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A PROFESSIONAL CORPORATION  
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September 19, 2000

**VIA HAND DELIVERY**

Docket Control  
ARIZONA CORPORATION COMMISSION  
1200 West Washington  
Phoenix, Arizona 85007

**Re: Qwest Corporation's 1999 Rate Application, Docket No. T-01051B-99-0105**

Dear Clerk:

Enclosed for filing in the above matter are the original and ten copies of the Rejoinder Testimony of Peter C. Cummings, George Redding, Philip E. Grate, Ann Koehler-Christensen, Nancy Heller-Hughes, Kerry Dennis Wu, David L. Teitzel, Scott A. McIntyre, Carl Inouye, Jerrold L. Thompson, and William E. Taylor, Ph.D. If you have any questions, please do not hesitate to contact me.

Very truly yours,

Timothy Berg

TB/DP

cc: All Parties of Record

**ORIGINAL**

Arizona Corporation Commission

**BEFORE THE ARIZONA CORPORATION COMMISSION**

**DOCKETED**

SEP 19 2000

DOCKETED BY	JM
-------------	----

IN THE MATTER OF THE APPLICATION OF )  
 U S WEST COMMUNICATIONS, INC., A )  
 COLORADO CORPORATION, FOR A )  
 HEARING TO DETERMINE THE EARNINGS )  
 OF THE COMPANY, THE FAIR VALUE OF THE )  
 COMPANY FOR RATEMAKING PURPOSES, )  
 TO FIX A JUST AND REASONABLE RATE OF )  
 RETURN THEREON, AND TO APPROVE RATE )  
 SCHEDULES DESIGNED TO DEVELOP SUCH )  
 RETURN. )

**DOCKET NO. T-01051B-99-0105**

AZ CORP COMMISSION  
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**REJOINDER TESTIMONY OF**

**PETER C. CUMMINGS**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF PETER C. CUMMINGS  
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1  
2  
**IDENTIFICATION OF WITNESS**

3 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**  
4 **POSITION.**

5 A. My name is Peter C. Cummings and my business address is 1600 Bell Plaza,  
6 Room 3005, Seattle, Washington 98191. I am employed by Qwest  
7 Corporation (Qwest) as Director - Finance and Economic Analysis.

8  
9 **Q. ARE YOU THE SAME PETER C. CUMMINGS THAT FILED DIRECT AND**  
10 **REBUTTAL TESTIMONY IN THIS DOCKET?**

11 A. Yes, I am. My work experience and qualifications are described in my direct  
12 testimony.

13  
14 **PURPOSE OF TESTIMONY**  
15

16 **Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

17 A. The purpose of my rejoinder testimony is to comment on the surrebuttal  
18 testimony filed by Charles W. King on behalf of the United States Department  
19 of Defense and Federal Executive Agencies, by Stephen G. Hill on behalf of  
20 the Arizona Corporation Commission Staff, by John B. Legler on behalf of the  
21 Residential Utility Consumer Office and by Arlene M. Starr on behalf of AT&T

1           Communications of the Mountain States, Inc. My rejoinder testimony will  
2           focus on clarifying limited specific issues related to cost of capital rather than  
3           restatement or augmentation of testimony already filed.

4

5           **COMMENT ON THE TESTIMONY OF CHARLES W. KING**

6

7           **Q.   PLEASE COMMENT ON MR. KING'S ASSERTION THAT YOUR GROUP**  
8           **OF COMPARABLE RISK COMPANIES IS NOT RISK COMPARABLE TO**  
9           **U S WEST'S ARIZONA OPERATIONS.**

10          A.   In his Exhibit CWK-01, Mr. King graphs Zacks betas from his own source and  
11          the DCF required return estimates from my direct and supplemental  
12          testimony exhibits. Citing the low correlation between these two data sets,  
13          Mr. King concludes that the group of companies is not risk comparable to  
14          Qwest's Arizona operations.

15

16          Mr. King's Exhibit CWK-01 is an "apples and oranges" comparison and it  
17          does not have any linkage to Arizona intrastate operations. He is graphing  
18          the required return estimate from application of a DCF model against beta,  
19          one of the input values to the capital asset pricing model. The fact that his  
20          betas do not track with my DCF model estimates is not surprising. DCF

1 model results and CAPM model results differ – that’s why it’s important to use  
2 more than one model.

3

4 Mr. King’s analysis is misplaced and misses two important points. First, the  
5 comparable company group in my testimony was selected based on two  
6 objective risk measures commensurate with Qwest Corporation (the  
7 telephone company); bond rating and cash flow variability. Second, the DCF  
8 and CAPM market required return estimates for the comparable companies  
9 as a group are in a fairly close range – 13.9% for the DCF and 13.3% for the  
10 CAPM. (Cummings Supplemental Direct page 4.)

11

12 **Q. DOES MR. KING AGREE WITH YOUR REVISION TO THE VERIZON**  
13 **DIVIDEND YIELD SHOWN IN HIS TESTIMONY?**

14 A. Yes. Mr. King agrees that the dividend yield for Verizon should be \$1.54  
15 instead of the \$0.20 shown on page 18 of his direct testimony. Making that  
16 correction changes the DCF return for Verizon from 12.01% to 14.46%.

17

18 **Q. WHAT IS THE PURPOSE OF MR. KING’S EXHIBIT CWK-02?**

19 A. I found Mr. King’s Exhibit CWK-02 to be confusing. It is marked as an  
20 exhibit, but reads as question and answer testimony and is dated October 25,  
21 1999. DCF estimates shown in this exhibit are based upon stock prices from

1 July to October 1999. I am interpreting Exhibit CWK-02 to be part of Mr.  
2 King's argument that U S WEST's pending merger with Qwest did not impact  
3 capital market data or cost of equity estimates for U S WEST and additionally  
4 that Exhibit CWK-02 does not contain data that he is relying upon for his cost  
5 of equity capital recommendation to the Commission.

6

7 **Q. ARE YOUR CONCLUSIONS RELATIVE TO MR. KING'S TESTIMONY THE**  
8 **SAME AS SHOWN IN YOUR REBUTTAL TESTIMONY?**

9 A. Yes. When corrected for the Verizon dividend error, Mr. King's DCF analysis  
10 of the three largest telephone companies provides a reasonable estimate of  
11 the required equity return for Qwest Corporation – the range of 12.73% to  
12 15.18% with a midpoint of 14.12%.

13

14 **COMMENT ON THE TESTIMONY OF STEPHEN G. HILL**

15

16 **Q. DO YOU AGREE WITH MR. HILL'S SUMMARY STATEMENT THAT, "MR.**  
17 **HILL DEMONSTRATES THAT HE HAS PROVIDED VERY SPECIFIC**  
18 **EVIDENCE REGARDING THE OPERATIONS OF QWEST'S ARIZONA**  
19 **LOCAL EXCHANGE OPERATIONS WHICH INDICATES THAT THE**  
20 **COMPANY HAS SIMILAR OPERATING RISK TO GAS DISTRIBUTORS.**

1           **THESE DATA WERE CONFIRMED INDEPENDENTLY BY OTHER**  
2           **WITNESSES IN THIS PROCEEDING.”**

3    A.    No. What Mr. Hill has provided in his testimony is an anecdotal comparison  
4           of the gas distribution industry and the telephone industry and this  
5           comparison appears to end before the Telecommunications Act of 1996. Mr.  
6           Hill has not provided any objective measures which demonstrate that the  
7           company has similar risk to gas distributors.

8  
9           I don't understand Mr. Hill's statement that "These data were confirmed  
10          independently by other witnesses in this proceeding." Mr. Hill is the only  
11          witness making the statement that gas distribution companies have similar  
12          risks to Qwest or other telephone operating companies. In fact, Dr. Legler  
13          says the exact opposite in his surrebuttal testimony:

14                        I agree with him [Cummings] the use of other groups of  
15                        companies, electric companies, gas distributors and  
16                        insurance companies are inappropriate for purposes of  
17                        estimating the cost of equity to U S WEST (QWEST) and  
18                        not comparable in riskiness to telephone companies.

19  
20                        (Legler Surrebuttal, page 2, lines 15-19)

21  
22    **Q.    REGARDING YOUR REBUTTAL TESTIMONY, MR. HILL SAYS, "MR.**  
23           **CUMMINGS REBUTTAL IS, IN THE MAIN, EXTREMELY SHORT ON**  
24           **SUBSTANCE. IT FAILS TO ADDRESS OBJECTIVE DIFFERENCES**

1           **BETWEEN OUR ANALYTICAL TECHNIQUES THAT MIGHT BE TIED TO**  
2           **UNDERLYING ECONOMIC THEORY AND RELIES, INSTEAD ON**  
3           **DISPARAGING REMARKS ABOUT ME, PERSONALLY.” HOW DO YOU**  
4           **RESPOND?**

5       A.     My rebuttal testimony is critical of Mr. Hill’s methodology; it is not critical of  
6           him as a person. My rebuttal testimony focuses on the ways in which Mr. Hill  
7           and I differ in our approach to estimating the cost of equity capital. I pointed  
8           out that it is to be expected that experts will differ in their use of models and  
9           data, and highlighted areas where I believe Mr. Hill’s methodology departs  
10          significantly from accepted financial theory and practice and significantly  
11          affects the cost of equity estimate.

12  
13          As for “failing to address objective differences between our analytical  
14          techniques that might be tied to underlying economic theory,” in the 15 pages  
15          of testimony devoted to rebuttal of Mr. Hill, I have quoted the investment  
16          research firms, Paine Webber and Value Line, the Financial Analysts’  
17          Journal, Financial Practice and Education, and the text, Principles of  
18          Corporate Finance. Additionally, I provided a 19 page technical Appendix  
19          (with exhibits) and referenced 2 data exhibits in addressing Mr. Hill’s  
20          analytical techniques.

21

1    **Q.    DO YOUR CONCLUSIONS ABOUT MR. HILL'S METHODS AND DATA**  
2       **REMAIN AS STATED IN YOUR REBUTTAL TESTIMONY?**

3    A.    Yes.

4

5       **COMMENT ON THE TESTIMONY OF DR. JOHN. B. LEGLER**

6

7    **Q.    DR. LEGLER SAYS "FRANKLY, I DO NOT KNOW WHERE MR.**  
8       **CUMMINGS GOT HIS RISK PREMIUM OF 7.4% AS SHOWN ON PAGE 36,**  
9       **LINE 6 OF HIS REBUTTAL TESTIMONY." CAN YOU EXPLAIN THE 7.4%**  
10      **RISK PREMIUM?**

11   A.    Yes. 7.4% is the historical risk premium of total returns for large company  
12       stocks over total returns for long term corporate bonds. From the Ibbotson  
13       Associates, Stocks, Bonds, Bills, and Inflation 2000 Yearbook cited and  
14       shown in my supplemental direct testimony Exhibit PCC-09, stocks had an  
15       average annual return of 13.3% over the 74 year period 1926 to 1999 and  
16       corporate bonds had an average annual return of 5.9%. The 7.4% average  
17       annual return difference is the additional return or risk premium for investors  
18       holding stocks instead of corporate bonds. The 7.4% long term historical risk  
19       premium is substantially higher than the 2.80% to 3.92% risk premium  
20       calculated by Dr. Legler.

21

1 Q. ARE YOUR CONCLUSIONS RELATIVE TO DR. LEGLER'S TESTIMONY  
2 THE SAME AS SHOWN IN YOUR REBUTTAL TESTIMONY?

3 A. Yes.  
4

5 COMMENT ON THE TESTIMONY OF ARLENE M. STARR  
6

7 Q. MS. STARR SAYS THAT QWEST IS USING AN OVERSTATED COST OF  
8 MONEY IN ITS ACCESS COST STUDIES BECAUSE THAT COST OF  
9 MONEY IS GREATER THAN THE 10.86% OVERALL RETURN  
10 RECOMMENDED IN YOUR TESTIMONY. CAN YOU EXPLAIN THE  
11 DIFFERENCE BETWEEN THE OVERALL RETURN RECOMMENDATION  
12 AND THE COST OF MONEY FOR ACCESS COST STUDIES?

13 A. Yes. The cost of money for access cost studies is not "overstated" – it is  
14 legitimately greater than the overall return because the firm's weighted  
15 average cost of capital is greater than the Commission allowed cost of  
16 capital. The cost of money for cost studies is an application of the firm's  
17 **weighted average cost of capital** or alternatively called the firm's **marginal**  
18 **or incremental cost of capital**. In their well known finance text, Professors  
19 Brealey and Myers explain the weighted average cost of capital. Their  
20 formula says that the weighted average cost of capital is equal to proportion

1 of debt times the after tax borrowing rate plus the proportion of equity times  
2 the expected rate of return on the firm's stock:

3 We refer to the *weighted-average cost of capital*. Sometimes  
4 we call it the *textbook formula*, since many other textbooks have  
5 put heavy emphasis on it. The formula is  
6

7  
8 
$$r^* = r_D (1 - T_c) \frac{D}{V} + r_E \frac{E}{V}$$
  
9

10  
11 where:

- 12  $r^*$  = the adjusted cost of capital [weighted average cost  
13 of capital]  
14  $r_D$  = the firm's current borrowing rate  
15  $T_c$  = the marginal *corporate* income tax rate  
16  $r_E$  = the expected rate of return on the firm's stock  
17 (which depends on the firm's business risk and its  
18 debt ratio)  
19  $D, E$  = the market values of currently outstanding debt  
20 and equity  
21  $V$  =  $D + E$   
22

23 (Richard A. Brealey and Stewart C. Myers, Principles of  
24 Corporate Finance, (4th Ed; New York: McGraw-Hill, Inc.; 1991),  
25 p. 465.)

26  
27 There are several key features of this textbook formula for the weighted  
28 average cost of capital which I want to highlight. The formula uses the firm's  
29 **current** borrowing rate, the **expected** rate of return on the firm's stock, and  
30 the **market** values of currently outstanding debt and equity. Along with the  
31 marginal tax rate, these features define the company's marginal cost of  
32 capital. The weighted average (or marginal cost of capital) is a weighted

1 average of the opportunity costs of the company's financing sources. This  
2 weighted average cost of capital is the proper input for TSLRIC or TELRIC  
3 forward looking cost models.

4  
5 The forward looking weighted average cost of capital is markedly different  
6 from my recommendation of 10.86% for a Commission authorized return,  
7 even though the terms of "debt", "equity", "cost of capital" and "capital  
8 structure" are common to both. Using an authorized return in place of the  
9 weighted average cost of capital in cost studies destroys the economic  
10 rationale underlying the cost studies.

11  
12 The Commission authorized return uses the company's **embedded** cost of  
13 debt; that is, the historical cost of debt from the company's books. The  
14 weighted average cost of capital calls for the company's **current** or  
15 **incremental** cost of new debt.

16  
17 The Commission authorized return uses the company's regulatory **book**  
18 **value** capital structure. The weighted average cost of capital calls for the  
19 **market values** of debt and equity. The Commission authorized return and  
20 the weighted average cost of capital have only one parameter in common --  
21 the **expected** rate of return on the company's stock or equity capital.

1

2 **Q. DOES THE FINANCIAL LITERATURE RECOGNIZE THE DISTINCTION**  
3 **BETWEEN THE WEIGHTED AVERAGE COST OF CAPITAL AND A**  
4 **COMMISSION ALLOWED COST OF CAPITAL?**

5 A. Yes. In a chapter devoted to cost of capital for regulated companies,  
6 Professor Erhardt contrasts the weighted average cost of capital and the  
7 allowable cost of capital, first describing the role of cost of capital in the  
8 regulatory process of setting customer rates:

9 In a typical rate case hearing, a necessary step is the  
10 establishment of a rate base. This rate base is usually the sum  
11 of the book values of debt and equity. The next step is to  
12 estimate the components of the allowable cost of capital. The  
13 cost of debt is the weighted average of the coupon rates on all of  
14 the company's existing debt. This historical pre-tax cost of debt  
15 is frequently called the "embedded cost of debt." The  
16 Commission also establishes an allowable cost of equity.

17

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*The allowable weighted average cost of capital  
equals the percent book equity of total book value  
capital times the allowable cost of equity plus the  
percent book debt of total book value capital times  
the historical cost of debt.*

The Commission multiplies the allowable cost of capital by the  
rate base to determine the allowable revenues. The  
Commission adds tax expenses, estimated production costs,  
and other expenses to these revenues. The resulting figure is  
analogous to the net sales of a manufacturer. The commission  
divides this figure by the forecasted demanded quantity and the  
result is allowable price.

This might be an appropriate process for regulators, because  
the objective of the regulatory commission is to determine the

1 allowable price. Yet this allowable cost of capital is different  
2 from the weighted average cost of capital.  
3

4 Erhardt then goes on to discuss the differences between the weighted  
5 average cost of capital and the allowable cost of capital:

6 Chapter 2 defines the weighted average cost of capital as:  
7

8  
9 *The Weighted Average Cost of Capital equals the*  
10 *percent equity market value of total market value*  
11 *times the cost of equity plus the percent debt market*  
12 *value of total market value times the current rate at*  
13 *which you could issue debt.*  
14

15 One obvious difference is the use of book weights for the  
16 allowable cost of capital and market weights for the weighted  
17 average cost of capital. ...  
18

19 A second difference between the allowable cost of capital and  
20 the weighted average cost of capital is the interest rate. The  
21 interest rate for the allowable cost of capital is the embedded  
22 historical rate, not the current rate.  
23

24 (Michael C. Erhardt, The Search For Value: Measuring the  
25 Company's Cost of Capital, Boston, MA: Harvard Business  
26 School Press, 1994, pp. 166-167)  
27

28 **Q. WHAT IS YOUR CONCLUSION ABOUT THE COST OF CAPITAL FOR THE**  
29 **RATE CASE AND FOR ACCESS COST STUDIES?**

30 A. The Commission allowed cost of capital is appropriate for historical cost rate  
31 base regulation, and the weighted average cost of capital is appropriate for  
32 economic analysis and forward looking cost studies.

1

2 **Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?**

3 **A. Yes, it does.**

BEFORE THE ARIZONA CORPORATION COMMISSION

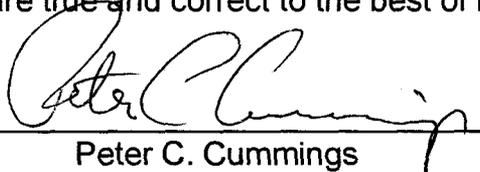
IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE ) DOCKET NO. T-1051B-99-105  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. )

STATE OF WASHINGTON )

: ss AFFIDAVIT OF PETER C. CUMMINGS  
COUNTY OF KING )

Peter C. Cummings, of lawful age being first duly sworn, depose and states:

- 1. My name is Peter C. Cummings. I am Director – Finance & Economic Analysis of Qwest Corporation in Seattle, Washington. I have caused to be filed written testimony and exhibits in support of U S WEST Communications, Inc. (Now Qwest Corporation) in Docket No. T-01051B-99-105.
- 2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

  
Peter C. Cummings

SUBSCRIBED AND SWORN to before me this 12<sup>th</sup> day of

September, 2000.

  
Notary Public residing at  
Seattle, Washington.

My Commission Expires: 09/15/02

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**BEFORE THE ARIZONA CORPORATION COMMISSION**

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**IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
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HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF )  
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PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )  
DESIGNED TO DEVELOP SUCH RETURN )**

**DOCKET NO. T-01051B-99-0105**

**REJOINDER TESTIMONY OF**

**GEORGE REDDING**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF GEORGE REDDING**

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**IDENTIFICATION OF WITNESS**

1  
2

3 **Q. PLEASE STATE YOUR NAME, TITLE, EMPLOYER AND ADDRESS.**

4 A. My name is George Redding. I am employed by Qwest Corporation as  
5 Director-Regulatory Finance. My address is 1801 California, Denver,  
6 Colorado.

