (MECHANIZED)	$0.49	$0.49	$0.00	$0.49	$103.90	$31.26	$0.00	$0.00
END OFFICE DEDICATED (DS1) - ADDITIONAL SYSTEM (MANUAL/FAX - COMPLEX)	$3.24	$0.81	$0.00	$0.00	$80.16	$23.14	$0.00	$0.00
END OFFICE DEDICATED (DS1) - ADDITIONAL SYSTEM (CESAR/LEX - COMPLEX)	$3.24	$0.81	$0.00	$0.00	$80.16	$23.14	$0.00	$0.00
END OFFICE DEDICATED (DS1) - ADDITIONAL SYSTEM (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$80.16	$23.14	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - INITIAL SYSTEM (MANUAL/FAX - COMPLEX)	$80.03	$53.81	$0.00	$44.91	$103.69	$30.23	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - INITIAL SYSTEM (CESAR/LEX - COMPLEX)	$54.74	$28.52	$0.00	$19.62	$103.69	$30.23	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - INITIAL SYSTEM (MECHANIZED)	$0.49	$0.49	$0.00	$0.49	$103.69	$30.23	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - ADDITIONAL SYSTEM (MANUAL/FAX - COMPLEX)	$3.24	$0.81	$0.00	$0.00	$78.84	$23.14	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - ADDITIONAL SYSTEM (CESAR/LEX - COMPLEX)	$3.24	$0.81	$0.00	$0.00	$78.84	$23.14	$0.00	$0.00
TANDEM TERMINATION (PER DS1) - ADDITIONAL SYSTEM (MECHANIZED)	$0.00	$0.00	$0.00	$0.00	$78.84	$23.14	$0.00	$0.00

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

NETWORK ELEMENTS	Service Order (Preordering, Ordering & Billing)				Channel Connect (Provisioning & Maintenance)			
	Connect	Disconnect	Change	Record	Connect	Disconnect	Change	Record

* Nonrecurring charges for connects are to be recovered separately from disconnects and at the time of occurrence.

Appendix C

Scenario 1

CLEC leases an EISCC, a Loop and a Network Interface Device (NID) on and individual basis. The EISCC is passed on to the CLEC at the CLEC's collocation cage. Under this approach the CLEC requests that each of the elements ordered should be unbundled. In the TELRIC costs adopted in D.98-02-106, the NID was not separated from the loop. Therefore the service order price for the NID is already captured in the nonrecurring charge for the loop.

CONNECT	EISCC	LOOP	NID	TOTAL
Nonrecurring Charge	NRC	NRC	NRC	
Manual-FAX	$2.08	$76.09	$0.00	$78.17
Semi-Mechanized	$2.08	$48.48	$0.00	$50.56
Mechanized	$0.17	$18.72	$0.00	$18.89

DISCONNECT	EISCC	LOOP	NID	TOTAL
Nonrecurring Charge	NRC	NRC	NRC	
Manual-FAX	$3.30	$57.51	$0.00	$60.81
Semi-Mechanized	$3.30	$29.60	$0.00	$32.90
Mechanized	$0.16	$8.73	$0.00	$8.89

Scenario 2

CLEC leases an EISCC, a Loop and Dedicated Transport. The EISCC is passed on to the CLEC at the CLEC's collocation cage. An additional DS-1 EISCC is passed from the collocation cage to the Dedicated Trunk (Transport). As in Scenario 1, the NID is not unbundled from the Loop and the DS-1 EISCC and Trunk serve 24 voice grade channels.

CONNECT	NID	LOOP	EISCC	DS-1 EISCC	TRUNK	TOTAL
Nonrecurring Charge	SO	NRC	NRC	NRC	NRC	
Manual-FAX	$0.00	$76.09	$2.08	$2.08	$140.37	$220.62
Semi-Mechanized	$0.00	$48.48	$2.08	$2.08	$114.28	$166.92
Fully Mechanized	$0.00	$18.72	$0.17	$0.17	$68.35	$87.41

DISCONNECT	NID	LOOP	EISCC	DS-1 EISCC	TRUNK	TOTAL
Nonrecurring Charge	SO	NRC	NRC	NRC	NRC	
Manual-FAX	$0.00	$57.51	$3.30	$3.30	$80.72	$144.83
Semi-Mechanized	$0.00	$29.60	$3.30	$3.30	$54.62	$90.82
Fully Mechanized	$0.00	$8.73	$0.16	$0.16	$36.53	$45.58

Appendix C

Scenario 3

A CLEC leases an EISCC, Switching and SS7 Signaling. The EISCC is passed onto the CLEC at the CLEC's collocation cage. The nonrecurring charges for SS7 ports and links are determined on a one-time basis per connection per central office. Pacific only identified semi-mechanized costs for the SS7 port and link.

