..J/MCK/tcg

Mailed 11/23/99

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.)

TABLE OF CONTENTS

Title	Page
INTERIM DECISION SETTING FINAL PRICES FOR NETWORK ELEMENTS OFFERED BY PACIFIC BELL	2
I. INTRODUCTION	2
A. Summary of Pricing Rulings	2
B. Procedural Background	3
C. The Supreme Court's Decision in *AT&T Corp. v. Iowa Utilities Bd.*	8
D. Implications of the Supreme Court's Decision	12
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?	17
A. Pacific's Pricing Proposal	18
1. Summary of Pacific's Overall Pricing Approach	18
2. Dr. Hausman's Advocacy of a "Risk Adder" For Sunk and Irreversible Investment	21
B. Other Parties' Criticisms of Pacific's Pricing Proposal	27
1. AT&T/MCI's Criticisms of Dr. Hausman's Proposed Risk Adder	27
2. Sprint's Criticisms of Dr. Hausman's Theory	34
3. The Facilities-Based Coalition's Criticisms of Dr. Hausman's Theory	36
C. Discussion	37
1. Dr. Hausman's Proposal For A "Sunk Cost" Adder Is Speculative And Ignores Similar Risks That Pacific Incurs in Providing Retail Service	37
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	44
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?	53
A. The AT&T/MCI Position	55
B. Sprint's Position	56
C. FBC's Position	57

TABLE OF CONTENTS
(Cont'd)

Title **Page**

D. Other Parties' Positions 61
E. Discussion 62
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? 74
A. The AT&T/MCI Proposal To Offset Yellow Page Revenues Against the Shared and Common Costs Applicable To Residential Loops 74
1. AT&T/MCI's Justification for the Proposal 74
2. Pacific's Position 77
3. Discussion 79
B. The Proposal To Reduce The Price of Residential Loops Below TELRIC By Applying A Surcredit Financed From the Universal Service Fund 84
1. The AT&T/MCI Proposal 85
2. Pacific's Criticisms of the AT&T-MCI Loop Surcredit Proposal 87
3. Pacific's Alternative to the AT&T/MCI Proposal For A Surcredit on Residential Loops 89
4. AT&T/MCI Criticisms of the Sawyer Proposal 90
5. Discussion 91
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? 99
A. The AT&T/MCI Position on How Additional TELRIC Costs Should Be Derived 100
B. Pacific's Position on How Additional TELRIC Costs Should Be Derived 102
C. Discussion Concerning Additional Costs 104
D. The Loop Costing and Pricing Issues Raised By Covad 109
E. Pacific's Response To Covad 111
F. Discussion of Loop Issues Raised by Covad 112

TABLE OF CONTENTS
(Cont'd)

Title **Page**

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? 116
A. Background of the Recombination Controversy 117
1. Rulings on Recombination in the Eighth Circuit's Iowa Decision .. 117
2. Discussion of Recombination Issue at the March 16, 1998 Prehearing Conference and in the ALJ Ruling of March 27, 1998 ... 118
3. Pacific's Agreements with AT&T, MCI and Sprint To Continue Providing UNE Combinations During The Remaining Term Of Those Carriers' Interconnection Agreements 122
B. Pacific's Proposal For Allowing CLECs to Combine Unbundled Network Elements For Themselves 124
C. The Parties' Positions on the Extent of the Commission's Authority To Order ILECs To Recombine Unbundled Network Elements For CLECs 127
1. The Pacific and GTEC Argument That the Commission Lacks Authority To Order UNE Combinations 127
2. The Contention of the Facilities-Based Coalition That the Commission Has Statutory Authority To Order UNE Combinations 130
3. The AT&T/MCI Position That CLECs Cannot Be Required To Invest in Network Facilities As A Precondition To Combining UNEs For Themselves 132
4. The Concerns of Sprint and the FBC About Security Issues Raised By Pacific's Points-Of-Access Proposal 133
D. Discussion 135
1. The Supreme Court's Decision in *AT&T-Iowa* Moots Many of the Issues Raised By the Parties in Their Recombination Testimony 135

TABLE OF CONTENTS
(Cont'd)

Title | Page

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. 139
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 148
4. When Fully-Mechanized Non-Recurring Charges Should Go Into Effect 154

VII. SHOULD THE PRICES FOR UNBUNDLED NETWORK ELEMENTS ESTABLISHED IN THIS PROCEEDING BE SET FORTH IN TARIFFS? .. 160
A. Positions of the Parties 162
B. Discussion 164

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? 170
A. Background 170
B. Pacific's Position On How To Set Price Floors For the Services Specified in D.96-03-020 175
1. Dr. Timothy Tardiff's Testimony 175
2. Dr. Richard Emmerson's Testimony 186
C. The AT&T/MCI Position on Price Floors and Imputation 189
D. Position of the FBC on Price Floors and Imputation 196
E. Sprint's Position 201
F. Positions of Other Parties 204
G. Discussion 205
1. Summary of Price Floor Conclusions 205

TABLE OF CONTENTS
(Cont'd)

Title **Page**

2. The Contribution Method of Imputation Remains Valid And Should be Used in Conjunction with the TSLRIC Studies Adopted in D.96-08-021. 208
3. Not All UNEs Should Be Considered Monopoly Building Blocks, Because Only Some UNEs Are Essential Facilities 216
4. Under the First Report and Order and *AT&T- Iowa*, Not All Unbundled Network Elements Are Essential Facilities 219
5. This Commission Has Not Held That, For Purposes of Imputation, All UNEs Must Be Considered Monopoly Building Blocks 221
6. The Parties Had Adequate Notice That The Issue of Which UNEs Should Be Treated As MBBs Would Be Considered in the Pricing Hearings 226
7. Loops Should Be Considered Monopoly Building Blocks For Imputation Purposes 232
8. Switching Should Be Considered A Monopoly Building Block for Imputation Purposes 236
9. The White Pages Listing Should Be Considered A Monopoly Building Block For Access Line Services 239

IX. When Should the Final Recurring and Non-Recurring Charges for UNES Adopted in this Decision Go Into Effect? 241

Findings of Fact 244
Conclusions of Law 255
ORDER 269

Appendix A
Appendix B
Appendix C
Appendix D
Appendix E

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.

---

[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.)

---

[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

---

[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).

---

[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

---

[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

---

[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

---

[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:

---

[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]

---

[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

---

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]

---

[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

---

[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

---

[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

[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

---

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

UNE	Proportion Sunk Costs	Markup Factor for TELRIC
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

[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

---

[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:

Footnote continued on next page

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

---

" . . . 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.)

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.)

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

[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

---

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

[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

---

[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

[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

Footnote continued on next page

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.)

---

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:

---

[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]

---

[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

---

[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.

Footnote continued on next page

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

---

> "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

---

[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."

Footnote continued on next page

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

---

[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.
>
> * * *
>
> "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:

Footnote continued on next page

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

---

"[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]

---

[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.)

Footnote continued on next page

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

---

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]

---

[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

Footnote continued on next page

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

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

[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]

---

[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

---

[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]

---

[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,

Footnote continued on next page

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:

---

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.

---

[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

[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

---

[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

[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

Footnote continued on next page

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

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.)

Footnote continued on next page

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.
>
> * * *
>
> "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]

---

[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

---

[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]

---

[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

---

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.)