7

8 **Q. ARE YOU THE SAME GEORGE REDDING WHO FILED DIRECT,**  
9 **SUPPLEMENTAL AND REBUTTAL TESTIMONY IN THIS**  
10 **PROCEEDING?**

11 A. Yes, I am.

12

13 **Q. IN YOUR REBUTTAL TESTIMONY YOU STATED THAT U S WEST**  
14 **COMMUNICATIONS IS NOW QWEST CORPORATION. WILL YOU**  
15 **CONTINUE TO REFER TO THE FORMER U S WEST**  
16 **COMMUNICATIONS AS QWEST OR THE COMPANY IN YOUR**  
17 **REJOINDER?**

18 A. Yes, I will.

19

**PURPOSE OF TESTIMONY**

20  
21

22 **Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

23 A. I will respond to the surrebuttal of Mr. Brosch and Mr. Carver of Staff, Mr.  
24 Larkin and Mr. Smith of RUCO, Ms. Gately of AT&T and Mr. Lee of  
25 DOD/FEA. I will refute the erroneous criticisms made by these witnesses  
26 concerning my test of the revenue requirement and the end of period

1 adjustments against 2000 actual results. I will once again demonstrate  
2 that my test was appropriate and valid, which leads to the conclusion that  
3 the Company's test period was properly developed and produced an  
4 appropriate revenue requirement. I will also address a number of  
5 adjustments made by various parties individually.  
6

7 **Q. HOW IS YOUR REJOINDER TESTIMONY ORGANIZED?**

8 A. It is organized by issue.  
9

10 **TEST OF THE REVENUE REQUIREMENT**  
11

12 **Q. IN YOUR REBUTTAL, YOU STATED THAT THE PURPOSE OF THE**  
13 **TEST WAS TO DETERMINE THE ADEQUACY OF THE PROPOSED**  
14 **REVENUE REQUIREMENTS OR DEFICIENCY. HAS ANYTHING IN**  
15 **EITHER STAFF OR RUCO SURREBUTTAL CHANGED THE RESULTS**  
16 **OF YOUR TEST?**

17 A. No. Staff, RUCO, AT&T and DOD/FEA have all tried to confuse the issue  
18 and turn attention away from the test of the revenue  
19 requirement/deficiency. They have all failed. Only Qwest's revenue  
20 requirement, when overlaid on 2000 results, produces a return close to  
21 that advocated for the historical test period of 1999.  
22

23 **Q. PLEASE EXPLAIN AGAIN, IN DETAIL, HOW YOU PERFORMED YOUR**  
24 **TEST OF THE ADEQUACY OF THE PROPOSED REVENUE**  
25 **REQUIREMENT.**

1 A. Certainly. My test was based on the statements of numerous experts,  
2 with whom I concur, regarding the purpose of the test year. That purpose  
3 is to produce a revenue requirement that will allow the Company the  
4 opportunity to achieve the found rate of return in the period when rates  
5 from this proceeding will go into effect. As rates from this proceeding  
6 have obviously not yet gone into effect, I chose the closest available  
7 alternative at the time of the filing of my rebuttal testimony, namely year-  
8 to-date May 2000 actual results, which I annualized.

9

10 **Q. DID YOU ADJUST THE 2000 ACTUAL RESULTS IN ANY MANNER?**

11 A. No, I did not. I used the as booked results.

12

13 **Q. MR. CARVER, ON PAGE 9 OF HIS SURREBUTTAL, STATES THAT "IT**  
14 **APPEARS THAT THE COMPANY INTENTIONALLY DECIDED TO NOT**  
15 **ADJUST THE YTD MAY 2000 NOI OR RATE BASE AMOUNTS FOR**  
16 **OUT-OF-PERIOD, ABNORMAL, NONRECURRING ITEMS OR TO**  
17 **OTHERWISE REFLECT CONSISTENCY WITH THE STAFF'S**  
18 **PROPOSED REVENUE REQUIREMENT ADJUSTMENTS. THIS LED**  
19 **ME TO CONCLUDE THAT THE COMPARATIVE RESULTS APPEARED**  
20 **TO BE INTENTIONALLY MISLEADING." HOW DO YOU RESPOND**  
21 **TO HIS STATEMENT?**

22 A. Let me clearly state that my chart was not misleading. I used actual year-  
23 to-date May 2000 results for my test and I made no adjustments. It is not  
24 misleading, much less intentionally misleading, to merely state that I used  
25 actual results. Where adjustments to the year 2000 results were made in

1 the section relating to the test of the end of period adjustment, I clearly  
2 stated what adjustments were made. For the overall test of the revenue  
3 requirement proposals, I did not claim to have made any adjustments.  
4

5 **Q. MR. CARVER MAINTAINS THAT YOU SHOULD HAVE ADJUSTED**  
6 **ACTUAL RESULTS TO REFLECT THE EFFECT OF DISALLOWANCES**  
7 **AND IMPUTATIONS PROPOSED BY STAFF AND RUCO AS WELL AS**  
8 **HIS SOP 98-1 PROPOSAL. WHAT IS YOUR VIEW?**

9 A. Mr. Carver is wrong. The actual results are just that, the actual results.  
10 They represent the Company's actual operating experience. Imputations  
11 and disallowances do not change the actual booked results.  
12

13 Mr. Carver also alleges that I should have adjusted the actual results to  
14 reflect his adoption of SOP 98-1 relating to the capitalization of software.  
15 If the Arizona Corporation Commission (ACC) had adopted SOP 98-1 for  
16 regulatory reporting in Arizona, I would agree with Mr. Carver. However,  
17 the ACC has not adopted SOP 98-1 and the Company is requesting that  
18 they not adopt it. Therefore, it is appropriate to reflect actual results as  
19 booked for this item since regulatory treatment is unknown at this time.  
20

21 **Q. WOULD MAKING THE ADJUSTMENT TO ACTUAL RESULTS, AS**  
22 **SUGGESTED BY MR. CARVER, CAUSE THE TEST RESULTS TO BE**  
23 **MISLEADING?**

24 A. Yes, it would. First, adjusting actual recorded results for disallowances  
25 or imputations proposed by any party falsely imposes the assumption that

1 the ACC has adopted such adjustments or positions and it should,  
2 thereafter, completely ignore the actual costs to the Company. Such  
3 assumptions are premature and, during the course of the proceeding , the  
4 ACC must be provided a complete picture of the effect of proposed  
5 adjustments, disallowances and imputations in order to arrive at a fully  
6 informed decision. Furthermore, even if the ACC adopts these positions,  
7 they will not change the actual financial results.

8  
9 Second, adjusting the actual data for any party's proposed position before  
10 making the comparison to that position automatically closes any gap  
11 between the data compared. Mr. Carver even acknowledges this fact at  
12 page 9 of his rebuttal testimony. Such a test is illogical, misleading and, by  
13 design, would diminish the impact of the test results.

14  
15 Third, this diminished test result would not provide the ACC with the true  
16 picture of the very serious deficiency in Staff and RUCO proposed  
17 revenue requirements. Only the Company's test results clearly  
18 demonstrate this fact.

19  
20 **Q. MR. CARVER, ON PAGE 7 OF HIS SURREBUTTAL, STATES THAT**  
21 **"AN HISTORIC TEST YEAR WAS NEVER INTENDED TO ESTIMATE,**  
22 **WITH PRECISION, LEVELS OF NET OPERATING INCOME OR RATE**

1           **BASE EXPECTED TO BE EXPERIENCED IN FUTURE PERIODS”.**

2           **PLEASE COMMENT.**

3    A.    I never claimed that the test period was intended to estimate the future  
4           with precision. What I do maintain is that the test period, if properly  
5           adjusted, should produce a revenue requirement that allows the Company  
6           the opportunity to earn, in the future, at levels close to the found rate of  
7           return.<sup>1</sup> It is that condition alone for which I am testing in my comparison  
8           to 2000 actual booked results.

9

10   **Q.    SEVERAL OF THE OPPOSING WITNESSES SEEM TO SUGGEST**  
11           **THAT YOU ARE SOMEHOW ATTEMPTING TO UPDATE THE**  
12           **HISTORICAL TEST YEAR WITH YOUR TEST OF THE REVENUE**  
13           **REQUIREMENT. DO YOU AGREE?**

14   A.    Absolutely not. Mr. Carver and Mr. Smith both allude to this point, while  
15           Mr. Lee states outright that I am attempting to update the test year. I am  
16           not updating the test year. I am testing the sufficiency of the  
17           recommended revenue requirements, which were developed from the  
18           1999 historical test year, by comparing the outcome of that development  
19           against 2000 actual, booked results.

20

---

<sup>1</sup> See also the quote by Dr. Alfred Kahn on page 5 of my rebuttal, which states that “the fact is . . . regulatory commissions have always been in the business of projecting, whether they knew it or not. When they used historic test year statistics . . . as the basis of future rates, they were in fact projecting. They were assuming that the future would be similar to the past. It is no more speculative, then, to make the best possible estimate of future costs when setting future rates; and honesty compels it.” (emphasis added).

1 **Q. MR. SMITH STATES THAT THE TEST HAS NO WEIGHT**  
2 **WHATSOEVER AS IT IS NOT A COMPLETE ANNUAL PERIOD. WHAT**  
3 **IS YOUR RESPONSE?**

4 A. This is just another attempt to diminish the value of the test. What neither  
5 Mr. Smith nor Mr. Carver can say is that their proposed revenue  
6 deficiency/requirement will produce results near even their own proposed  
7 rate of return when overlaid on actual results.

8

9 **END OF PERIOD ADJUSTMENT**

10

11 **Q. PLEASE TURN YOUR ATTENTION TO THE END OF PERIOD**  
12 **ADJUSTMENT. DO THE OPPOSING WITNESSES HAVE ANYTHING**  
13 **NEW TO ADD HERE?**

14 A. Not really. They make the same basic argument as they did for the test of  
15 the revenue requirement. They complain that I did not adjust actual  
16 results for imputations and disallowances. My response is still the same –  
17 the actual results are not adjusted for these items. The fact still remains  
18 that Qwest's advocacy is the only one that produces both revenues and  
19 expenses that are close to the level currently being experienced.

20

21 **Q. MR. CARVER AND MR. LEE BOTH STATE THAT THEY ARE**  
22 **REVIEWING APPROPRIATE EXPENSE TRENDS. DO YOU AGREE?**

23 A. No. While both make assertions that their expense trends show that their  
24 expense levels are appropriate, they both suffer from a major deficiency.  
25 Neither of their trends extends past the end of the test year. Only the  
26 Company shows trends that extend into 2000. And, again, only Qwest's

1 proposed expenses based on end of period 1999 approximate the  
2 expenses actually occurring in 2000.

3  
4 **Q. MR. CARVER, ON PAGES 15 AND 16 OF HIS SURREBUTTAL,**  
5 **STATES THAT HIS USE OF TWELVE MONTHS FOR EACH POINT ON**  
6 **HIS GRAPH WILL SMOOTH OUT MONTH TO MONTH**  
7 **FLUCTUATIONS. IS HE CORRECT?**

8 **A.** He is correct as far as he goes, but he does not discuss one obvious  
9 shortcoming of using twelve months for each data point. That  
10 shortcoming is that all of his data points portray old history. This is true  
11 since each data point consists of twelve months of historical information.  
12 While his points smooth month-to-month variances they are backward  
13 looking rather than forward looking. Again, the purpose of a properly  
14 adjusted test period is to look forward. It is not appropriate to compare  
15 adjusted test year results that are forward looking to a trend that, by its  
16 very construction, is backward looking.

17  
18 Additionally, by using a backward looking 12 months for a given data  
19 point, Mr. Carver's end of test year data point at December 1999  
20 understates the end-of-period expense level. This is the case because,  
21 on an upwardly sloping trend line where expenses are increasing, Mr.  
22 Carver's data points are weighted downward with lower prior month  
23 expense levels. To achieve an appropriate trend line representing end-of-  
24 period expense levels one must carry such a trend line forward into year  
25 2000.

1

2 **Q. MR. SMITH COMPLAINS AT PAGE 4 OF HIS TESTIMONY THAT YOU**  
3 **HAVE SUBSTITUTED A “TEST MONTH” FOR A TEST YEAR. PLEASE**  
4 **COMMENT.**

5 A. This complaint is a smoke screen. By necessity, an end of period  
6 adjustment focuses on the latter portion of the test year. RUCO, itself,  
7 makes end of period adjustments for both revenues and wage-related  
8 expenses. While they did not employ exactly the same methodology as  
9 the Company, their adjustments were predicated, at least partly, on results  
10 at the end of the test year. Thus, Mr. Smith, is himself being inconsistent  
11 when he complains that the Company’s adjustments relied on end of  
12 period data.

13

14 **Q. MR. SMITH ALSO STATES THAT THE ANNUALIZATION OF NON-**  
15 **LABOR EXPENSE IS NOT CONSISTENT WITH PAST ACC PRACTICE.**  
16 **WHAT ARE YOUR REACTIONS?**

17 A. As I have explained numerous times, I believe that a properly adjusted  
18 test period should synchronize all of the elements of the ratemaking  
19 equation, namely revenues, expenses, taxes and rate base. Since an end  
20 of period rate base is employed in Arizona, all other elements should be  
21 synchronized with it. That is what I have done in the Company’s  
22 presentation of the test year. I have been careful throughout my direct,  
23 rebuttal and now rejoinder testimony to lay out a clear theoretical basis for  
24 the appropriateness of the end of period adjustment to all elements of the  
25 ratemaking equation. I have also tested the results of these adjustments

1 against actual, booked results in 2000 to demonstrate that the  
2 adjustments proposed by Qwest are appropriate.

3  
4 **Q. MR. CARVER, AT PAGE 36, IMPLIES THAT THE COMPANY**  
5 **WITNESSES HAVE BEEN INCONSISTENT IN THEIR TREATMENT OF**  
6 **LTIP. WHAT IS YOUR RESPONSE?**

7 A. As stated in the response to data request UT171-008, no specific LTIP  
8 adjustment was made because the end of period wage and salary  
9 adjustment produced pro forma expense levels higher than the levels that  
10 included the LTIP. The 1999 amount of LTIP involved is minor, at less  
11 than \$0.2M.

12  
13 **POST TEST YEAR WAGES**  
14

15 **Q. MR. CARVER RENEWS HIS ARGUMENTS REGARDING THE LEVEL**  
16 **OF POST TEST YEAR WAGES. DO YOU HAVE ANYTHING TO ADD**  
17 **TO THE POSITION YOU TOOK IN YOUR REBUTTAL?**

18 A. Yes, I do. On page 27 of his surrebuttal, Mr. Carver states that "the  
19 ultimate objective in selecting from this menu of test year options is the  
20 establishment of rates for the future that will provide the utility with an  
21 opportunity to earn a reasonable return on investment." I concur with this  
22 statement. The test that compared fully adjusted test year expenses to  
23 actual results being incurred in 2000 established the validity of the  
24 Company's total adjustments to the test year. These adjustments  
25 included the post test year wage and salary increases of \$7.8M.

26

1 Then Mr. Carver goes on to try and somehow make the Company's  
2 adjustment for post test year wages and salaries into a forecasted test  
3 year. I would agree with Mr. Carver that I was using an element of a  
4 forecasted test year except for one thing – the Company's adjustment  
5 maintained the test year volumes. In other words, the post test year  
6 wages and salary increases were stated at test year 1999 levels; that is,  
7 test year volumes times the known price level change. Changes in post  
8 test year known and measurable price levels have consistently been  
9 adopted by regulators, including the ACC, despite the fact that Mr. Carver  
10 does not agree.

11  
12 Mr. Carver then claims that the Company's approach is piecemeal. I  
13 would refer Mr. Carver to page 28 of my rebuttal testimony where I stated  
14 that I would have made other post test year price level changes had there  
15 been any. The Company's approach was not piecemeal; rather the post  
16 test year wage and salary adjustments were the only price level changes  
17 uncovered in my review.

## 18 **SOFTWARE CAPITALIZATION**

19 **Q. MR. CARVER AND MR. SMITH BOTH ADDRESS SOFTWARE**  
20 **CAPITALIZATION AGAIN IN THEIR SURREBUTTAL. DO YOU HAVE**  
21 **ANY COMMENTS?**  
22  
23

1 A. I would only like to reiterate two points. The first is that this change will  
2 not be cash impacting if it is not adopted for regulatory purposes and that  
3 the transition is of short duration. Mr. Carver lists various accounting  
4 changes that have been adopted for regulatory purposes. Again, they all  
5 had longer lives than the five year life of the instant change.

6  
7 The second point is that I would not have proposed a rider for this item if  
8 there were not a price cap plan being proposed in this case. Assuming  
9 adoption of Mr. Carver's adjustment for the first year impact of SOP 98-1,  
10 and further assuming the adoption of a price cap plan, the Company  
11 would be in the hole on this issue. Consequently, as further capitalization  
12 takes place, the revenue requirement related to this item will automatically  
13 increase from the first year decrease without any ability for the Company  
14 to recover these costs. Even Mr. Smith's three-year average leaves the  
15 Company short since the price cap plan being proposed will last five  
16 years. The preferable treatment is still not to adopt this change for  
17 purposes of this revenue requirement determination.

18

19

20

### **IMAGE ADVERTISING**

21 **Q. ALL OF THE PARTIES EXCEPT FOR AT&T ADDRESS IMAGE**  
22 **ADVERTISING AND CONTINUE TO PROPOSE ITS EXCLUSION. DO**  
23 **YOU HAVE ANY FURTHER THOUGHTS ON THEIR COMMENTS?**

24 A. Yes, I do. This is one of those issues where the basis for making the  
25 adjustment has changed. When the Company was a monopoly provider  
26 of local services, there were much stronger arguments related to the

1 exclusion of image advertising. But times have changed and quickly.  
2 Qwest now faces competition in almost every area of its business. There  
3 is strong competition for business and toll services, and competition is  
4 growing in the residential sector. Cox Cable, in Arizona, is offering local  
5 residential access in portions of the Phoenix metropolitan area. When  
6 competition is present, the need for image advertising to retain current  
7 customers and set up the sale of new products becomes mandatory. With  
8 competition, the arguments that support product advertising also support  
9 image advertising. When there is competition, the Company must first  
10 promote its brand in order to sell additional products. The two types of  
11 advertising are inextricably tied together.

12  
13 **Q. MR. CARVER CITES A NUMBER OF CASES WHERE IMAGE**  
14 **ADVERTISING HAS BEEN EXCLUDED AND CLAIMS THAT THE**  
15 **SAME RATIONALE SHOULD APPLY HERE. HAS HE MISSED**  
16 **SOMETHING?**

17 **A.** Yes, he has. The scenario of emerging competition that I outlined above  
18 has, by and large, come into existence since the passage of the  
19 Telecommunications Act of 1996. Mr. Carver cites several cases that  
20 support his contention, namely, the last Arizona order in 1995, a Utah  
21 order from 1997 and a 1996 Washington order. None of these cases were  
22 decided based on the explosive growth of competition that has occurred in  
23 the past couple of years. I certainly do not view any of these cases as  
24 valid precedent given the dramatic change in market conditions.

25

1 **Q. MR. LARKIN ALSO OPPOSES IMAGE ADVERTISING. WHAT IS HIS**  
2 **BASIS?**

3 A. Like Mr. Carver, Mr. Larkin does not take cognizance of the changed  
4 factual situation. He cites past precedent and still regards local service as  
5 a monopoly, which it no longer is, especially in Arizona. Furthermore, it is  
6 indisputable that there is very robust competition in other areas such as  
7 long distance.

8

### 9 **FCC DEREGULATED PRODUCTS**

10

11 **Q. HAS MR. SMITH NOW QUANTIFIED HIS AJUSTMENT FOR THIS**  
12 **ISSUE?**

13 A. Yes, he has. However, he has failed to make the companion adjustments  
14 made by Mr. Carver to remove the separations effects of including FCC  
15 deregulated services with regulated results. I do not agree that this  
16 adjustment is necessary unless these deregulated results are removed  
17 from regulation. Mr. Carver's adjustment has the same effect as removing  
18 these products from regulated results. As I stated in my rebuttal testimony,  
19 I believe this adjustment is proper if the Commission grants the  
20 Company's request to remove these deregulated results from regulation.