CONNECT	EISCC	SWITCHING PORT	SS7 PORT	SS7 LINK	TOTAL
Nonrecurring Charge	NRC	NRC	SO	SO	
Manual-FAX	$2.08	$59.37	$41.96	$35.09	$138.50
Semi-Mechanized	$2.08	$31.65	$41.96	$35.09	$110.78
Fully Mechanized	$0.17	$7.98	$41.96	$35.09	$85.20

DISCONNECT	EISCC	SWITCHING PORT	SS7 PORT	SS7 LINK	TOTAL
Nonrecurring Charge	NRC	NRC	SO	SO	
Manual-FAX	$3.30	$51.84	$20.03	$21.57	$96.74
Semi-Mechanized	$3.30	$24.12	$20.03	$21.57	$69.02
Fully Mechanized	$0.16	$4.26	$20.03	$21.57	$46.02

Scenario 4

CLEC leases an *as is* migration for Loop, NID, Switch Port and Existing Features. Because this is an as is migration, there is not an existing collocation cage or EISCC. Therefore the elements are leased as an existing platform of network elements

CONNECT	LOOP	NID	SWITCH PORT	EXISTING FEATURES	TOTAL
Nonrecurring Charge	SO	SO	SO	SO	
Manual-FAX	$57.52	$0.00	$51.55	$3.24	$112.31
Semi-Mechanized	$29.93	$0.00	$23.84	$3.24	$57.01
Mechanized	$0.17	$0.00	$0.17	$0.17	$0.51

DISCONNECT	LOOP	NID	SWITCH PORT	EXISTING FEATURES	TOTAL
Nonrecurring Charge	SO	SO	SO	SO	
Manual-FAX	$48.94	$0.00	$47.74	$0.00	$96.68
Semi-Mechanized	$21.03	$0.00	$20.03	$0.00	$41.06
Mechanized	$0.17	$0.00	$0.17	$0.00	$0.34

Appendix C

Scenario 5

CLEC leases an *as is* migration for Plain Old Telephone Service (POTS) which includes the Loop, NID and, Switch Port. Thereafter the customer changes service from POTS to ISDN service.

CONNECT	LOOP	SWITCH	ISDN	ISDN	TOTAL
LINK		PORT	PORT	LINK	
Nonrecurring Charge	SO	SO	NRC	NRC	
Manual-FAX	$57.52	$51.55			$109.07
Semi-Mechanized	$29.93	$23.84			$53.77
Mechanized	$0.17	$0.17			$0.34

DISCONNECT	LOOP	SWITCH	ISDN	ISDN	TOTAL
LINK		PORT	PORT	LINK	
Nonrecurring Charge	SO	SO	NRC	NRC	
Manual-FAX	$48.94	$47.74			$96.68
Semi-Mechanized	$21.03	$20.03			$41.06
Mechanized	$0.17	$0.17			$0.34

CONNECT		ISDN	ISDN	ISDN	TOTAL
ISDN		PORT	LINK	Features	
Nonrecurring Charge		NRC	NRC	SO	
Manual-FAX		$89.17	$81.61	$3.24	$170.78
Semi-Mechanized		$61.45	$53.65	$3.24	$115.10
Mechanized		$19.98	$18.72	$0.17	$38.70

DISCONNECT		ISDN	ISDN	ISDN	TOTAL
ISDN		PORT	LINK	Features	
Nonrecurring Charge		NRC	NRC	SO	
Manual-FAX		$59.43	$58.48	$0.00	$117.91
Semi-Mechanized		$31.71	$30.14	$0.00	$61.85
Mechanized		$12.17	$8.73	$0.00	$20.90

Appendix C

Scenario 6

CLEC leases an extended link which is comprised of a Loop, Digital Cross Connect System (DCS), and Dedicated DS-1 Transport. This is a custom combination, thus the sum of the stand-alone NRC approach is used to calculate final nonrecurring charges.

CONNECT		DIGITAL CROSS	DEDICATED	TOTAL
	LOOP	CONNECT	TRANSPORT	
Nonrecurring Charge	NRC	NRC	NRC	
Manual-FAX	$76.09	$81.15	$140.37	$297.61
Semi-Mechanized	$48.48	$81.15	$114.28	$243.91
Mechanized	$18.72	$80.28	$68.35	$167.35

DISCONNECT		DIGITAL CROSS	DEDICATED	TOTAL
	LOOP	CONNECT	TRANSPORT	
Nonrecurring Charge	NRC	NRC	NRC	
Manual-FAX	$57.51	$40.19	$80.72	$178.42
Semi-Mechanized	$29.30	$40.19	$54.62	$124.11
Mechanized	$8.73	$36.30	$36.53	$81.56

Appendix C

Scenario 6A

CLEC leases an extended link which is comprised of a Loop, Digital Cross Connect System (DCS), and Dedicated DS-1 Transport. In this case, the extended link is an "as is" migration, thus the sum of the service order approach is used to calculate final nonrecurring charges.