21

22 **Q. NEITHER MR. CARVER NOR MR. SMITH ADVOCATE REMOVING THE**  
23 **FCC DEREGULATED PRODUCTS FROM REGULATION. HAVE THEY**  
24 **JUSTIFIED THIS TREATMENT?**

25 A. No. It is entirely inconsistent to argue that there should be a profit  
26 imputation to ensure that regulated products do not subsidize deregulated

1 products and at the same time argue that these products should remain  
2 under regulation. The most logical way to achieve the desired result is to  
3 deregulate these FCC deregulated products at the state level.  
4

## 5 **ISSUES RELATED TO SALE OF EXCHANGES**

6

7 **Q. MR. SMITH AGAIN BRINGS UP THE SHARING OF THE GAIN ON THE**  
8 **SALE OF EXCHANGES. WHAT IS YOUR RESPONSE?**

9 A. He reiterated his testimony. I will only state that the disposition of this gain  
10 is a question that should be resolved in the sale of exchanges docket.  
11 Once it is disposed of there, then the impact, if any, on this case may be  
12 determined. Until that time it is premature to discuss disposition of the  
13 gain in this case.  
14

15 **Q. MR. BROSCH CONTINUES HIS ARGUMENTS RELATING TO THE**  
16 **ALLOCATION OF INCREASED MARKETING EXPENSE AND**  
17 **CORPORATE OVERHEADS. DO YOU HAVE ANY FURTHER**  
18 **COMMENTS?**

19 A. Only briefly. I was surprised by Mr. Brosch's statement that when the  
20 Company brings up anticipated growth, as here in conjunction with  
21 corporate overheads, it is considered invalid. However, it appears to be  
22 entirely proper for Staff to use anticipated growth to bolster some of their  
23 arguments.  
24

25 As to the marketing expense, Mr. Brosch is entirely correct that some of  
26 the advertising in urban markets is received in rural markets through the

1 media. However, that is a spillover effect and does not alter the fact that  
2 the marketing push is in the urban centers and directed toward the urban  
3 customer. Also, not all media spills over. Radio advertising tends to be  
4 more localized as does newspaper advertising. Furthermore, the spillover  
5 effect will disappear after the exchanges are sold; i.e. the advertising  
6 aimed at the urban markets will impact only those urban markets.

7  
8 **Q. MS. GATELY ATTEMPTED TO CLARIFY HER ADJUSTMENT**  
9 **RELATED TO THE SALE OF EXCHANGES. DO YOU NOW AGREE**  
10 **WITH HER ADJUSTMENT?**

11 A. No, I do not. She is apparently arguing that since the net operating  
12 income of the exchanges being sold is positive that this somehow or other  
13 benefits Qwest. What she fails to show is that when all elements of the  
14 exchange sale are accounted for the removal of these costs decreases  
15 the overall revenue requirement. This is because the return on investment  
16 generated by the exchanges being sold is only 4% (see Exhibit GAR-  
17 S7G). This return is far below the requested return; therefore, removal of  
18 all elements of the proposed sale actually lowers the requested revenue  
19 requirement.

20  
21 **EMPLOYEE CONCESSIONS**  
22

23 **Q. MR. BROSCHE ACKNOWLEDGES THAT QWEST COULD NOT**  
24 **RECOVER THE INTERSTATE PORTION OF EMPLOYEE**  
25 **CONCESSIONS IF THEY WERE ALLOCATED BETWEEN THE**



1 would like to focus on item 5, which states that "under Arizona law,  
2 automatic adjustment clauses are reserved for those expenses that are  
3 extremely volatile and which widely fluctuate." This describes the  
4 reciprocal compensation issue perfectly. There are existing agreements  
5 with some carriers that provide for reciprocal compensation related to ISP  
6 service. There are also new agreements with other carriers which provide  
7 that reciprocal compensation for ISP traffic is inappropriate. The issue of  
8 whether ISP traffic is interstate or intrastate and the impact of the  
9 designation on reciprocal compensation is under review by both the courts  
10 and the FCC. Also, there is legislation pending in Congress on this  
11 subject. This all adds up to high volatility and uncertainty. Qwest's  
12 proposal merely requests that all parties be held harmless from this  
13 volatility by providing an automatic adjustment clause.

#### 14 15 **COSTS ASSOCIATED WITH LNP** 16

17 **Q. MS. GATELY PERSISTS THAT COSTS NOT ACCEPTED BY THE FCC**  
18 **FOR SPECIFIC RECOVERY UNDER THE LNP SURCHARGE SHOULD**  
19 **BE REMOVED FROM THE DETERMINATION OF THE REVENUE**  
20 **REQUIREMENT. DO YOU AGREE?**

21 **A.** Absolutely not. The FCC defined the costs that could be recovered under  
22 the LNP surcharge very narrowly. They agreed that other costs were  
23 supportive of the provision of LNP, but only allowed direct LNP costs to be  
24 recovered under the LNP surcharge. All of the costs incurred were  
25 necessary to prepare the network to handle LNP, but some of the costs  
26 were associated with both general upgrades of the network and LNP.

1 These costs were not considered direct or specific enough to be  
2 recovered under the LNP surcharge. These are the costs that should be  
3 recovered in the ordinary course of business.

4  
5 **Q. CAN YOU PROVIDE A CONCRETE EXAMPLE OF THE FCC'S**  
6 **THINKING?**

7 A. Yes. In its *Memorandum Opinion and Order* dated December 14, 1998,  
8 the Commission states

9 In the *First Report and Order*, the Commission concluded that the 1996  
10 Act provided for an extraordinary mechanism to recover certain eligible  
11 costs of providing number portability, in addition to the existing price  
12 caps and rate-of-return recovery mechanisms. In the *Third Report and*  
13 *Order*, the Commission limited the costs eligible for recovery through  
14 this new federal mechanism to "costs carriers incur specifically in the  
15 provision of number portability services, such as for the querying of  
16 calls and the porting of telephone numbers from one carrier to  
17 another." The Commission further specified that costs "that carriers  
18 incur as an incidental consequence of number portability, however, are  
19 not costs directly related to providing number portability." The  
20 Commission, therefore, concluded that these latter costs have become  
21 ordinary costs of doing business in this new environment, and, thus,  
22 represent general network upgrades. LECs must distinguish the costs  
23 of providing local number portability itself, recoverable through the  
24 federal charges provided in the Third Report and Order, from general  
25 network upgrade costs recoverable through the price caps and rate-or-  
26 return mechanisms. (footnotes omitted)<sup>2</sup> [emphasis added]  
27

28 This paragraph clearly indicates that costs disallowed from recovery under  
29 the federal LNP mechanism had already become, as of December 1998,  
30 ordinary costs of doing business. It is precisely these ordinary costs of

---

<sup>2</sup> In the Matter of Telephone Number Portability Cost Classification Proceeding, CC Docket 95-116 and RM 8535, *Memorandum Opinion and Order*, released December 14, 1998 at 9.

1 doing business that Qwest seeks to recover in both interstate and  
2 intrastate prices through existing recovery mechanisms.

3  
4 **OTHER INTERCONNECTION COSTS**  
5

6 **Q. MS. GATELY ALSO PERSISTS IN ARGUING THAT ALL COSTS**  
7 **RELATED TO INTERCONNECTION SHOULD BE EXCLUDED. DO**  
8 **YOU HAVE ANY FURTHER COMMENTS ON THIS SUBJECT?**

9 A. The interconnection costs, other than the specific LNP costs recoverable  
10 under the FCC's LNP surcharge, flow through the normal separations  
11 process. So do the revenues associated with these costs. Ms. Gately  
12 seems to be under the impression that the revenues associated with  
13 interconnection are not recognized in the development of the revenue  
14 requirement and therefore, the costs may be double recovered. She is in  
15 error. All of the interconnection revenues properly assignable to the  
16 intrastate jurisdiction are included in the Company's intrastate revenues.  
17 There is no double recovery.

18  
19 **FCC CPR AUDIT**  
20

21 **Q. MS. GATELY PERSISTS IN BELIEVING THAT THE CPR AUDIT**  
22 **RESULTS INDICATE THAT QWEST'S INVESTMENT IS INFLATED.**  
23 **PLEASE COMMENT.**

24 A. This contention is, and has been, vehemently denied by Qwest as well as  
25 all of the other RBOCs. There has been no adjudication of this issue by  
26 the FCC, whose Staff conducted the original audit. Until the FCC has

1 reached a decision on this issue, there is no determination to be made by  
2 the Arizona Commission.

3  
4 I must also repeat certain points I made in my rebuttal. The FCC audit  
5 was not an audit of Qwest's books with respect to investment in plant. It  
6 was a review of the individual property records. The audit did not test for  
7 understatement errors and no mention was made in the audit if additional  
8 pieces of equipment were counted. Further, the audit did not use dollar  
9 based sampling techniques. These facts render the audit results  
10 incapable of determining the dollar value of any errors noted.

11

12 **Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?**

13 **A.** Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. ):

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
GEORGE REDDING

ss

STATE OF COLORADO )  
COUNTY OF DENVER )

George Redding, of lawful age being first duly sworn, depose and states:

1. My name is George Redding. I am Director – Regulatory Finance of Qwest Corporation in Denver, Colorado. I have caused to be filed written rejoinder testimony in support of Qwest in Docket No. T-01051B-99-0105
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

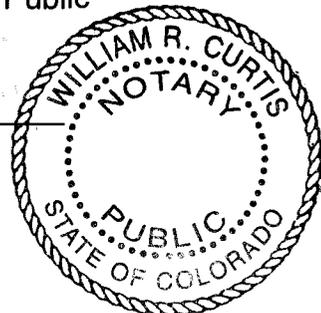
Further affiant sayeth not.

  
George Redding

SUBSCRIBED AND SWORN to before me this 15<sup>TH</sup> day of SEPTEMBER, 2000.

  
Notary Public

My Commission Expires: \_\_\_\_\_



My Commission Expires 10/28/2003

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AZ CORP COMMISSION  
DOCUMENT CONTROL

**BEFORE THE  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**DOCKET NO. T-01051B-99-0105**

**REJOINDER TESTIMONY OF**

**PHILIP E. GRATE**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF PHILIP E. GRATE**

**INDEX OF TESTIMONY**

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1 **INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Philip E. Grate. My business address is 1600 Bell Plaza,  
4 Room 3008, Seattle, Washington 98024.

5

6 **Q. ARE YOU THE SAME PHILIP E. GRATE WHO FILED REBUTTAL**  
7 **TESTIMONY IN THIS CASE?**

8 A. Yes.

9

10 **Q. U S WEST HAS UNDERGONE A NAME CHANGE. HOW WILL YOU**  
11 **REFER TO THE FORMER U S WEST IN YOUR REJOINDER**  
12 **TESTIMONY?**

13 A. The regulated telecommunications subsidiary of Qwest Communications  
14 International, Inc. (formerly U S WEST, Inc.) is now Qwest Corporation.  
15 Qwest Corporation is the new name of the former U S WEST  
16 Communication, Inc. In my testimony I will refer to the former U S WEST  
17 Communications, Inc. as "Qwest" or the "Company."

18

19 **Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

20 A. The purpose of my rejoinder testimony is to respond to the surrebuttal  
21 testimonies of Steven C. Carver on behalf of Staff and Hugh Larkin, Jr. on  
22 behalf of RUCO concerning incentive compensation and pension asset in  
23 revenue requirement.

1

2

## INCENTIVE COMPENSATION

3 *Rejoinder To RUCO's Surrebuttal*

4

5 **Q. RUCO SUGGESTS THAT QWEST'S OVERALL STANCE IN THIS CASE**  
6 **APPEARS TO BE THAT IF IT INCURS A COST, THAT COST SHOULD**  
7 **NOT BE QUESTIONED AND SHOULD AUTOMATICALLY BE FLOWED**  
8 **THROUGH TO RATEPAYERS. [LARKIN, P. 3, L. 11] MR. LARKIN**  
9 **ALSO ASSERTS, "THE COMPANY'S APPROACH WOULD**  
10 **ESSENTIALLY DISCONTINUE ANY SORT OF PRUDENCE REVIEWS**  
11 **OR ANALYSIS OF SPECIFIC COST ITEMS." [LARKIN, P. 3, L. 29] ARE**  
12 **THESE FAIR CHARACTERIZATIONS OF YOUR REBUTTAL**  
13 **TESTIMONY?**

14 **A. No. As I stated in my rebuttal testimony, prudence and reasonableness**  
15 **are the standards against which these costs should be reviewed.**

16 To the extent costs are necessary and prudently incurred in the  
17 conduct of the utility's business and reasonable in amount, they  
18 should not be disallowed. [Grate rebuttal testimony, page 5]

19 Although he mentions prudence [Larkin surrebuttal, p. 3, l. 20, p. 5, l. 10]  
20 and market power [Larkin surrebuttal, p. 4, l. 6], Mr. Larkin has made no  
21 attempt to show that Qwest's incentive compensation plans are in any  
22 way imprudent, unreasonable, or an abuse of market power. To make  
23 such a showing, Mr. Larkin would have to demonstrate that companies  
24 that lack market power do not use such plans, that companies that lack

1 market power do not use performance criteria like those in Qwest's plans  
2 and that the amount Qwest pays its employees is more than the amount  
3 companies that lack market power pay their employees. Mr. Larkin has  
4 not made such a demonstration.

5  
6 The review and analysis that Mr. Larkin offers to support his  
7 recommended 50% disallowance of Qwest's ABP and STIP is limited to  
8 broad observations that "these plans result in benefits to both ratepayers  
9 and shareholders" [Larkin direct, p. 18, l. 18, p. 19, l. 5] and "[s]ome of the  
10 specific goals appear to be in direct conflict with ratepayer interests."  
11 [Larkin, p. 19, l. 6]. Mr. Larkin could have recommended specific  
12 disallowances of costs he believes are incurred in direct conflict with  
13 ratepayer interests. Instead, he suggests 50% without offering anything to  
14 show why 50% is not an arbitrary number. Mr. Larkin's testimony does  
15 not evidence any effort to perform a detailed review or rigorous analysis.

16  
17 It is very easy for just about anyone to find something to criticize in a  
18 compensation plan. But such criticisms should not be used as the basis  
19 for a disallowance of costs unless those costs are clearly unnecessary,  
20 imprudent or unreasonable in amount. This is particularly true when—as  
21 is the case in this proceeding—no party disputes that the costs were  
22 actually incurred.

1 Q. RUCO ARGUES THAT INCENTIVE COMPENSATION SHOULD BE  
2 DISALLOWED BECAUSE IT IS SUBJECT TO MANAGEMENT  
3 DISCRETION AND SHAREHOLDERS STAND TO BENEFIT FROM IT.  
4 [LARKIN SURREBUTTAL, PP. 7-8] IS THE FACT THAT  
5 SHAREHOLDERS BENEFIT LEGITIMATE GROUNDS FOR A  
6 DISALLOWANCE OF A COST?

7 A. No. This argument is incorrect for many reasons. First, management has  
8 discretion over every aspect of the operation of the Company, not just  
9 incentive compensation. Except in the case of cooperatives, ratepayers  
10 have no expectation of being involved in the management of utilities. The  
11 argument that a cost should be disallowed because it is subject to  
12 management discretion proves too much and could be improperly used to  
13 justify disallowance of any expense no matter how reasonable and  
14 prudent.

15  
16 Second, under cost of service regulation, ratepayers and shareholders  
17 both benefit from the same financial performance. My rebuttal testimony  
18 illustrates how this mechanism works. Mr. Larkin suggests my illustration  
19 is overly simplistic, is not specific to U S West's/Qwest's experience and  
20 should be given no weight. [Larkin, p. 6, l. 19] My illustration is simple so  
21 that the concepts it is explaining can be readily understood. It is non-  
22 specific because it illustrates a ratemaking mechanism, not a specific fact  
23 pattern. While Mr. Larkin would like the Commission to ignore the  
24 illustration, he does not dispute that 1) cost of service ratemaking provides  
25 a mechanism that allows ratepayers to benefit from improved financial

1 performance and 2) the ratemaking mechanism the illustration describes  
2 applies to Qwest in Arizona.

3  
4 Finally, the fact that shareholders benefit from incentive compensation is  
5 not grounds for its disallowance. The ACC should not disallow a cost  
6 designed to provide financial benefits to shareholders merely because  
7 ratepayers will receive those same benefits (through reduced revenue  
8 requirement) only after shareholders have received them. Such a  
9 disallowance would financially penalize shareholders for employing a  
10 management strategy that increases the likelihood ratepayers will get a  
11 financial benefit. Furthermore, to disallow such costs is to give  
12 ratepayers a free ride. Ratepayers would get the benefit of a utility whose  
13 revenue requirement and rates are more likely to decline. But ratepayers  
14 will not have to pay the full cost of employee compensation that motivates  
15 employees to achieve results that reduce revenue requirement and lower  
16 rates.

17  
18 ***Rejoinder to Staff's Surrebuttal***

19 **Q. IN SURREBUTTAL, STAFF ARGUES:**

20 **“THE INCENTIVE COMPENSATION PLAN COSTS THAT THE STAFF**  
21 **HAS RECOMMENDED BE DISALLOWED ARE PRIMARILY DRIVEN BY**  
22 **CORPORATE-WIDE FINANCIAL RESULTS OR SURVEYS OF**  
23 **CUSTOMER PERCEPTIONS OF THE COMPANY. IN GENERAL**  
24 **TERMS, THESE CORPORATE-WIDE GOALS AND OBJECTIVES DO**

1       **NOT ADDRESS OR DEFINE SPECIFIC SERVICE QUALITY**  
2       **MEASURES OR PERFORMANCE EXPECTATIONS THAT ARE UNIQUE**  
3       **TO THE SPECIFIC WORK ACTIVITY OF THE INDIVIDUAL COMPANY**  
4       **EMPLOYEE OR COMMON GROUPS OF EMPLOYEES, WHICH**  
5       **WOULD MOST DIRECTLY MOTIVATE EMPLOYEE WORK."**

6       **[CARVER, P. 37, LINES 1-6]**

7       **DOES THE USE OF CORPORATE WIDE GOALS INSTEAD OF**  
8       **SPECIFIC WORK ACTIVITY GOALS OF THE INDIVIDUAL EMPLOYEE**  
9       **JUSTIFY DISALLOWANCE OF INCENTIVE COMPENSATION?**

10     A.    No. The use of company-wide goals instead of employee or group  
11           specific goals in no way justifies a disallowance. Mr. Carver offers no  
12           ratemaking principles in support of his position that incentive  
13           compensation should be disallowed unless it is tailored to individual  
14           employees or common groups of employees. Instead, he merely implies  
15           that, because they do not exclusively use specific service quality  
16           measures or performance expectations that are unique to the specific  
17           work activity of the individual Company employee or common groups of  
18           employees, Qwest's plans are so defective that their costs should be  
19           disallowed.

20  
21           Based on his experience, Mr. Carver may sincerely believe that goals  
22           tailored to individuals and work groups goals are better motivators.  
23           However he has never been employed by a large corporation, managed a  
24           large corporation or managed a large group of people. Mr. Carver has not

1 shown that incentive compensation plans in general, or Qwest's plans in  
2 particular, are ineffective at motivating employees or that such plans are  
3 imprudent or unreasonable. Nor has he shown why his preference for  
4 goals tailored to individuals and work groups justifies a disallowance.

5  
6 The Commission should not disallow a cost because the Company's  
7 professional managers have adopted a management technique different  
8 from that which the Commission's Staff's prefers.