CONNECT		DIGITAL CROSS	DEDICATED	TOTAL
	LOOP	CONNECT	TRANSPORT	
Nonrecurring Charge	SO	SO	SO	
Manual-FAX	$57.52	$4.05	$72.74	$134.31
Semi-Mechanized	$29.93	$4.05	$46.65	$80.63
Mechanized	$0.17	$0.17	$0.73	$1.07

DISCONNECT		DIGITAL CROSS	DEDICATED	TOTAL
	LOOPS	CONNECTS	TRANSPORT	
Nonrecurring Charge	SO	SO	SO	
Manual-FAX	$48.94	$4.05	$44.91	$97.90
Semi-Mechanized	$21.03	$4.05	$18.81	$43.89
Mechanized	$0.17	$0.17	$0.73	$1.07

Appendix C

Scenario 7

CLEC leases an extended link which is comprised of a DS-1 Loop and Dedicated DS-1 Transport. This is also a custom combination, thus the sum of the stand-alone NRC approach is used to calculate final nonrecurring charges.

CONNECT	DS-1	DEDICATED	TOTAL
	LOOP	TRANSPORT	
Nonrecurring Charge	NRC	NRC	
Manual-FAX	$167.65	$140.37	$308.02
Semi-Mechanized	$139.68	$114.28	$253.96
Mechanized	$104.74	$68.35	$173.09

DISCONNECT	DS-1	DEDICATED	TOTAL
	LOOP	TRANSPORT	
Nonrecurring Charge	NRC	NRC	
Manual-FAX	$63.34	$80.72	$144.06
Semi-Mechanized	$35.02	$54.62	$89.64
Mechanized	$13.60	$36.53	$50.13

Appendix C

Scenario 7A

CLEC leases an extended link which is comprised of a DS-1 Loop and Dedicated DS-1 Transport. In this case the Extended Link is an "as is" migration, thus the sum of the stand-alone service order approach is used to calculate final nonrecurring charges.

CONNECT	DS-1	DEDICATED	TOTAL
	LOOP	TRANSPORT	
Nonrecurring Charge	SO	SO	
Manual-FAX	$63.06	$72.74	$135.80
Semi-Mechanized	$35.09	$46.65	$81.74
Mechanized	$0.17	$0.73	$0.90

DISCONNECT	DS-1	DEDICATED	TOTAL
	LOOP	TRANSPORT	
Nonrecurring Charge	SO	SO	
Manual-FAX	$49.91	$44.91	$94.82
Semi-Mechanized	$21.03	$18.81	$39.84
Mechanized	$0.17	$0.73	$0.90

Key

NRC = Full Stand Alone Nonrecurring Charge Which Includes Service Order and Channel Connect (I.e. Provisioning and Maintenance) Charges

SO = Service Order Charges Only And Is Used To Estimate Nonrecurring Charges Under The Sum Of The Service Order Approach.

Appendix D
Compliance Reference Document

Summary of Pacific Bell Price Floors

Service	Pacific Bell Price Floor
1MB single line	****
1MR	****
1FR	****
COPT	****
ISDN Feature - Residence	****
ISDN Feature - Business	****
Usage (per msg)	
Residence Local	****
Business Local	****
Residence ZUM	****
Business ZUM	****

(1). Adjustment reflects correction to Pacific's proposal which employed the TSLRIC flat rate local residence usage instead of the TSLRIC measured rate local residence usage.

APPENDIX E

List of Appearances

Respondents: Timothy S. Dawson and Gregory L. Castle, Attorneys at Law, for Pacific Bell; Elaine M. Lustig, and Charles C. Read, Attorneys at Law, for GTE California Incorporated; and William C. Harrelson, Attorney at Law, for MCI Telecommunications Corporation.

Intervenors: Evelyn Elsesser and Alexis K. Wodtke, Attorneys at Law, and Richard Purkey, for Sprint Communications Company, L.P.; Michael P. Hurst and Terry J. Houlihan, Attorneys at Law, for AT&T Communications of California, Inc.

Interested Parties: Peter A. Casciato, Attorney at Law and Glenn Semow and Cynthia Walker, for California Cable Television Association; John L. Clark, Attorney at Law, for Telecommunications Resellers Association; Thomas Long, Attorney at Law, and Regina Costa, for Toward Utility Rate Normalization; Martin A. Mattes, Attorney at Law, for California Payphone Association; Virginia J. Taylor, Attorney at Law, for Department of Consumer Affairs; Barbara Snider, Attorney at Law, for Citizens Telecommunications Company of California, Inc.; Dhruv Khanna and Prince Jenkins, Attorneys at Law, for Covad Communications Company; Lee Burdick, Attorney at Law, for Cox California Telcom II, L.L.C.; Peter A. Casciato, Attorney at Law, for Northpoint Communications, Inc.; and Earl Nicholas Selby, Attorney at Law, for ICG Telecom Group, Inc., NEXTLINK California, Inc. and MGC Communications, Inc.

Office of Ratepayer Advocates: Ira Kalinsky, Attorney at Law.

(END OF APPENDIX E)