9  
10 **Q. IN SURREBUTTAL, STAFF ARGUES:**

11 **"THE COMPANY HAS NOT DEMONSTRATED THE DEGREE TO**  
12 **WHICH THE CORPORATE-WIDE GOALS AND OBJECTIVES HAVE**  
13 **MOTIVATED THE BROAD BASE OF EMPLOYEES TO PERFORM AT**  
14 **LEVELS UNLIKELY TO BE ATTAINED IN THE ABSENCE OF SUCH**  
15 **PLANS OR THAT THE PLANS HAVE RESULTED IN ACHIEVEMENTS**  
16 **BENEFITING ARIZONA RATEPAYERS THAT COULD NOT HAVE**  
17 **BEEN ATTAINED WITHOUT SUCH PLANS."**

18 **SHOULD QWEST'S INCENTIVE COMPENSATION PLANS BE**  
19 **DISALLOWED UNLESS THE COMPANY DEMONSTRATES HOW THE**  
20 **PLANS HAVE MOTIVATED EMPLOYEES TO ATTAIN ACHIEVEMENTS**  
21 **BENEFITING ARIZONA RATEPAYERS THAT COULD NOT HAVE**  
22 **BEEN ATTAINED WITHOUT SUCH PLANS?**

23 **A.** No. A common theme runs through Mr. Carver's incentive compensation  
24 and pension asset testimony. That common theme is Mr. Carver's

1 argument that expenses should be disallowed from results of operations  
2 and assets should be disallowed from ratebase unless the Company can  
3 prove something that is not provable.

4  
5 Mr. Carver argues that Pension Asset must be removed from ratebase  
6 unless the Company can prove that ratepayers have recovered all  
7 pension credits the Company has recorded. He also argues that any  
8 reconciliation of pension expenses and credits must go back many  
9 decades to the beginning of the Company's pension plan (this  
10 requirement assures that records necessary to conduct the reconciliation  
11 are unavailable). By Mr. Carver's own admission, this is a standard that  
12 the Company can not meet.

13  
14 Now in surrebuttal testimony Mr. Carver introduces a new requirement  
15 that he argues the Company must satisfy if its incentive compensation  
16 expenses are to be allowed. In proposing to assign his new standard-of-  
17 proof, he argues incentive compensation costs should be disallowed  
18 unless the Company identifies and quantifies the degree to which  
19 incentive compensation has caused improvements in financial and service  
20 quality performance, "that could not have been attained without such  
21 plans." Meeting this standard would be an impressive accomplishment  
22 indeed.

23

1 Obviously, it is impossible to know what would have been achieved had  
2 Qwest had no incentive compensation plans because there is only one  
3 Company and one set of outcomes to measure. The outcomes that would  
4 have been achieved with different plans or no plans are purely a matter of  
5 speculation.

6

7 **Q. MR. CARVER CLAIMS TO HAVE BEEN "RATHER SURPRISED THAT**  
8 **THE COMPANY WAS UNABLE TO PROVIDE ANY DATA TO**  
9 **DEMONSTRATE...TANGIBLE BENEFITS." [CARVER, P. 37, L. 26]**  
10 **WHAT IS YOUR RESPONSE?**

11 **A.** In 1999 any particular firm either had an incentive compensation plan or it  
12 did not. Expecting Qwest to measure and compare the benefits achieved  
13 through its plans with the benefits that would have been achieved with no  
14 plans is like expecting a person to identify and quantify how their lifetime  
15 income would have been different had they chosen a different career.  
16 The best anyone can do is speculate. What we do know with certainty is  
17 that incentive compensation costs were incurred as part of a total  
18 compensation package offered to management and employees for the  
19 work they perform in providing telecommunications services to Arizona  
20 ratepayers.

21

22 **Q. MR. CARVER ARGUES THAT QWEST'S INCENTIVE COMPENSATION**  
23 **EXPENSES SHOULD BE DISALLOWED IN PART BECAUSE THEY**  
24 **RELY ON SURVEYS INSTEAD OF "TRADITIONAL" MEASURES OF**

1           **SERVICE QUALITY. [CARVER SURREBUTTAL, P. 40, LINE 16**  
2           **THROUGH P. 41, LINE 22] IS THIS A REASONABLE BASIS FOR A**  
3           **DISALLOWANCE?**

4    A.    No. While Mr. Carver professes to make no “judgement” about the CVA,  
5           he does make a judgement because he recommends disallowance  
6           based on Qwest’s use of the CVA. Based on his belief that CVA surveys  
7           are inferior to more “traditional” and direct measures of service quality, he  
8           opines that the costs of incentive compensation for the CVA should be  
9           disallowed. Here again he asks the Commission to disallow a cost  
10          because the Company’s professional managers have not adopted the  
11          management technique that he prefers. Unless Staff can show that the  
12          CVA is unreasonable or imprudent, the costs incurred for it should not be  
13          disallowed.

14

15   **Q.    DOES THE CVA’S RELIANCE ON SURVEYS MAKE IT**  
16   **UNREASONABLE OR IMPRUDENT?**

17   A.    No. All measures of service quality have their shortcomings. It is easy to  
18          find something to criticize in any service quality measure.

19

20          The use of customer surveys to ascertain customer satisfaction is  
21          widespread and commonplace in the United States. No one can  
22          reasonably argue that use of customer surveys to measure service quality  
23          for purposes of incentive compensation is unreasonable or imprudent.  
24          Mr. Carver’s preference for “traditional” measures of service quality and

1 his criticisms of the CVA do not justify disallowing incentive compensation  
2 costs.

3

4 **Q. MR. CARVER STATES IN SURREBUTTAL:**

5 **TO THE EXTENT THAT ARIZONA CUSTOMERS ARE BEING ASKED**  
6 **TO PAY FOR THE COST OF IMPROVING SERVICE QUALITY, BOTH**  
7 **THE COSTS SOUGHT FOR RECOVERY AND THE IMPROVEMENT IN**  
8 **QUALITY SHOULD BE BASED ON ARIZONA OPERATIONS—NOT**  
9 **COSTS OR IMPROVEMENTS IN OTHER STATE JURISDICTIONS**  
10 **MUCH LESS COMPANY WIDE PERCEPTIONS THAT MAY NOT**  
11 **DIRECTLY TRANSLATE INTO THE PROVISION OF HIGHER QUALITY**  
12 **ARIZONA SERVICE. [CARVER, P. 42, L. 16]**

13 **WHAT IS YOUR RESPONSE?**

14 **A.** Mr. Carver is suggesting incentive plans should be disallowed unless the  
15 Company can show how Arizona ratepayers benefited from the costs  
16 incurred in Arizona for the plans because “the corporate-wide benefits  
17 alleged to result from these plans...are not necessarily realized or  
18 realizable in Arizona—because Arizona does not necessarily mirror the  
19 Company’s consolidated operations.” [Carver surrebuttal, p. 44, l. 20]  
20 He concludes that “[b]ecause of the structure of the incentive plans and  
21 the cost allocation process employed, employee payouts and the  
22 apportionment of costs to Arizona are not based on the financial or  
23 service achievements attained in Arizona.” [Carver, p. 45, l.11]

24

1 This argument is another variation on Mr. Carver's impossible-to satisfy  
2 standard-of-proof strategy. In this case, he is asserting that unless there  
3 is a direct and demonstrable link between the incentive compensation  
4 costs incurred in Arizona and the benefits derived from them in Arizona,  
5 those costs should be disallowed. It is undeniable that the benefits of  
6 incentive compensation are not necessarily realized among the 14 states  
7 in direct proportion to the costs each of those states incur for incentive  
8 compensation. But this does not mean that the incentive compensation  
9 costs incurred in Arizona provide no benefit to Arizona or that the costs  
10 are unreasonable or imprudent.

11  
12 The employees whose compensation costs are charged to the Arizona  
13 jurisdiction were subject to these plans. While these employees  
14 performed work in or on behalf of (and, therefore, charged to) Arizona  
15 they were under the influence of the incentives in the plans.  
16 Consequently, the work performed in or on behalf of Arizona was  
17 influenced by the incentives and the influence of the plans is imbedded in  
18 the costs charged to Arizona and the results of the work done in or for  
19 Arizona.

20  
21 Even if the benefits of incentive compensation could be specifically  
22 identified and quantified (which they can't), it still would not be reasonable  
23 to expect the Company to demonstrate that all the incentive compensation  
24 costs incurred or charged to Arizona yielded benefits that stayed in  
25 Arizona. Similarly, some of the benefits realized in Arizona may be linked

1 to incentive compensation costs borne by other jurisdictions. Further,  
2 even if there were 14 separate state incentive compensation plans there  
3 would be no assurance that the cost/benefit ratio of each state would be  
4 the same.

5  
6 Ratepayers pay for service, not for specific elements of a utility's costs;  
7 were it otherwise, rates would be adjusted annually to provide full  
8 recovery of costs actually incurred. Rates in Arizona are not set by  
9 reference to any formula that makes adjustments for differently levels of  
10 service quality. Instead, Qwest's service quality levels in Arizona are  
11 subject to rules that provide for financial rewards and penalties. So it is a  
12 mischaracterization to claim that "Arizona customers are being asked to  
13 pay for the cost of improving service quality."

14  
15 Under the cost-of-service method of ratemaking now employed in Arizona,  
16 rates should be designed to provide a reasonable opportunity for a utility  
17 to recover the reasonable and prudent costs of providing service. If the  
18 incentives in Qwest's plans do not make Qwest's employee compensation  
19 unreasonable or imprudent, such costs should not be disallowed. A  
20 corporation that operates in multiple states can hardly be said to act  
21 imprudently or unreasonably because it does not measure state specific  
22 performance, particularly where state specific service quality performance  
23 is not an element in the computation of rates and service quality levels are  
24 a result of many variables.

1

2 **Q. IN SURREBUTTAL MR. CARVER ALLEGES:**

3 **...EMPLOYEES PARTICIPATING IN THE COMPANY'S 1999 STIP AND**  
4 **ABP COULD STILL ACHIEVE A NEAR-TARGET TOTAL BONUS FROM**  
5 **EXCEPTIONAL FINANCIAL PERFORMANCE EVEN IF NO BONUS IS**  
6 **ACHIEVED FOR SERVICE QUALITY. [CARVER, P. 43, L. 10]**

7 **WHAT IS YOUR RESPONSE?**

8 A. The targets in the plans are just that, targets. They are not maximums  
9 and they do not define the limit of employees' desire to earn  
10 compensation. The fact that near-target payouts could be made does not  
11 diminish the fact that employees would be leaving incentive compensation  
12 dollars "on the table" if they do not get a payout for service quality. So  
13 any implication Mr. Carver might try to make 1) that employees would view  
14 payouts for exceptional financial performance as full compensation for  
15 missing service quality objectives or 2) that the structure of the plan  
16 negates the motivational effect of service quality incentives, is false.

17

18 Mr. Carver's suggestion that all of the costs of the STIP and ABP should  
19 be disallowed because, under exceptional circumstances, employees  
20 could receive a near-target payout is yet another one of his criticisms. In  
21 direct testimony, Mr. Carver suggests the STIP and APB should be  
22 disallowed because they "focus heavily on increasing financial targets and  
23 enhancing corporate profitability." [Carver, p. 45, l. 11] His criticism  
24 here—based on exceptional circumstances—is a variation on that

1 complaint. It does not demonstrate the plans are unreasonable or  
2 imprudent and does not justify a disallowance.

3

4 **Q. IN SURREBUTTAL MR. CARVER ALLEGES:**

5 **ARIZONA EMPLOYEES COULD PERCEIVE DIMINISHED INCENTIVES**  
6 **BECAUSE THE STATE'S RESULTS ARE CO-MINGLED WITH AND**  
7 **DILUTED BY THOSE OF THE OTHER 13-STATE OPERATIONS,**  
8 **EITHER POSITIVELY OR NEGATIVELY. [CARVER, P. 45, L. 4]**

9 **WHAT IS YOUR RESPONSE?**

10 A. Mr. Carver argues that Arizona employees' incentives could be diminished  
11 because the level of performance in Arizona is diluted by the other 13  
12 states. [Carver, p. 45, l. 1] Following his line of reasoning to its logical  
13 conclusion, all employees experience diminished incentives because their  
14 performance is diluted by all other employees' performance. Here again  
15 Mr. Carver would justify a disallowance based on a philosophical  
16 difference. Incentive compensation can be individualized at the risk of  
17 promoting selfishness and parochialism or it can be based on broad  
18 outcomes at the risk of diminishing individual incentives. Mr. Carver's  
19 preference for individual instead of corporate or large group incentives  
20 does not make them unreasonable or imprudent and a disallowance  
21 based on his preference would be an unreasonable financial penalty.

22

23 **Q. DO YOU HAVE ANY REJOINDER TO MR. CARVER'S SURREBUTTAL**  
24 **CONCERNING THE IT CAREER STRUCTURE BONUS PLAN?**

1 A. No. Mr. Carver offers no surrebuttal to my rebuttal testimony on this plan.

2

3 ***Reasonableness and Prudence***

4 **Q. SHOULD THERE BE DIFFERENT STANDARDS OF**  
5 **REASONABLENESS AND PRUDENCE FOR JUDGING THE COSTS OF**  
6 **REGULATED UTILITIES AND THE COSTS OF NON-REGULATED**  
7 **BUSINESSES?**

8 A. No. In Mr. Larkin's words, "one of the purposes of regulation...is to  
9 ensure that the captive ratepayers are not being harmed through the  
10 market power of the utilities." [Larkin, p. 4, l. 4] It follows that the standard  
11 of reasonableness for reviewing a utility cost should be whether prudently  
12 and competently operated companies without market power would incur  
13 that same cost and in the same amount. If so, the cost is reasonable.  
14 Staff's and RUCO's testimonies completely fail to show that Qwest's  
15 incentive compensation plans do not satisfy that reasonableness test.

16

17 Neither Staff nor RUCO articulate a standard of review for incentive  
18 compensation costs in their direct testimony. Instead, they criticize  
19 various features of the plans because they are not structured the way  
20 Staff and RUCO would prefer them to be structured. It is easy to criticize  
21 the structure of any particular incentive compensation plan because there  
22 are so many other ways plans can be structured. It is much harder to  
23 manage, motivate and compensate a very large and diverse workforce of  
24 a multi-state company. It is inappropriate to financially penalize a utility

1 for incentive compensation plans that are reasonable, prudent, and  
2 designed to provide benefit to ratepayers because the plans are not  
3 structured the way consumer advocates or regulatory staff would prefer  
4 that they be structured.

5  
6 No witness alleges that Qwest pays its employees too much.  
7 Consequently, whether the Commission should financial penalize  
8 shareholders—as Mr. Larkin and Mr. Carver recommend—should be  
9 determined by deciding this question: would ratepayers be better served if  
10 the amount management employees received in 1999 for incentive  
11 compensation was paid as base salary instead?

12  
13 If the Commission determines that paying incentive compensation instead  
14 of base salary was imprudent and, therefore, harmed ratepayers, then a  
15 disallowance of the portion that was imprudent would be appropriate. To  
16 the extent, however, paying incentive compensation left ratepayers no  
17 worse off than if the amount paid had been base salary, no disallowance  
18 can be justified, regardless of Staff's and RUCO's criticisms of Qwest's  
19 plans.

20  
21 **Q. ARE QWEST'S APB, STIP, AND ITCSBP REASONABLE AND**  
22 **PRUDENT FROM A MANAGEMENT COMPENSATION STANDPOINT?**

23 **A.** Like Mr. Carver and Mr. Larkin, my credentials do not qualify me as an  
24 expert on the effectiveness or reasonableness of incentive compensation

1 plans from the perspective of the management compensation discipline.  
2 Accordingly, I have asked Qwest's Director of Management  
3 Compensation, Mr. Jeffrey Haynes, to provide his expert opinion  
4 regarding the effectiveness, reasonableness and prudence of Qwest's  
5 1999 APB, STIP and ITCSBP. Attachment PG-1 is Mr. Haynes sworn  
6 affidavit that the performance criteria of Qwest's 1999 APB, STIP and  
7 ITCSBP were reasonable and prudent from a management compensation  
8 standpoint and that the total compensation Qwest paid its managers was  
9 reasonable in amount based on a comparison with other firms.

10  
11 **PENSION ASSET**

12 *Rejoinder To RUCO's Surrebuttal*

13 **Q. ARE YOU RESPONDING TO SURREBUTTAL FROM RUCO?**

14 **A.** No. RUCO did not file any surrebuttal testimony on Pension Asset.

15  
16 *Rejoinder To Staff's Surrebuttal*

17 **Q. MR. CARVER SUGGESTS THAT YOU CRITICIZE HIS OPINION ONLY**  
18 **BECAUSE IT DIFFERS FROM YOUR OWN. [CARVER, P 51, LINES. 9--**  
19 **11. IS THIS TRUE?**

20 **A.** No. I drew attention to the fact that Mr. Carver relies only on his opinion  
21 because that opinion:

22 1. is unsupported by sound ratemaking principles;

- 1           2. supports a test for disallowance that violates the rule against  
2           retroactive ratemaking;
- 3           3. supports a standard-of-proof that even Mr. Carver acknowledges  
4           cannot be satisfied;
- 5           4. applies to the one major balance created by accruals that happens to  
6           reduce ratebase (Pension Asset); and
- 7           5. does not apply to the two major balances created by accruals that do  
8           not happen to reduce ratebase (accumulated depreciation and  
9           accumulated deferred taxes).

10

11 **Q. MR. CARVER SUGGESTS THE STANDARD-OF-PROOF ON PENSION**  
12 **ASSET SHOULD BE DIFFERENT THAN THE STANDARD-OF-PROOF**  
13 **THAT APPLIES TO ACCUMULATED DEPRECIATION AND**  
14 **ACCUMULATED DEFERRED TAXES BECAUSE "PENSION**  
15 **ACCOUNTING CHANGED DRAMATICALLY WITH THE ADOPTION OF**  
16 **SFAS 87." [CARVER SURREBUTTAL P. 52, L. 3—13 ] DO YOU**  
17 **AGREE WITH HIS REASONING?**

18 **A.** No. Mr. Carver relies on a distinction that makes no difference. No  
19 ratemaking principle suggests that one element of the balance sheet  
20 should be subject to a different standard-of-proof than all the other  
21 elements of the balance sheet. The change in accounting brought about  
22 by SFAS 87 does not justify imposing on Pension Asset a standard-of-  
23 proof that violates the rule against retroactive ratemaking.

1

2 Nor does the fact that the Pension Asset was created by a "dramatic" or  
3 "radical" accounting change suggest that it should be treated differently.  
4 Pension Asset is not the only ratebase balance created by a significant  
5 change. A similarly significant change in federal income tax law gave rise  
6 to the recording of accumulated deferred taxes that can and do vary from  
7 year to year.

8

9 Section 441 of the Tax Reform Act of 1969 enacted rules requiring the  
10 "normalization method of accounting" as a condition to the use of  
11 accelerated methods of depreciation for purposes of computing income  
12 taxes applicable to regulated utility plant placed in service after January 1,  
13 1970. Only after the rules requiring the normalization method of  
14 accounting went into effect did Mountain Bell (Qwest's predecessor in the  
15 1970's) and all the other Bell Operating Companies begin to compute  
16 income taxes using the accelerated methods of depreciation that have  
17 created the accumulated deferred tax balances on the Company's books  
18 today. The fact that the Pension Asset was created by a "dramatic" or  
19 "radical" change hardly makes it unique.

20

21 **Q. IF ACCUMULATED DEFERRED TAXES WERE EXCLUDED FROM**  
22 **RATEBASE FOR FAILING THE SAME TEST MR. CARVER WOULD**  
23 **APPLY TO PENSION ASSET, HOW MUCH WOULD THE TEST YEAR'S**  
24 **RATEBASE BE INCREASED?**

1 A. If Qwest's 1999 test year Arizona ratebase excluded accumulated  
2 deferred taxes, the ratebase would increase over \$300 million, an amount  
3 far greater than the amount ratebase would decrease if Pension Asset  
4 were excluded.

5  
6 **Q. IN SURREBUTTAL, MR. CARVER CLAIMS THAT IF PENSION ASSET**  
7 **IS TO BE INCLUDED IN RATEBASE, "REGULATORS MUST BE**  
8 **ASSURED THAT RATEPAYERS HAVE FULLY ENJOYED REDUCED**  
9 **RATES OR SOMEHOW BEEN PROVIDED THE BENEFIT OF THE**  
10 **NEGATIVE COSTS RESULTING FROM THE ADOPTION OF FAS87."**  
11 **[CARVER SURREBUTTAL, P. 53, L. 14] DO ALL REGULATORS**  
12 **REQUIRE SUCH ASSURANCE?**

13 A. No. I am aware of several jurisdictions in which regulators have included  
14 pension asset in ratebase without imposing the standard-of-proof that Mr.  
15 Carver argues is required. Such jurisdictions include, for example, the  
16 federal jurisdiction, Colorado, Iowa, Minnesota, Oregon and Washington.

17 The FCC's rules specifically provide for inclusion of Pension Asset in  
18 ratebase. In Docket 86-497, the FCC examined its rules to prescribe  
19 components of rate base and net income of dominant carriers such as the  
20 Company. In an Order adopted December 17, 1987, in Docket 86-497,  
21 the FCC ruled, at paragraph 43 regarding items to be included in rate  
22 base,

23 We will allow deferred charges related to...pension fund payments  
24 in excess of expenses recognized for regulatory purposes.

1 Hence, for ratemaking purposes, the FCC determined to include the  
2 pension asset in rate base in 1987.

3

4 **Q. DOES THE PUBLIC UTILITY COMMISSION OF COLORADO REQUIRE**  
5 **THE STANDARD-OF-PROOF MR. CARVER SUGGESTS**  
6 **REGULATORS MUST IMPOSE?**

7 A. No. Pages 28 through 30 of USWC witness G. Y. Fleming's direct  
8 testimony in Colorado Docket No. 90S-544T, explains that his filing  
9 follows the FCC's approach regarding the pension asset. Mr. Fleming's  
10 testimony quoted footnote 35 in the FCC's Report and Order in Docket  
11 No. 86-497 adopted December 17, 1989. That footnote states:

12 In the Pension and Debt Proceeding (note 31 supra), we concluded  
13 that it would be appropriate to include in the rate base pension fund  
14 payments in excess of recognized expenses. We also concluded  
15 that in the converse situation, the excess should be deducted from  
16 the rate base, to the extent recognized expenses exceed pension  
17 fund payments. (emphasis added)

18 In rate case Docket No. 90S-544T, USWC included a pension asset as  
19 part of its Cash Working Capital (CWC) requirement in the amount of  
20 \$13.6 million. Following negotiations and a stipulation in the case, this  
21 asset was removed from the CWC calculation and included as a rate base  
22 item.

23

24 **Q. DOES THE IOWA UTILITIES BOARD REQUIRE THE STANDARD-OF-**  
25 **PROOF MR. CARVER SUGGESTS REGULATORS MUST IMPOSE?**

1 A. No. The IUB did not initially accept adoption of SFAS 87 so the pension  
2 credit was not initially recognized in Iowa cost of service. In 1994, in  
3 Docket No. RPU-93-9 (TF-94-343) the IUB changed its position and  
4 ordered amortization of the pension credit into cost of service over seven  
5 years. In regards to the pension asset, Page 6 of the Commission's order  
6 states:

7 The rate base will not be adjusted. It is based on a 13-month  
8 average, and the record contains no persuasive evidence that an  
9 adjustment is necessary. As the FAS 87 negative pension  
10 expense is amortized, future 13-month average rate bases will  
11 reflect the change. (emphasis added)

12 **Q. DOES THE MINNESOTA DEPARTMENT OF PUBLIC SERVICE**  
13 **REQUIRE THE STANDARD-OF-PROOF MR. CARVER SUGGESTS**  
14 **REGULATORS MUST IMPOSE?**

15 A. No. On pages 6 and 7 of the comments concerning USWC's incentive  
16 regulation plan, dated May 17, 1996, filed in Minnesota Docket No.  
17 P421/EM-89-860, the Minnesota DPS explained :

18 The pension asset has been included in every filing since the first  
19 one in 1990, and its basis comes from the settlement in Docket  
20 No.P421/C-86-354, where negative rather than positive pension  
21 expense was first recognized. The Incentive Plan calls for the  
22 inclusion of a cash working capital requirement, and the pension  
23 asset component of the cash working capital requirement reflects  
24 the accumulation of negative pension expenses as a result of an  
25 over-funded pension trust. No cash flows back to USWC for the  
26 negative expense credit because the Company is not reimbursed  
27 by the trustee for temporary excesses in the pension fund.  
28 Consequently, this deferred asset is included in the cash working  
29 capital requirement representing an accumulated cash drain as a  
30 result of the negative pension expense credited to USWC's  
31 operations. If and when it is determined that additional funds are  
32 needed in the pension trust, a positive expense will be recognized,  
33 and a corresponding reduction will be made in the deferred asset  
34 balance. Until future pension expense fully reduce this deferred

1                   asset, it is included in the cash working capital requirement of  
2                   USWC's rate base so that a return can be earned on this balance  
3                   of negative expenses that have not been compensated by cash  
4                   flows from the pension fund. (emphasis added)  
5

6   **Q.    DOES THE PUBLIC UTILITY COMMISSION OR OREGON REQUIRE**  
7           **THE    STANDARD-OF-PROOF    MR.    CARVER    SUGGESTS**  
8           **REGULATORS MUST IMPOSE?**

9    A.    No. In Docket UT 125, the pension asset was initially a contested issue.  
10           However, after discussions between the Company and Public Utility  
11           Commission of Oregon Staff, the issue was settled. The following  
12           appears on page 29 of Oregon Staff Exhibit 87 which is witness  
13           Lambeth's Supplemental Testimony on Support of the Second Stipulation  
14           in Docket UT 125.

15  
16           Q.    DO STAFF AND USWC AGREE ON THIS ADJUSTMENT,  
17           SHOWN IN EXHIBIT REVISED STAFF/3, LAMBETH/17,  
18           COLUMN 35?

19           A.    Yes. This issue is completely settled. Exhibit Staff/88,  
20           paragraph 5, shows that staff and USWC agree to (1) leave  
21           the negative expense in operating expenses, (2) leave  
22           accumulated deferred taxes in the rate base, and (3) add the  
23           pension asset to the rate base.

24           Q.    WHAT IS THE BASIS OF THE STIPULATION?

25           A.    I added the pension asset to the rate base because it is fair  
26           to the company and to its customers.

27

28   **Q.    DOES THE WASHINGTON UTILITIES AND TRANSPORTATION**  
29           **COMMISSION REQUIRE THE STANDARD-OF-PROOF MR. CARVER**  
30           **SUGGESTS REGULATORS MUST IMPOSE?**

1 A. No. In Docket No. UT-950200, the Washington Utilities and  
2 Transportation Commission's Order, dated April 11, 1996, addresses the  
3 pension asset on pages 66 and 67. In conclusion, it provides:

4 The Company proposes to include the pension asset as a discrete  
5 item in rate base. Ms. Wright discusses the pension asset  
6 adjustment, PFA-3. which increases rate base by \$69.9 million.

7

8

\* \* \*

9

10 The commission accepts the Company position on this adjustment.  
11 All of the return earned in the fund is used to reduce the need for  
12 further investment by the company, and thus it works to reduce the  
13 pension expense. That was the company's position in docket No.  
14 UT-930307. The Company's proposal appears to be consistent  
15 with the prior order. The order in that docket states that the  
16 commission does not question the prudence of the asset, and that  
17 the reason for rejection at that time was merely that it should be  
18 examined in conjunction with a total working capital analysis such  
19 as the one presented in this proceeding.

20

21 **Q. IN QWEST'S LAST RATE CASE DID THE ACC CONCLUDE THAT**  
22 **PENSION ASSET SHOULD BE EXCLUDED FROM RATEBASE AS A**  
23 **MATTER OF PRINCIPLE?**

24 A. No. The ACC's order dated January 3, 1995, in Docket No. E-1051-93-  
25 183, UT-950200, addresses the pension asset issue on pages 3 through  
26 5. In pertinent part, the order states:

27 We concur with the Company that the overfunded pension assets  
28 which were contributed by shareholders should be included in rate  
29 base. It would be unfair to permit ratepayers to benefit by reduced  
30 expenses resulting from capital invested by Company  
31 shareholders.

32

1 **Q. THEN WHY DID THE ACC EXCLUDE PENSION ASSET FROM**  
2 **RATEBASE IN QWEST'S LAST RATE CASE?**

3 A. In Qwest's last rate case Mr. Carver proposed the same standard-of-proof  
4 for Pension Asset that he is proposing in this case. In the prior case, the  
5 ACC concluded:

6 Although the Company has presented evidence in an effort to  
7 demonstrate that since 1986 the shareholders have provided the  
8 monies which resulted in the current overfunded pension asset,  
9 Staff's analysis has raised significant questions as to the accuracy  
10 of the Company's claim. Even if we were convinced of the  
11 accuracy of the Company's number for the 1976-1993 period, we  
12 would still not be able to conclude that shareholders have  
13 advanced the excess pension amounts. Accordingly, we must  
14 deny the Company's request to include the net amount overfunding  
15 of \$36,213,000 in rate base.

16 I did not attempt to satisfy Mr. Carver's proposed standard-of-proof  
17 because it is not supported by sound ratemaking principles, violates the  
18 rule against retroactive ratemaking, is proposed for no other element of  
19 ratebase and is, by Mr. Carver's own admission, impossible to satisfy. For  
20 these reasons, I respectfully request the ACC to reconsider the  
21 evidentiary test and standard-of-proof upon which it relied to disallow  
22 Qwest's Pension Asset in Qwest's last rate case.

23

24 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

25 A. Yes.

**BEFORE THE  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**DOCKET NO. T-01051B-99-0105**

**EXHIBITS OF**

**PHILIP E. GRATE**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**BEFORE THE ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. )  
)  
STATE OF COLORADO )  
)  
COUNTY OF Denver )**

**DOCKET NO. T-1051B-99-105**

**AFFIDAVIT OF  
JEFFREY A. HAYNES**

**ss**

Jeffrey A. Haynes, of lawful age being first duly sworn, depose and states:

1. My name is Jeffrey Haynes. I have been awarded a Bachelors of Arts Degree majoring in Psychology from the University of Colorado and a Masters of Business Administration with an emphasis in Human Resource Management from Colorado State University. I have been occupied as a human resources consultant for eight years and have been employed by U S WEST / Qwest for the last three years. I am currently Director of Management Compensation for Qwest. In this capacity I am responsible for providing expertise and consultation on the development and administration of management salary and incentive programs, ensuring competitive and equitable plans.

The opinions expressed herein are based upon my training, experience as a human resources consultant and upon benchmarking surveys in which U S WEST/Qwest participate annually to ascertain what levels and types of compensation are necessary to attract and retain the managerial talent necessary to operate successfully in our industry.

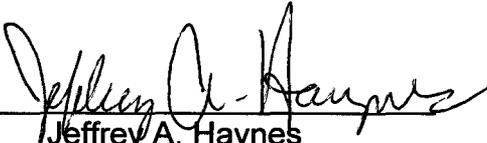
In my opinion, U S WEST/Qwest's use of the Annual Bonus Plan, Short Term Incentive Compensation Plan and IT-Career Structure Bonus Plan in 1999 was prudent and reasonable. Viewed from the perspective of the management compensation discipline, these plans should properly be characterized as "competitive." By "competitive" I mean that they were designed to attract, retain and motivate management employees with the skill sets and personal productivity necessary to successfully operate U S WEST/Qwest's business without paying them excessively.

I believe the design of the plans is both prudent and reasonable. First, the plans are designed to reflect and reward employees for the success of the firm as a whole and to balance the need to meet short term financial goals with the need to maintain appropriate levels of customer service and satisfaction. Second, the plans are designed to recognize and reward individual performance in accordance with the company's philosophy of paying more for higher levels of employee performance.

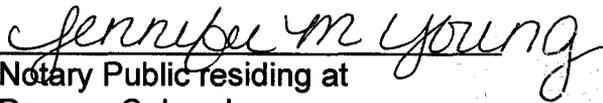
In my opinion, U S WEST/Qwest's use of benchmarking ensures that the firm's compensation plan, including incentive compensation, is competitive with other firm's plans in the labor market. Making the payouts under the plans dependent on business performance helps assure a reasonable and prudent payout level. Conditioning the level of payout to individual employees upon on individual's performance levels helps assure adherence to the company's pay-for-performance philosophy.

2. I hereby swear and affirm that the foregoing statements are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
\_\_\_\_\_  
Jeffrey A. Haynes

SUBSCRIBED AND SWORN to before me this 6<sup>th</sup> day of September, 2000.

  
\_\_\_\_\_  
Notary Public residing at  
Denver, Colorado.

My Commission Expires: **My Commission Expires May 23, 2004**



**ORIGINAL**

**RECEIVED**

**BEFORE THE ARIZONA CORPORATION COMMISSION**

2000 SEP 19 P 3:27

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN )

**DOCKET NO. T-01051B-99-0105**

**REJOINDER TESTIMONY OF**

**DAVID L. TEITZEL**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF DAVID L. TEITZEL  
INDEX OF TESTIMONY**

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**RESPONSE TO DR. FRANCIS COLLINS**

**Q. AT PAGE 3, DR. COLLINS CLAIMS THAT QWEST HAS FAILED TO PROVIDE A COMPREHENSIVE ASSESSMENT OF COMPETITIVE LOSSES IN ARIZONA IN THIS DOCKET AND THAT THE CURRENT LEVEL OF COMPETITION DOES NOT WARRANT PRICING FLEXIBILITY FOR QWEST. WHAT IS YOUR RESPONSE?**

A. Dr. Collins assertions are simply wrong. The competitive losses identified in my previous testimony in this docket represent only a subset of the Qwest competitive losses in Arizona. For example, customers moving into Arizona and establishing service with a Qwest competitor are not identifiable as competitive losses and are not included in any "share" estimates. Customers who choose to leave Qwest for a facilities-based competitor, such as Cox, who do not self report as leaving Qwest for a competitor are not tracked as competitive losses (as acknowledged by Dr. Collins at Page 4, lines 15-17 of his surrebuttal testimony). Customers who choose to replace a Qwest additional line with a competitor's service are not tracked as competitive losses so long as the primary service remains with Qwest.

1 Dr. Collins asserts that the argument that identifiable Qwest competitive  
2 loss do not represent total losses is "...neither logical nor convincing"<sup>1</sup>  
3 Again, Dr. Collins is wrong. The competitive losses Qwest has the ability  
4 to identify are a subset of overall losses to competition in Arizona.

5  
6 Finally, Dr. Collins attributes a belief to Qwest that "...100% of the existing  
7 market, as well as the future market, belongs to Qwest..."<sup>2</sup> Dr. Collins'  
8 logic in arriving at this conclusion is mysterious at best. Nowhere in any  
9 Qwest testimony or data request response has any Qwest witness  
10 suggested anything of the sort. Qwest fully recognizes that competition is  
11 here to stay, and will comply with all federal and state requirements  
12 designed to foster the growth of fair competition. The demonstration of  
13 the presence of open competition and consequent request for Competitive  
14 Zone classification for wire centers in which full competition exists as set  
15 forth in previous testimony is intended only to establish an environment of  
16 competitive parity in which either Qwest or its competitors will win  
17 customers' business based on value-added packaging, creative marketing  
18 and service quality instead of uneven regulatory constraints.

19  
20 **Q. AT PAGE 4, DR. COLLINS ASSERTS THAT QWEST COMPETITIVE**  
21 **LOSSES TO RESALE OR UNE-BASED COMPETITION ARE NOT TRUE**  
22 **LOSSES, BUT SIMPLY REVENUE TRANSFERS BETWEEN QWEST'S**  
23 **RETAIL AND WHOLESALE ORGANIZATIONS. IS THIS VIEW**  
24 **ACCURATE?**

---

<sup>1</sup> Collins surrebuttal, Page 4, Lines 21-23.

<sup>2</sup> Collins Surrebuttal, Page 4, Lines 1 and 2.

1 A. Absolutely not. In fact, Dr. Collins extends his argument to say "...Qwest  
2 considers the transfer of net revenue, **which may be the same number**  
3 **of dollars as net revenue**, to wholesale services as a loss to  
4 competition."<sup>3</sup> (emphasis added). Dr. Collins' argument makes no sense.  
5 Currently, Qwest's residential resale discount in Arizona is approximately  
6 12%, and UNEs are fully available to competitors at prices even lower  
7 than the discounted resale rate levels, with the exception of unbundled  
8 loops for residence customers. The net revenue impact of Qwest losses  
9 to these forms of competition is certainly greater than zero. Additionally, a  
10 customer lost to resale or UNE-based competition represents a customer  
11 with whom Qwest has lost a direct marketing relationship, which  
12 diminishes the opportunity for Qwest to offer service packages and other  
13 new value propositions to that customer. Contrary to Dr. Collins'  
14 assertions, competitive losses to resale and UNE forms of competition are  
15 true customer losses to Qwest.

16  
17 **Q. DR. COLLINS SUGGESTS THAT COMPETITIVE LOCAL EXCHANGE**  
18 **CARRIERS (CLECS) AND QWEST ARE ON EQUAL REGULATORY**  
19 **FOOTING, SINCE CLECS TYPICALLY PROVIDE SERVICE TO ANY**  
20 **CUSTOMER REQUESTING SUCH SERVICE IN THE LOCALITIES IN**  
21 **WHICH THE CLECS HAVE CHOSEN TO SERVE.<sup>4</sup> IS HE CORRECT?**

22 A. No. Qwest's competitors have chosen to deploy service in Phoenix and  
23 Tucson in a very targeted way. For example, residential customers in  
24 Chandler have the option to subscribe to telephone service offered by

---

<sup>3</sup> Collins surrebuttal, Page 4, Lines 23-25.

<sup>4</sup> Collins surrebuttal, Page 7, Lines 1-9

1 Cox, while customers in Bisbee and other less urban areas of the state do  
2 not. In this example, if Qwest chooses to deploy a package of services  
3 designed to counter Cox's offer, it must make the package available to all  
4 residential customers in Arizona. Qwest currently does not have the  
5 flexibility to respond to competitors with the same granularity with which  
6 Qwest's competitors enter the market. Regulatory parity between Qwest  
7 and its competitors does not yet exist.

8  
9 **Q. AT PAGE 9, DR. COLLINS ARGUES THAT QWEST'S DATA**  
10 **REGARDING THE PRESENCE OF COMPETITION IS INCOMPLETE.<sup>5</sup>**  
11 **IS HE CORRECT?**

12 **A.** Perhaps, but on this point, it is not clear what he means. Qwest's data is  
13 incomplete in the sense that Qwest does not have data that measures the  
14 full extent of competitive losses. While Dr. Collins implies that the  
15 competitive intelligence sources cited in footnote 6 of my rebuttal  
16 testimony can be used to accurately quantify overall competitive losses,  
17 he neglects to mention what footnote 6 said, which is as follows:

18  
19 However, Qwest has obtained competitive intelligence regarding  
20 Cox's plans to deploy telephone service in Tucson in 2001.

21  
22 This reference is only to a publicly-available document Qwest located  
23 which refers to Cox's intent to deploy residential service in Tucson. In no  
24 way does this footnote suggest that Qwest has the ability to accurately  
25 quantify all competitive losses in Arizona. In fact, only Qwest's

---

<sup>5</sup> Collins surrebuttal, P. 9, Lines 1-19

1 competitors have accurate data regarding the number of customers they  
2 now serve.

3  
4 Qwest has provided extensive data in this docket demonstrating the  
5 presence of competition in each of the wire centers for which Qwest has  
6 requested Competitive Zone classification. Each of these wire centers is  
7 served by at least one facilities-based provider in addition to resale and  
8 wireless providers. The competitive data available to the Commission in  
9 this Docket is more than sufficient to support a finding that effective  
10 competition exists in these wire centers.

11  
12 **RESPONSE TO MR. WILLIAM DUNKEL**

13  
14 **Q. AT PAGE 41 OF HIS SURREBUTTAL TESTIMONY, MR. DUNKEL**  
15 **CLAIMS THAT QWEST IS ASKING THIS COMMISSION TO CLASSIFY**  
16 **ANY WIRE CENTER AS A COMPETITIVE ZONE IF A COMPETITOR IS**  
17 **SERVING ONLY ONE CUSTOMER IN THAT WIRE CENTER. IS THIS**  
18 **AN ACCURATE REPRESENTATION OF QWEST'S PROPOSAL?**

19 **A.** No. In fact, Qwest has provided extensive documentation demonstrating  
20 the presence of a variety of competitors, each serving a significant  
21 number of customers, in each wire center for which Competitive Zone  
22 classification is being requested. Further, any future Competitive Zone  
23 requests will be subject to Commission scrutiny and approval..

24

1 **Q. ALSO AT PAGE 41, MR. DUNKEL COMPLAINS THAT QWEST HAS**  
2 **NOT PROVIDED SUFFICIENT COMPETITIVE INFORMATION TO**  
3 **SATISFY THE REQUIREMENT OF ARTICLE 11, SECTION R.14-2-**  
4 **1108(B) OF THE COMMISSION'S RULES. DO YOU AGREE?**

5 A. No. Qwest has supplied extensive evidence of the presence of  
6 competition in each of the wire centers for which it seeks Competitive  
7 Zone status. Included in this evidence is customer loss tracking data (to  
8 both facilities-based and non-facilities based competition), identification of  
9 specific competitors, known affiliations/mergers between competitors,  
10 summaries of competitors' pricing in the subject wire centers, route maps  
11 displaying the location of competitors' fiber optic facilities in each of these  
12 wire centers and marketing materials demonstrating the active promotion  
13 by Qwest's competitors of substitute services. For the reasons outlined in  
14 my responses to Dr. Collins' testimony, Qwest cannot accurately  
15 determine its market share nor that of its competitors in each wire center  
16 for which Competitive Zone status is requested without first obtaining  
17 information from competitors that they will not produce. In-service data  
18 specific to individual carriers is available only to those carriers, and the  
19 competitive carriers protect such information as extremely confidential.  
20 However, Qwest's estimates of market share is no less accurate than that  
21 which has been relied on by the numerous other CLECs who have  
22 petitioned for competitive classification under these same rules. In those  
23 instances, the carriers have made no attempt to quantify market share  
24 with any degree of accuracy. Instead, they have relied on broad  
25 statements and estimates that are much less detailed and accurate than

1 the information Qwest has provided in this docket. And in most instances,  
2 the Commission has chosen to accept those broad estimates. The rules  
3 specify neither a standard of review, nor a threshold for determining what  
4 constitutes a competitive market. However, the Commission possesses  
5 the authority to compel each provider of telecommunications services in  
6 the greater Phoenix and Tucson areas to confidentially provide reports to  
7 the Commission of the number of access lines now served in each  
8 geographic area in which Qwest has requested Competitive Zones be  
9 established. This data, coupled with previously supplied Qwest counts of  
10 access lines by wire center, would enable the Commission to gain an  
11 accurate view of relative market shares for each provider. Interestingly,  
12 the Utah Commission has taken this approach, and subsequently found  
13 that sufficient competition now exists to classify wire centers along the  
14 Wasatch Front as Competitive Zones.

15  
16 **Q. AT PAGES 41 AND 42, MR. DUNKEL COMPLAINS THAT, UNDER**  
17 **QWEST'S PROPOSAL, QWEST COULD "...INCREASE RATES**  
18 **WHERE EFFECTIVE COMPETITION DOES NOT EXIST." IS HE**  
19 **CORRECT?**

20 **A.** No. If the Commission determines that Competitive Zone classification of  
21 a particular wire center is warranted, it will do so on the basis of the  
22 presence of a broad array of competitive alternatives to Qwest's services  
23 in that wire center. In reality, there is no competitor in any Qwest wire  
24 center in the greater Phoenix and Tucson areas that is offering only one  
25 residential or business service, as documented in my direct testimony in

1 this Docket. Competition exists in each wire center for which Qwest seeks  
2 Competitive Zone classification.

3

4 **Q. AT PAGE 45, MR. DUNKEL TAKES ISSUE WITH YOUR CONTENTION**  
5 **THAT THE PRESENCE OF RESALE-BASED COMPETITION IS MUCH**  
6 **MORE PREVALENT IN PHOENIX AND TUCSON EXCHANGES THAN**  
7 **IN THE REMAINDER OF THE STATE. WOULD YOU COMMENT?**

8 A. Yes. In his surrebuttal, Mr. Dunkel references Confidential Exhibit DLT-4  
9 to my rebuttal testimony, which provides a comparison of the number of  
10 access lines served by resale-based competitors in the Bisbee and  
11 Chandler Main wire centers. The numbers shown on this exhibit are  
12 incorrect, and have been corrected in Confidential Exhibit DLT-1 to this  
13 testimony. The source for this information is Qwest's data request  
14 response to WDA 02-39, and the data was not compiled correctly in  
15 Confidential Exhibit DLT-4 to my rebuttal. As revised Confidential Exhibit  
16 DLT-1 shows, resale-based competition is much more prevalent in  
17 Chandler than it is in Bisbee.

18

19 **Q. AT PAGE 46, MR. DUNKEL STATES "IN ORDER TO LURE**  
20 **CUSTOMERS AWAY FROM QWEST, COMPETITORS HAVE TO**  
21 **CHARGE LOWER PRICES OR OFFER SOME OTHER ADVANTAGE**  
22 **OVER QWEST." IS THIS AN ACCURATE REPRESENTATION OF THE**  
23 **COMPETITIVE DYNAMICS IN WIRE CENTERS IN THE GREATER**  
24 **PHOENIX AND TUCSON AREAS?**

1 A. It certainly is. In fact, this is the model for competitive entry I have seen in  
2 each of the 14 traditional Qwest states. Competitors choose to enter  
3 markets on a selective geographic basis and offer attractive pricing and  
4 packaging to encourage customers to shift to their services. The problem  
5 with this model, of course, is that Qwest must offer the same services, at  
6 the same basic prices, to all customers in its Arizona service territory.  
7 Qwest is currently precluded from differentiating between geographic  
8 markets to respond to competition occurring on that basis. To the extent  
9 that Qwest is compelled by competitive dynamics to offer a certain bundle  
10 of services to respond to a specific competitor's offer in a particular wire  
11 center, that same bundle must be offered statewide.

12  
13 **Q. AT PAGE 46, MR. DUNKEL STATES THAT COX COMMUNICATIONS**  
14 **OFFERS RESIDENTIAL BASIC EXCHANGE SERVICE TO ITS CABLE**  
15 **TELEVISION CUSTOMERS AT \$11.75 PER MONTH. IS THIS**  
16 **CORRECT?**

17 A. Only in part. Cox actively promotes residential basic exchange service for  
18 additional lines at \$6.50 per month for its customers who also subscribe to  
19 cable television from Cox. Under current regulatory guidelines, Qwest  
20 cannot offer prices competitive with Cox's additional line offer.  
21 Additionally, since this offer is only available to customers who also  
22 subscribe to Cox cable television service, I can only conclude that Cox is  
23 subsidizing this low price with margins available from its cable television  
24 operations.

25

1 **Q. MR. DUNKEL, AT PAGE 47, ARGUES THAT QWEST COULD RAISE**  
2 **RATES IN PARTS OF ARIZONA NOT SUBJECT TO EFFECTIVE**  
3 **COMPETITION TO OFFSET A PRICE RESPONSE TO A COMPETITIVE**  
4 **OFFER SUCH AS THE ONE AVAILABLE FROM COX. IS THIS**  
5 **REASONABLE?**

6 A. No. If Qwest's services are found by the Commission to not be subject to  
7 competition, the Commission will not grant Competitive Zone status for  
8 that wire center. At this point, services in wire centers outside greater  
9 Phoenix and Tucson are generally fully regulated, and the Commission  
10 will have continued full regulatory control of Qwest's prices in those areas.  
11 Finally, if Qwest hypothetically increased a price in a Competitive Zone  
12 which the Commission found to be inappropriate or anticompetitive, the  
13 Commission has full authority under Commission Rule R14-2-1108(H) to  
14 reclassify Qwest's services in that wire center as noncompetitive. Clearly,  
15 both competitive and regulatory checks and balances are in place to  
16 ensure appropriate pricing in the competitive Phoenix and Tucson  
17 markets.

18

19 **Q. AT PAGE 48, MR. DUNKEL COMPLAINS THAT, UNDER QWEST'S**  
20 **COMPETITIVE ZONES PROPOSAL "...THE MINIMUM PRICES FOR**  
21 **SERVICES COULD BE BELOW THE TOTAL SERVICE LONG RUN**  
22 **INCREMENTAL COST..." WOULD YOU COMMENT?**

23 A. As stated in the previous response, the Commission will continue to have  
24 the authority to monitor Qwest's pricing practices and to take appropriate  
25 action if necessary. Nothing in previous Qwest testimony suggests that

1 Qwest's pricing in a Competitive Zone will violate any Commission rule or  
2 Arizona statute. Commission Rule R-14-2-1109(A) states:

3  
4 A telecommunications company governed by this Article may price  
5 a competitive telecommunications service at any level at or below  
6 the maximum rate stated in the company's tariff on file with the  
7 Commission, provided that the price for the service is not less than  
8 the company's total service long run incremental cost of providing  
9 the service.

10  
11 Qwest will continue to comply with this requirement in any wire center the  
12 Commission determines to warrant Competitive Zones classification.  
13 Although Qwest believes that, so long as average prices for services  
14 within Competitive Zones exceed TSLRIC for the service, subsets of  
15 customers could receive prices slightly below TSLRIC within existing  
16 Commission rules. However, Qwest will not contest this issue in this  
17 Docket, and will commit to maintaining prices above TSLRIC in all  
18 competitive zones.

19  
20 **Q. AT PAGE 50, MR. DUNKEL IMPLIES THAT THE COMMISSION HAS**  
21 **NO AUTHORITY TO TAKE ACTION IF QWEST WERE TO "DOUBLE"**  
22 **ITS RATES WITHIN COMPETITIVE ZONES. IS THIS IMPLICATION**  
23 **ACCURATE?**

24 **A.** No. Commission rules provide the Commission the authority to rescind  
25 Competitive Zone status in any wire center in which it finds that Qwest has  
26 priced its services in an inappropriate manner. In addition, competitive  
27 forces present in the wire centers for which Qwest has requested

1 Competitive Zones status will drive prices for all providers serving those  
2 markets to market-based levels.

3  
4 **Q. AT PAGES 51 AND 52, MR. DUNKEL DISMISSES RESALE AND UNE-**  
5 **BASED COMPETITION AS BEING UNABLE TO PROVIDE "...ANY**  
6 **SIGNIFICANT PROTECTION FROM IMPROPER PRICES INCREASES**  
7 **BY THE LEC." IS HE CORRECT?**

8 A. No. Mr. Dunkel bases his entire conclusion on the dynamics of resale,  
9 which provides resellers of Qwest services in Arizona a discount of  
10 approximately 12% from standard residential retail rates. Certainly, resale  
11 of Qwest services is a means of competitive entry with minimal capital  
12 investment. Additionally, resellers of services such as Centrex are able to  
13 create additional margins by contracting with alternative long distance  
14 providers to gain volume discounts on toll services which can be passed  
15 on, at least in part, to the reseller's customers. Mr. Dunkel is incorrect if  
16 he believes the 12% resale discount defines the entirety of resale  
17 competitive dynamics. Mr. Dunkel completely ignores UNE-based  
18 competition as a viable alternative through which competitors can enter  
19 the Arizona market. In fact, UNE wholesale prices are completely  
20 unrelated to retail pricing, and represent prices to competitors even lower  
21 than resale prices, except for residence unbundled loops. Both resale  
22 and UNE-based competition create market based pricing constraints on  
23 Qwest's pricing in Arizona.

24

1 **Q. MR. DUNKEL REITERATES HIS CONTENTION AT PAGE 54 THAT**  
2 **“...LOOP FACILITIES ARE USED BY AND ARE REQUIRED TO**  
3 **PROVIDE A WHOLE FAMILY OF SERVICES”<sup>6</sup> AND COSTS OF**  
4 **PROVIDING THE LOOP SHOULD THEREFORE BE TREATED AS**  
5 **SHARED COSTS. DO YOU AGREE?**

6 **A.** No. This issue is addressed in detail in the rebuttal testimonies of Dr.  
7 Taylor and Mr. Thompson on behalf of Qwest. Mr. Dunkel relies on this  
8 flawed assumption to support his contention that Qwest’s proposed Zone  
9 Increment price structure is excessive. He goes on to state that Toll and  
10 Switched Access revenues generated by rural Arizona customers should  
11 be factored into Zone Increment pricing decisions. As stated in my  
12 rebuttal testimony, it is very important that Qwest’s wholesale and retail  
13 pricing structures for loop-based services remain consistent to prevent  
14 rate arbitrage and economically inefficient competitive growth in Arizona.  
15 Under Mr. Dunkel’s proposal, loop costs could be allocated to a wide  
16 range of services and Toll and Switched Access revenues could be used  
17 to offset the higher costs of providing Qwest service to rural Arizona  
18 customers. This proposal is inappropriate. As discussed by Dr. Taylor  
19 and Mr. Thompson, service costs must follow the cost-causer. In addition,  
20 Mr. Dunkel’s suggestion that implicit subsidies should be maintained from  
21 Toll and Switched Access services to basic exchange services is clearly  
22 contrary to the guidelines of the Telecommunications Act of 1996, which  
23 requires that implicit subsidies must be made explicit.

24

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<sup>6</sup> Dunkel surrebuttal, P. 54, Lines 23-24

1 **Q. AT PAGE 56, MR. DUNKEL STATES THAT, WHEN A COMPETITOR IS**  
2 **ASSESSING WHETHER TO ENTER A PARTICULAR MARKET, "...THE**  
3 **RATIONAL COMPETITOR WILL CONSIDER THE TOTAL REVENUES**  
4 **FROM THE WHOLE PACKAGE OR FAMILY OF SERVICES THAT THE**  
5 **COMPETITOR WOULD RECEIVE FROM A CUSTOMER (INCLUDING**  
6 **TOLL/SWITCHED ACCESS REVENUES", NOT JUST THE REVENUE**  
7 **IT WILL RECEIVE FROM BASIC EXCHANGE SERVICE. WHAT DOES**  
8 **THIS STATEMENT MEAN TO YOU?**

9 A. Mr. Dunkel seems to be saying that competitors should proceed with  
10 entering rural markets, even if UNE loop rates are significantly higher than  
11 the prices the competitor may be able to charge its customers, since  
12 competitors can expect to enjoy the margin windfall associated with Toll  
13 and Switched Access service.

14

15 **Q. WHAT IS THE PROBLEM WITH THIS POSITION?**

16 A. In the Arizona market, competitors are not following Mr. Dunkel's  
17 suggestion. Rather, the preponderance of competitive activity is in the  
18 greater Phoenix and Tucson areas of the state. I can only conclude that  
19 competitors have examined the financial opportunities associated with  
20 rural versus urban markets, and have found that the cross-subsidy  
21 concept advanced by Mr. Dunkel doesn't work.

22

23 **Q. AT PAGE 57, MR. DUNKEL TAKES ISSUE WITH QWEST'S POSITION**  
24 **THAT REDUCTIONS IN INTRALATA LONG DISTANCE RATES DO**  
25 **NOT RESULT IN INCREASED CALL VOLUMES, AND THAT QWEST**

1           **SHOULD NOT INCORPORATE TOLL RATE CHANGES INTO THIS**  
2           **DOCKET IN ANY EVENT. DO YOU AGREE?**

3    A.    No, for two reasons. First, Qwest is also proposing substantial Switched  
4           Access rate reductions in this Docket. If intraLATA long distance prices  
5           are not also reduced, Qwest will lose an even greater number of long  
6           distance minutes to its competitors than the significant number it has lost  
7           to date. Since Switched Access and intraLATA long distance revenues  
8           remain in Qwest's rate base in Arizona, the net effect of Switched Access  
9           reductions without corresponding intraLATA long distance rate reductions  
10          would be an increase in Qwest's revenue requirement in this Docket,  
11          which would ultimately be borne by the Arizona ratepayer.

12  
13          Next, in the "monopoly" environment in which Qwest's predecessors  
14          operated in an earlier era, a substantial change in intraLATA long distance  
15          prices could be expected to generate a measurable demand response.  
16          However, in the current, highly competitive long distance market,  
17          customers are not swayed by price points until they approach the level of  
18          \$.05. In states such as Washington, Nebraska and Wyoming, where  
19          intraLATA long distance price reductions have been implemented, Qwest  
20          has not experienced an increase in call volume. There is no fact-based  
21          reason to expect that intraLATA long distance call volumes in Arizona will  
22          be stimulated in response to Qwest's price proposal in this docket. The  
23          intraLATA long distance pricing proposal in this Docket can be expected,  
24          however, to enable Qwest to continue to reasonably compete in the

1 market, which would not be possible if Switched Access rates are reduced  
2 absent long distance price adjustments.

3  
4 **Q. REGARDING THE DIRECTORY ASSISTANCE (D.A.) PRICING**  
5 **PROPOSAL IN THIS DOCKET, MR. DUNKEL ALLEGES THAT QWEST**  
6 **HAS INCORRECTLY CALCULATED THE REVENUE IMPACT**  
7 **ASSOCIATED WITH THE PROPOSED D.A. PRICE INCREASE. DO**  
8 **YOU AGREE?**

9 A. No. Mr. Dunkel alleges that the temporary D.A. surcharge of \$0.12 in  
10 place during 1999 was inappropriately included in the calculation of  
11 "present" D.A. revenues in Qwest's revenue impact calculations, causing  
12 the net revenue impact of the D.A. price change to be understated. Mr.  
13 Dunkel also included a detailed spreadsheet as Confidential Exhibit 31 to  
14 his surrebuttal testimony to demonstrate how he arrived at his conclusion.  
15 While Mr. Dunkel relies upon portions of Qwest's response to data  
16 request WDA 35-6, he chose to ignore other portions of the response  
17 which directly address his contention. In Confidential Exhibit DLT-2, I  
18 recreate the full content of Qwest's response to Mr. Dunkel in WDA 35-6,  
19 Attachment B. This analysis clearly shows that the "present" revenue  
20 calculations are based on a price per D.A. call of \$0.47 and provides a  
21 line item view of the components of the revenue impact calculations that  
22 result in the annual D.A. revenue impact displayed in my Supplemental  
23 Direct testimony in this Docket.

24

1 **Q. AT PAGE 61, MR. DUNKEL CLAIMS THAT QWEST PRICES PRIVACY**  
2 **LISTINGS AS IF THEY WERE NON-DISCRETIONARY SERVICES. IS**  
3 **HIS INTERPRETATION CORRECT?**

4 A. No. Mr. Dunkel bases his position on an emotional appeal that some  
5 customers utilize Privacy Listings because they have been "...targets of  
6 harassment or worse," and that Privacy Listings should therefore not be  
7 considered to be discretionary. Like Mr. Dunkel, I am sensitive to the  
8 utility of Privacy Listings to the subset of customers that use them to limit  
9 harassing calls. However, this service remains indisputably an optional  
10 service, and Qwest's proposed price levels remain reasonable.

11

12 **Q. HAS MR. DUNKEL PROPERLY INTERPRETED YOUR REBUTTAL**  
13 **TESTIMONY REGARDING SERVICE AFFORDABILITY?**

14 A. No. At Page 62, Lines 18, he states: "...contrary to Mr. Teitzel's claims,  
15 making universal service affordable for all not only fits in the post TA-1996  
16 environment, but it is a specific requirement of TA96." On this point he  
17 has misinterpreted my testimony. The following is the full text of the  
18 portion of my rebuttal from which Mr. Dunkel has drawn to paraphrase my  
19 "claims":

20

21 Mr. Dunkel seems to dismiss targeted assistance plans for  
22 customers with limited means, and instead, suggests that local  
23 exchange prices should be driven to very low levels to ensure  
24 affordability for all. This was a valid concept in the past, but no  
25 longer fits in the post-TA 1996 environment. All prices must now  
26 be moved toward cost. Implicit subsidies must be identified and  
27 made explicit. Prices must be deaveraged and cost-based. These  
28 things must be accomplished through a combination of rate  
29 rebalancing and High Cost Fund support, and Telephone

1 Assistance and Link Up Plans will continue to be available to  
2 provide additional support to low income households to optimize  
3 universal service. **Qwest agrees that residential basic exchange**  
4 **service must continue to be available at affordable rates, but**  
5 **the traditional, subsidy-laden model for accomplishing that**  
6 **goal is no longer viable.**<sup>7</sup>(emphasis added).  
7

8 I stand by my testimony that the Telecommunications Act of 1996 requires  
9 that traditional implicit telecommunications subsidies be made explicit,  
10 that rates must become cost-based, and that High Cost Fund and other  
11 assistance plans will be available to ensure that telephone service  
12 continues to be reasonably available to all customers. These conclusions  
13 are far different from those ascribed to me by Mr. Dunkel.  
14

### 15 RESPONSE TO DR. BEN JOHNSON

16  
17 **Q. AT PAGE 7, LINES 20 THROUGH 25, OF HIS SURREBUTTAL, DR.**  
18 **JOHNSON OPINES THAT QWEST'S RATE DESIGN IN THIS DOCKET**  
19 **DOES NOT CONSISTENTLY REFLECT COST CAUSATION. DO YOU**  
20 **AGREE?**

21 **A.** No. Qwest's rate design establishes prices that are above cost (with the  
22 notable exception of residential basic exchange services) and generates  
23 revenues which support the positive revenue requirement in Arizona  
24 identified by Qwest witness George Redding. The proposed prices do not  
25 reflect a standard "mark up" above direct cost, nor should they. It is a  
26 common pricing practice in telecommunications and other industries that  
27 prices for discretionary services carry higher margins than less

---

<sup>7</sup> Rebuttal Testimony of David L. Teitzel, Pages 26 and 27.

1 discretionary services. For example, an optional compact disc player on a  
2 Ford typically is priced at a higher margin than the car itself. Dr. Johnson  
3 complains that Qwest's proposed prices for discretionary services such as  
4 Caller I.D. and premium listings generate increased margins for these  
5 services. These pricing proposals are not inconsistent in any way with  
6 pricing structures previously approved by the Commission, nor are they  
7 inconsistent with economic theory, as discussed in greater detail in the  
8 rejoinder testimony of Dr. Taylor.

9  
10 **Q. SHOULD QWEST WITHDRAW ITS PROPOSAL TO INCREASE PRICES**  
11 **ON DISCRETIONARY SERVICES SUCH AS CALLER I.D. OR**  
12 **PREMIUM LISTINGS, OR TO MOVE THEIR PRICES DOWNWARD**  
13 **TOWARD DIRECT COST, WHAT WOULD BE THE EFFECT ON THE**  
14 **REMAINDER OF QWEST'S PRICING PROPOSALS?**

15 **A.** Since the discretionary services in Qwest's rate design proposal are  
16 integral to Qwest's revenue requirement in Arizona, prices for other less  
17 discretionary services, such as residential and business basic exchange  
18 services, would need to bear an additional increase to enable Qwest to  
19 fulfill the positive revenue requirement identified in this Docket if  
20 incremental revenues from discretionary services were removed from the  
21 pricing equation.

22

1 **Q. AT PAGES 18 AND 19, DR. JOHNSON ARGUES THAT QWEST'S**  
2 **COMPETITIVE ZONES PROPOSAL WOULD ALLOW QWEST TO**  
3 **ENGAGE IN "ANTICOMPETITIVE PRICING."<sup>8</sup> DO YOU AGREE?**

4 **A.** No. As discussed in my earlier rejoinder testimony regarding similar  
5 claims made by Mr. Dunkel, Qwest's Competitive Zones proposal  
6 represents a mechanism to create competitive parity between Qwest and  
7 its competitors. Currently, Qwest's competitors have the latitude to enter  
8 markets in a highly targeted manner and price services on that basis.  
9 Qwest's ability to respond to such entry is currently limited to introducing  
10 pricing or packaging plans on a statewide basis. Contrary to Dr.  
11 Johnson's claims, the Competitive Zones proposal will not create any sort  
12 of "competitive advantage" for Qwest, but will enable Qwest to compete  
13 on an equal footing with the array of competitors now present and those  
14 who will enter the market in the future.

15

16 **Q. AT PAGE 19, LINES 19 THROUGH 21, DR. JOHNSON CAUTIONS THE**  
17 **COMMISSION THAT IT "...SHOULD NOT SIMPLY ASSUME THAT**  
18 **ANTICOMPETITIVE BEHAVIOR WON'T OCCUR, NOR SHOULD IT**  
19 **ASSUME THAT THE ANTI-TRUST LAWS ARE SUFFICIENT TO**  
20 **PROTECT THE PUBLIC INTEREST." DOES THE COMMISSION HAVE**  
21 **REMEDIES AVAILABLE TO IT IF QWEST ENGAGES IN**  
22 **"ANTICOMPETITIVE BEHAVIOR" IN PRICING SERVICES NOW**  
23 **CLASSIFIED AS FULLY COMPETITIVE OR SERVICES CONTAINED**  
24 **WITHIN COMPETITIVE ZONES IN THE FUTURE?**

---

<sup>8</sup> Surrebuttal testimony of Dr. Ben Johnson, Page 19, Lines 15-18.

1 A. Yes. Dr. Johnson neglects to discuss the guidelines of Commission Rule  
2 R14-2-1108(H), which provides the Commission the continued authority to  
3 reclassify a service, or a Competitive Zone, as noncompetitive if it finds  
4 that a provider has priced in an inappropriate manner. I have no doubt  
5 that the Commission will closely follow the evolution of competition in the  
6 Arizona telecommunications market, and will be quick to take action if it  
7 finds anticompetitive behavior has occurred. I also have no doubt that it  
8 will not simply assume that the public interest has been protected.

9

10 **Q. AT PAGES 20 AND 21, DR. JOHNSON COMPLAINS THAT YOU HAVE**  
11 **DISAGREED WITH HIM THAT A CHANGE TO COMMISSION RULE**  
12 **R14-2-1108(A) IS NECESSARY. WOULD YOU COMMENT?**

13 A. As stated in my rebuttal testimony, Commission Rule R14-2-1108(A)  
14 defines the conditions for classification of a service, or group of services,  
15 as competitive. Commission Rule R14-2-1102(A) specifies that the  
16 "relevant market" may be defined on a service by service basis, a group  
17 basis and/or by geographic location. Contrary to Mr. Johnson's claim that  
18 "this term is never mentioned in the rule which allows the Company to  
19 petition for competitive classification." Subsections B and B1 of the rule  
20 he cites (R14-2-1108) state the following:

21

22 B. The petition for competitive classification shall set forth the  
23 conditions within the **relevant market** that demonstrate that the  
24 telecommunications service is competitive, providing, at a  
25 minimum, the following information:

26

27

28

29

1. A description of the general economic conditions that exist  
which make the **relevant market** for the service one that is  
competitive;

1 (emphasis added).

2

3 The guidelines are already clear, and Qwest's Competitive Zone proposal  
4 follows those guidelines. The revisions to the rules proposed by Dr.  
5 Johnson are simply not necessary. However, even though we disagree  
6 with Dr. Johnson about the need for a rule change, it is clear that both  
7 RUCO and Qwest agree that the Company should be allowed to petition  
8 for competitive classification on a geographic basis.

9

10 **Q. AT PAGE 25, 7 THROUGH 19, DR. JOHNSON PAINTS A PICTURE**  
11 **THAT QWEST'S COMPETITIVE ZONES PROPOSAL WILL LEAD**  
12 **DIRECTLY TO ANTICOMPETITIVE PRICING AND SLOWER**  
13 **COMPETITIVE ENTRY BY ALTERNATIVE CARRIERS INTO THE**  
14 **ARIZONA MARKET. DO YOU AGREE?**

15 **A.** No. To turn Dr. Johnson's argument around 180 degrees, it appears that  
16 he is suggesting that the Commission should continue to fully regulate  
17 Qwest and require it to price on a statewide average basis, and that  
18 Qwest should not be allowed to respond to a specific competitor in a  
19 defined market. This is contrary to any reasonable interpretation of the  
20 guidelines of the Telecommunications Act of 1996 and contrary to the  
21 procompetitive policies of this Commission. The Federal and State policy  
22 objectives are geared to promote competitive growth by "leveling the  
23 playing field." It is entirely inappropriate for the incumbent provider to be  
24 constrained from competing fairly where competition is entrenched.  
25 Qwest will not price its services in an anticompetitive manner in its  
26 proposed Competitive Zones, but it will compete aggressively. The

1 Commission will continue to have the authority over telecommunications  
2 competition in Arizona.

3

4 **Q. AT PAGE 33, DR. JOHNSON OFFERS "MARKET SHARE" DATA FOR**  
5 **CLECS IN ARIZONA. IS THIS DATA RELEVANT TO QWEST'S**  
6 **REQUEST FOR ESTABLISHMENT OF COMPETITIVE ZONES?**

7 A. No. The "share" percentages cited by Dr. Johnson are sourced from FCC  
8 data obtained at a past point in time and reflect statewide totals. Since  
9 local competition is concentrated primarily in the Phoenix and Tucson  
10 areas, Dr. Johnson's percentages do not reflect the proportionately higher  
11 level of competition in those areas. The data is also not reflective of the  
12 current level of competition in Arizona, but instead is a historical view.

13

14 **Q. AT PAGE 34, LINE 21 THROUGH 24, DR. JOHNSON CLAIMS THAT**  
15 **YOUR REBUTTAL TESTIMONY DID NOT FULLY CRITIQUE HIS**  
16 **COMMENTS REGARDING QWEST'S PROPOSED RATE DESIGN.**  
17 **WOULD YOU COMMENT?**

18 A. Yes. Unfortunately, the bulk of Dr. Johnson's arguments are premised on  
19 the flawed concept that loop costs can be spread across a wide variety of  
20 services and that prices therefore need not be based upon their direct  
21 cost. I will defer to Dr. Taylor to explain in his rejoinder testimony the  
22 reasons, from an economist's perspective, why cost allocation concepts  
23 are not workable in the current telecommunications market.

24

1 Many of the concerns Dr. Johnson expresses have been addressed  
2 earlier in my rejoinder testimony regarding Mr. Dunkel's rebuttal  
3 testimony. In his comments, Dr. Johnson has ignored a variety of factors  
4 that must be considered by Qwest and the Commission in determining an  
5 appropriate pricing design in this rate case. For example, prices must be  
6 driven toward appropriate cost-recovery levels to satisfy requirements of  
7 the Telecommunications Act of 1996 that implicit subsidies be made  
8 explicit and to promote the economically efficient growth of competition.  
9 Wholesale and retail price structures must be reasonably aligned to  
10 encourage competitive growth not only in densely populated urban  
11 centers, but in rural areas of Arizona. In satisfying a positive revenue  
12 requirement, margins in proposed prices for optional services and  
13 features should be higher than margins for local exchange services to  
14 mitigate pricing pressure on residential and business basic exchange  
15 customers to the extent practicable. Telephone service affordability must  
16 be a factor in designing a rate structure, and the role of Lifeline and Link  
17 Up plans in assisting low income customers to maintain service should be  
18 considered.

19  
20 **Q. AT PAGE 35, DR. JOHNSON CONCEDES THAT QWEST'S ZONE**  
21 **INCREMENT PROPOSAL FOR RETAIL SERVICES IS IN ALIGNMENT**  
22 **WITH QWEST'S DEAVERAGED ONE LOOP PROPOSAL, BUT**  
23 **ARGUES THAT THE PROPOSED ZONE INCREMENT PRICES ARE**  
24 **OUT OF STEP WITH THE DEAVERAGED ONE LOOP PRICES**  
25 **ORDERED BY THE COMMISSION. WOULD YOU COMMENT?**

1 A. Yes. As stated in my Supplemental Direct testimony in this Docket, it is  
2 very important that price deaveraging be implemented consistently across  
3 wholesale and retail loop-based services if pricing anomalies are to be  
4 avoided and if competition is to be encouraged to expand throughout the  
5 state. This pricing alignment is the most important consideration for the  
6 parties to integrate into final decisions regarding rate design. The Zone  
7 Increment rate structure proposed in my Supplemental Direct testimony  
8 was not submitted to the Commission in response to the order in Docket  
9 T-00000A-00-0914 which established interim deaveraged UNE loop  
10 prices, and was instead based upon the proposed Qwest UNE loop prices  
11 in that Docket. In view of the Commission order in Decision No. 62753,  
12 which established interim deaveraged UNE loop rates, Qwest is willing to  
13 reconsider its Zone Increment pricing proposal to maintain appropriate  
14 wholesale and retail pricing relationships. However, any adjustment in  
15 proposed Zone Increment rates will require adjustments in other elements  
16 of Qwest's retail pricing proposal to support the revenue requirement  
17 identified by Mr. Redding.

18

19 **Q. AT PAGE 37, LINES 8 AND 9, DR. JOHNSON OPINES THAT "...IT IS**  
20 **REASONABLE TO ASSUME THAT A TOLL PRICE REDUCTION WILL**  
21 **RESULT IN LARGER TOLL VOLUMES." IS THIS CONCLUSION WELL**  
22 **FOUNDED?**

23 A. No. In fact, as discussed in my rejoinder testimony to Mr. Dunkel, in  
24 states such as Washington, Wyoming and Nebraska, where toll rate  
25 reductions have been recently implemented, Qwest has seen a continued

1 downward trend in intraLATA toll volumes. In a strictly theoretical sense,  
2 or in a market in which competition is nonexistent, one might expect to  
3 see a measurable demand response resulting from a substantial price  
4 decrease. However, elasticities are not following the theoretical model in  
5 Qwest's current intraLATA long distance markets.

6  
7 **Q. AT PAGE 39, DR. JOHNSON CONCLUDES THAT IT IS APPROPRIATE**  
8 **TO REDUCE BUSINESS BASIC EXCHANGE RATES BY \$5.00 AND TO**  
9 **REDUCE RESIDENTIAL BASIC EXCHANGE RATES BY \$2.00 IN**  
10 **ARIZONA. IS THIS CONCLUSION FLAWED?**

11 **A.** Yes. Dr. Johnson supports this conclusion by maintaining that loop costs  
12 can be allocated across a range of services to drive down the underlying  
13 cost of providing residential and business basic exchange services. As  
14 discussed in detail by Dr. Taylor, this logic is simply wrong. In fact, Dr.  
15 Johnson's recommendation presumes that no implicit subsidies exist in  
16 Qwest's residential basic exchange prices, and if his logic is extended,  
17 would lead to the conclusion that high cost fund support, Telephone  
18 Assistance plans or Link Up programs are not necessary in Arizona or in  
19 any other state. By his reasoning, any telephone company earning a  
20 positive rate of return would simply continue to subsidize below cost basic  
21 exchange services with revenues from other above cost services.

22  
23 **RESPONSE TO DR. LEE SELWYN**  
24

1 **Q. AT PAGE 24, LINES 2 THROUGH 6, DR. SELWYN ARGUES THAT**  
2 **QWEST'S COMPETITORS DO NOT HAVE THE SAME ABILITY TO**  
3 **PROVIDE SERVICE ON AN INCREMENTAL BASIS ON ITS EXISTING**  
4 **PLANT AND ORGANIZATIONAL RESOURCES AS DOES QWEST. DO**  
5 **YOU AGREE?**

6 A. No. In fact, especially in the Phoenix and Tucson markets where CLECs  
7 are entrenched, a large number of state of the art digital central office  
8 switches are in place (either collocated in Qwest central offices or located  
9 nearby) that are capable of providing not only basic exchange services,  
10 but a whole spectrum of optional features. Qwest's competitors certainly  
11 do offer optional features on an "incremental basis" similar to the manner  
12 in which Qwest offers such features, and do so in the targeted geographic  
13 areas they choose to serve.

14

15 **Q. AT PAGE 24, LINES 17 AND 18, DR. SELWYN SUGGESTS THAT**  
16 **BASIC RESIDENTIAL SERVICE CURRENTLY "INCLUDES" ONE FREE**  
17 **DIRECTORY ASSISTANCE CALL PER MONTH. IS THIS**  
18 **CHARACTERIZATION ACCURATE?**

19 A. No. Qwest's current Directory Assistance tariff, which is separate and  
20 distinct from its Basic Exchange service tariff, specifies that one free  
21 Directory Assistance call per month is offered. Directory Assistance is a  
22 fully competitive service in the current Arizona market, and it is not an  
23 inherent component of Basic Exchange service.

24

1 **Q. AT PAGE 25, LINES 8 THROUGH 17, DR. SELWYN ARGUES THAT**  
2 **DIRECTORY ASSISTANCE SERVICE IS NOT DISCRETIONARY IN**  
3 **ARIZONA. IS HE CORRECT?**

4 A. No. A wide range of options are now readily available to Arizona  
5 consumers to obtain directory listings, including options such as the "00"  
6 and "10-10-9000" directory services of AT&T and Worldcom, dial around  
7 directory assistance providers, internet directory services, wireless  
8 services and standard telephone directories. The variety of available  
9 directory assistance options clearly defines this service as both optional  
10 and discretionary: Not only do the vast majority of Arizona customers not  
11 utilize Qwest's Directory Assistance service on a regular basis, but a wide  
12 range of alternatives are available to them when they do elect to use  
13 directory assistance.

14

15 **Q. AT PAGE 26, LINES 21 THROUGH 27, DR. SELWYN DISMISSES**  
16 **YOUR CONTENTION THAT VIABLE COMPETITION IS PRESENT FOR**  
17 **QWEST'S DIRECTORY ASSISTANCE (D.A.) SERVICE. WOULD YOU**  
18 **COMMENT?**

19 A. Mr. Selwyn appears to base his conclusion on the "411 dialing parity"  
20 argument. It is not clear to me whether Mr. Selwyn understands that any  
21 customer dialing "00", AT&T's heavily advertised dialing pattern for its  
22 Directory Assistance service for local and national numbers, will be routed  
23 to the customer's presubscribed interLATA carrier for handling. There can  
24 be no dispute that the "00" dialing pattern is certainly equivalent to  
25 Qwest's "411" dialing pattern. Additionally, other directory assistance

1 alternatives, such as Worldcom's 10-10-9000 service, internet directory  
2 services and wireless directory assistance services (also accessed via the  
3 411 dialing pattern) are as convenient as Qwest's Directory Assistance  
4 service. Finally, "411" dialing parity requirements of the  
5 Telecommunications Act of 1996 specifically related to CLECs' ability to  
6 utilize this dialing pattern. On March 1, 2000, the ACC issued an order in  
7 the Section 271 proceeding certifying that Qwest has met this dialing  
8 parity requirement in Arizona.

9

10 **Q. DR. SELWYN ARGUES, AT PAGE 28, THAT QWEST CAN CREATE A**  
11 **"PRICE SQUEEZE" ON ITS COMPETITORS WITHIN COMPETITIVE**  
12 **ZONES BY PRICING ITS RETAIL SERVICES LOWER THAN**  
13 **ESSENTIAL WHOLESALE ELEMENTS. IS THIS ACCURATE?**

14 **A.** No. The key assumption behind Dr. Selwyn's contention is that Qwest's  
15 wholesale services continue to be considered "essential" to Qwest's  
16 competitors within competitive zones. However, to the extent the  
17 Commission agrees that competition is now present in the wire centers for  
18 which Qwest seeks Competitive Zone classification, the wholesale  
19 elements corresponding to those services can no longer be considered to  
20 be "essential" elements. In determining a price floor for a retail service  
21 based on nonessential elements, the TSLRIC of the service is considered  
22 to be that floor. As stated earlier in my rejoinder testimony, Qwest  
23 commits that the revenues for any service within a particular Competitive  
24 Zone will remain above the TSLRIC of that service. If the Commission  
25 finds that Qwest has violated that commitment, it will have the continued

1 authority to reclassify services in the Competitive Zone in question as non-  
2 competitive, which would also modify the imputation test to require that  
3 the price for essential wholesale elements and the TSLRIC for non-  
4 essential elements must be incorporated into the price floor.

5  
6 **RESPONSE TO MS. ARLEEN STARR**

7  
8 **Q. AT PAGE 5, LINES 4 THROUGH 7, MS. STARR STATES "...QWEST'S**  
9 **PROPOSAL WOULD ESSENTIALLY ELIMINATE THE IMPUTATION**  
10 **REQUIREMENT FOR TOLL SERVICES IN THE AREAS CLASSIFIED**  
11 **AS COMPETITIVE." IS SHE CORRECT?**

12 A. Not entirely. In wire centers found to be competitive, alternatives to  
13 Switched Access also exist by definition. In this instance, the traditional  
14 intraLATA long distance imputation test would be modified to reflect the  
15 TSLRIC of providing the wholesale Switched Access service in that wire  
16 center. An imputation requirement would remain in place, but the inputs  
17 to that calculation would be modified based on a reclassification of  
18 Switched Access as "non-essential" in that wire center.

19  
20 **Q. AT PAGE 6, MS. STARR CLAIMS THAT "...QWEST REMAINS A**  
21 **MONOPOLY PROVIDER OF SWITCHED ACCESS SERVICES AND**  
22 **THERE IS NO REASONABLE SUBSTITUTE FOR THESE SERVICES."**  
23 **WOULD YOU COMMENT?**

24 A. Customers are now placing and receiving long distance calls via a variety  
25 of means, including dedicated access, internet protocol telephony and

1 wireless services. In fact, AT&T has recently taken a substantial equity  
2 stake in Net2Phone, the nation's largest internet telephony provider. In  
3 view of the alternatives to Switched Access service outlined in my direct  
4 and supplemental direct testimony, Switched Access cannot realistically  
5 be termed a "monopoly" service, especially in the wire centers for which  
6 Qwest requests Competitive Zone classification.

7  
8 **Q. MS. STARR, AT PAGES 7 AND 8, TAKES EXCEPTION TO YOUR**  
9 **CRITICISM OF AT&T'S RECENT PROPOSAL TO INCREASE**  
10 **INTERSTATE LONG DISTANCE RATES, AND SUGGESTS THAT THE**  
11 **PROPOSAL WAS REALLY A NET RATE REDUCTION FOR ITS**  
12 **CUSTOMERS. IS THIS CORRECT?**

13 **A.** While some prices clearly were reduced by AT&T in its proposal, my  
14 understanding of the FCC's position is that it viewed AT&T's proposal as a  
15 significant net increase for interstate long distance customers. It is also  
16 my understanding that the FCC's strong expression of concern with this  
17 proposal led AT&T to subsequently discontinue these rate increase plans.

18  
19 **PAY PHONE USAGE CHARGE FOR 800 SERVICELINE**

20  
21 **Q. HAS THE COMMISSION ISSUED A RECENT ORDER CONCERNING**  
22 **QWEST'S APPLICATION TO INITIATIVE A SEPARATE CHARGE FOR**  
23 **CALLS FROM PAY PHONES IN ARIZONA TO 800 SERVICELINE**  
24 **CUSTOMERS?**

1 A. Yes. On August 29, 2000, the Commission ordered in Docket No. T-  
2 01051B-00-0369 that issues concerning Qwest's establishment of a \$0.26  
3 charge for calls from pay phones to 800 ServiceLine customers should be  
4 integrated into Qwest's pending rate case, Docket No. T-01051B-99-0105.

5

6 **Q. WHY DOES QWEST NOW FIND IT NECESSARY TO IMPLEMENT A**  
7 **CHARGE OF \$0.26 FOR THESE CALLS?**

8 A. On October 7, 1997, the FCC mandated compensation of Pay Phone  
9 Service Providers (PSP) for completed calls originating from pay phones.  
10 These compensated calls include any calls made from a pay phone where  
11 the caller does not pay for the service at the time the call is completed.  
12 Qwest now compensates PSPs at \$0.24 per message for these calls as  
13 required by the FCC. However, Qwest's billing systems have been  
14 unable, until recently, to accommodate assessment of a charge to 800  
15 ServiceLine customers for "non-paid" coin calls. Qwest's proposal will  
16 now establish a charge of \$0.26 for these calls, to be assessed to the 800  
17 ServiceLine customer receiving the call to recover the expense of  
18 payments to the PSPs.

19

20 **Q. IF QWEST MUST PAY PSPs AT A RATE OF \$0.24 PER CALL, WHY**  
21 **DOES QWEST REQUEST APPROVAL FOR A CHARGE OF \$0.26 FOR**  
22 **THESE CALLS?**

23 A. The differential of \$0.02 will enable Qwest to recover miscellaneous costs  
24 associated with recovering and remitting the charge and subsequent  
25 payment to PSPs in Arizona. Cost support for this charge is being

1 sponsored in the rejoinder testimony of Mr. Jerrold Thompson on behalf of  
2 Qwest.

3  
4 **CONCLUSION**

5  
6 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

7 A. In this rejoinder testimony, I have discussed various contentions by Dr.  
8 Collins, Mr. Dunkel, Dr. Johnson, Dr. Selwyn and Ms. Starr regarding the  
9 propriety of Qwest's Competitive Zones and retail services pricing  
10 proposals. The contentions espoused fall into two groups: 1) Qwest  
11 should continue to be fully regulated even though its competitors operate  
12 under relaxed regulation, and 2) Qwest's retail services pricing proposals  
13 should be rejected on the basis of the concept that loop costs may be  
14 spread across a wide range of services to keep basic exchange service  
15 prices low. Both of these contentions are plainly wrong. Full competition  
16 exists in the wire centers in the greater Phoenix and Tucson areas for  
17 which Qwest requests Competitive Zone classification. In these areas,  
18 Qwest's competitors are selectively targeting lucrative markets, while  
19 Qwest is constrained from effectively competing at a sufficiently granular  
20 level. Qwest's Competitive Zones proposal will simply establish  
21 competitive parity between Qwest and its competitors in Arizona,  
22 consistent with the objectives of the Telecommunications Act of 1996 and  
23 of this Commission.

24

1 As discussed in my previous written testimony, Qwest's retail pricing  
2 proposal effectively balances a variety of objectives: appropriate cost  
3 recovery, support of Qwest's positive revenue requirement in this Docket,  
4 removal of implicit subsidies, correct alignment of retail and wholesale  
5 loop-based service pricing structures and maintenance of affordable  
6 pricing. The arguments advanced by Dr. Johnson and Mr. Dunkel  
7 seriously undermine these objectives and virtually ensure that implicit  
8 subsidies would be maintained well into the future. Their "cost sharing"  
9 concept for retail services would also undermine the economic incentives  
10 for competitors to offer service to the rural areas of Arizona, since Qwest's  
11 wholesale service prices would significantly exceed its retail service prices  
12 in those areas.

13  
14 Qwest's Competitive Zones and retail services pricing proposals  
15 appropriately reflect the current Arizona telecommunications market and  
16 effectively address the policy objectives outlined above. I respectfully  
17 request the Commission to approve these proposals as filed.

18  
19 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

20 **A.** Yes, it does.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION OF )  
QWEST CORPORATION, A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN )**

**DOCKET NO. T-01051B-99-0105**

**EXHIBITS OF**

**DAVID L. TEITZEL**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

## INDEX OF EXHIBITS

### DESCRIPTION

### EXHIBIT

Resold Lines in Service ox Bundling Strategy

DLT-1

Directory Assistance Proposal Revenue Impact

DLT-2

**Redacted**

**Resold Lines in Service: April, 1999**

Bisbee, Az.

Redacted

Chandler Main, Az.

Redacted



BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
QWEST CORPORATION, A COLORADO )  
CORPORATION, FOR A HEARING TO )  
DETERMINE THE EARNINGS OF THE )  
COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN )  
STATE OF WASHINGTON )  
COUNTY OF KING )  
)  
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)

DOCKET NO. T-1051-B-99-105  
AFFIDAVIT OF  
DAVID L. TEITZEL

SS

I, David L. Teitzel, of lawful age being first duly sworn, deposes and states:

- 1. My name is David L. Teitzel. I am Directory, Product and Market Issues for Qwest Corporation, formerly known as U S WEST Communications, Inc., in Seattle, Washington. I have caused to be filed written rejoinder testimony in support of Qwest Corporation in Docket No. T-01051-B-99-105.
- 2. Attached hereto and made a part hereof for all purposes is my rejoinder testimony.
- 3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
David L. Teitzel

SUBSCRIBED AND SWORN to before me this 12<sup>th</sup> day of September, 2000.

  
Notary Public

My Commission Expires:  
09/16/02

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**RECEIVED**

**BEFORE THE**

**ARIZONA CORPORATION COMMISSION**

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AZ CORP COMMISSION  
DOCUMENT CONTROL

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**DOCKET NO. T-01051B-99-0105**

**REJOINDER TESTIMONY OF**

**SCOTT A. MCINTYRE**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF SCOTT A MCINTYRE**  
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**REPLY TO ARLEEN M. STARR**

**Q. MS. STARR TAKES ISSUE WITH YOUR ASSERTION THAT DS1 PRIVATE LINE IS A REASONABLE ALTERNATIVE TO SWITCHED ACCESS. DOES SHE ADDRESS YOUR ASSERTION HEAD ON?**

A. No. She attempts to challenge my position by redirecting the focus to residential customers instead of the business market I addressed in my rebuttal testimony. Clearly, DS1 is primarily a business alternative that effectively reduces the average switched access rates AT&T pays. By reducing the average effective rate, AT&T can offer end-user customers long distance plans that are far below the theoretical rates driven by switched access pricing.

**Q. DOES MS. STARR SUPPORT YOUR POINT ON THIS BYPASS ISSUE?**

A. Yes, actually she does. She states, "I think Mr. McIntyre very clearly demonstrates that if DS1 private line service for \$250 per month was (sic) a realistic alternative to switched access, IXCs would not choose to pay \$11,000 for switched access instead." This pretty clearly makes my point. I cannot imagine a carrier paying the \$11,000 for switched access, when all they have to do (at minimum) is place an order for a DS1 from any of several providers.

**Q. MS. STARR STATES THAT THE PROPOSED INTRASTATE ENTRANCE FACILITY RATES FOR DS1 AND DS3 ARE DIFFERENT THAN THOSE IN THE FCC TARIFF. CAN YOU EXPLAIN WHY THIS IS TRUE?**

1 A. Yes. When this case was originally filed, in January 1999 Qwest did plan to  
2 make these rates consistent with FCC rates. Since that time, there have been  
3 two annual adjustments to FCC rates and it is the most current FCC annual  
4 adjustment that Ms. Starr compares with our original proposal. The rates  
5 proposed now align with FCC private line prices for DS1 and DS3, and no longer  
6 match switched access entrance facilities. Qwest attempts to keep these rates in  
7 line because they are substitutable services, but jurisdictional differences make  
8 this difficult. This is one of the key reasons Qwest proposed to deregulate high  
9 capacity services in Arizona. If these services were deregulated, it would be far  
10 easier to prevent pricing differences due only to jurisdictional constraints. While  
11 Qwest does have pricing flexibility for these services, this is a rate case and  
12 these services are still regulated. This means, to demonstrate revenue impacts,  
13 we must propose rates and changes to rates and calculate the annualized  
14 impact. In a constantly changing regulated environment, where rate changes  
15 take years to accomplish, it is not surprising that we have a pricing difference at  
16 any given moment.

17

18 **Q. MS. STARR FINDS IRONY WITH THE FACT THAT QWEST IS PROPOSING**  
19 **TO RAISE PRICES IN A MARKET YOU CLAIM IS COMPETITIVE AND**  
20 **SUBSTITUTABLE FOR SWITCHED ACCESS. DO YOU FIND IT IRONIC?**

21 A. Hardly. As a substitute for switched access, private line services provide such an  
22 economic advantage that modest price changes have very little impact. Qwest  
23 offers these services across many jurisdictions and we try to keep pricing  
24 consistent. Many of our customers purchase service in many states and also  
25 through FCC tariffs. Sometimes these rates need adjustment, both up and down

1 to maintain consistency. The proposed pricing originally was intended to match  
2 the FCC rates, as describe above. In addition, the rates proposed are the month  
3 to month rates for these services. There are several pricing plans available at  
4 rates below the ones listed. Fluctuations, both up and down are common in  
5 competitive markets and Qwest's proposal in this case is hardly unusual. The  
6 analog private line prices need to be increased because several elements are  
7 below costs. This is by far the most significant increase proposed by Qwest and  
8 even Mr. Dunkel, supports such an increase.

9  
10 **REPLY TO WILLIAM DUNKEL**

11  
12 **Q. MR. DUNKEL SEEMS TO BELIEVE THAT LOWERING SWITCHED ACCESS**  
13 **RATES DISCOURAGES COMPETITION. WOULD YOU LIKE TO COMMENT?**

14 **A.** Yes. Mr. Dunkel seems to think lowering the margin on switched access  
15 discourages competition by making this service less profitable.<sup>1</sup> AT&T claims  
16 lowering switched access rates encourages competition. In theory at least, Mr.  
17 Dunkel is closer to correct than is AT&T, but both are mainly using this as an  
18 argument to support their respective positions. Much of the competition in the  
19 switched access market has to do with bypass. As I have discussed in my  
20 rebuttal testimony, the price differences between switched access and private  
21 line bypass are huge. A DS1 private line for \$250 per month is an easy choice  
22 over \$11,000 worth of switched access. While lowering switched access rates by  
23 converting the carrier common line (CCL) charge to an explicit subsidy may

---

<sup>1</sup> Dunkel surrebuttal, page 32, lines 18-21

1 change this picture a little, but it has no significant impact on those competitors  
2 building bypass networks.

3  
4 **Q. WHAT IS THE COROLLARY TO MR. DUNKEL'S POSITION ON**  
5 **COMPETITION?**

6 A. The corollary is that if, (and this is a big if) lowering margins in switched access  
7 discourages competition in the access market, then raising margins (by raising  
8 prices) for local exchange services must encourage competition in that market.  
9 Keeping local exchange rates low discourages competition in that area. This is  
10 one of the key benefits to eliminating implicit subsidies. Implicit subsidies hide  
11 the true economics of providing service and stifle competition in markets where it  
12 would normally develop.

13  
14 **Q. MR. DUNKEL STATES THAT YOU HAVE OBJECTED TO THE "FORM" OF**  
15 **BILLING FOR THE CCL. HE SUGGESTS THAT CHANGING THE FORM OF**  
16 **THE CHARGE RATHER THAN WHO PAYS THE CHARGE, MIGHT BE**  
17 **ACCEPTABLE. IS THIS REASONABLE?**

18 A. By itself, a change in the form of the charge wouldn't accomplish anything. Mr.  
19 Dunkel is referring to my concern over two facets of the CCL charge. One is that  
20 the CCL is charged on a per minute basis (form) and the second is that carriers  
21 pay it. The CCL has traditionally been considered as revenue support that helps  
22 keep local exchange rates low. Charging for CCL on a per minute basis hides  
23 the true nature of the revenue support for local exchange service which is  
24 charged on a per line basis. This creates an implicit subsidy, supported by toll  
25 customers. This also encourages uneconomic bypass of switched access. This

1 is my concern over the "form" of the charge. My concerns over the fact that  
2 carriers pay this charge are basically the same. Making carriers pay, and then  
3 pass along to customers, rates intended to support local exchange service hides  
4 the true nature of the revenue support and this too, is why it is an implicit  
5 subsidy. In addition, it also encourages uneconomic bypass. If you want to  
6 rebalance rates to reduce or eliminate the revenue support provided by the CCL  
7 charge, you must address where this revenue will be recovered. After you  
8 decide where it will be recovered, you can determine what form is appropriate.  
9 There are many services that may be affected by this type of rate re-balancing.

10  
11 **Q. MR. DUNKEL CLAIMS YOU HAVE MIS-STATED HIS TESTIMONY**  
12 **CONCERNING THE SUSTAINABILITY OF THE PRIVATE LINE REVENUE**  
13 **REQUIREMENT HE HAS SUGGESTED. DO YOU BELIEVE THE LEVEL HE**  
14 **HAS SUGGESTED IS SUSTAINABLE?**

15 A. No. If we were to price at the \$70 million revenue level, as he suggests, we  
16 would surely lose significant market share.

17  
18 **Q. HAS MR. DUNKEL STATED THAT ANY SHORTFALL OF THIS REVENUE**  
19 **REQUIREMENT SHOULD NOT BE MADE UP BY ANY OTHER PRODUCT?**

20 A. Yes. Mr. Dunkel stated in his direct and in his rebuttal testimony, "However, in  
21 no event should the rates for other non-competitive services be set to remove the  
22 private line revenue requirement that the USWC management has elected to not  
23 recover in the private line rates."

24

1 **Q. IN YOUR OPINION, HAS MR. DUNKEL RECOMMENDED THAT QWEST BE**  
2 **ASSIGNED A REVENUE REQUIREMENT THAT IS NOT ATTAINABLE?**

3 A. Yes.  
4

5 **Q. MR. DUNKEL TAKES ISSUE WITH YOUR EXAMPLE OF HOW CUSTOMERS**  
6 **GENERATING MORE THAN \$250 PER MONTH IN TOLL ARE TARGETS FOR**  
7 **BYPASS USING PRIVATE LINES. WOULD YOU COMMENT ON HIS**  
8 **ASSERTIONS?**

9 A. In my rebuttal testimony, I stated that an average DS1 is priced at about \$250  
10 per month and suggested this, as a means of bypassing switched access. There  
11 are certainly such circuits priced much less than this, depending on the specific  
12 circuit configuration. I also stated that customers generating **more** than \$250 in  
13 toll are target customers for such bypass. I agree that this private line charge is  
14 only one element of the total cost of toll services. However, from a marketing  
15 perspective, this is a good place to start looking at specific customers for bypass  
16 opportunities. Customers that generate this level of toll revenue receive toll calls  
17 as well. Once such a private line circuit is established the carrier also bypasses  
18 terminating switched access charges. This means that while the originating toll  
19 may establish a revenue threshold, carriers save switched access costs for both  
20 originating and terminating traffic. Compared to the possible \$11,000 in switched  
21 access rates that might be bypassed by using such private lines, this seems to  
22 be a pretty reasonable marketing approach.

**REPLY TO MICHAEL J. ILEO, PH.D.**

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**Q. MICHAEL J. ILEO, PH.D. FILED SURREBUTTAL TESTIMONY ON BEHALF OF THE ARIZONA PAYPHONE ASSOCIATION. DO YOU WISH TO REPLY TO HIS TESTIMONY?**

A. Yes. I will try to boil Dr. Ileo's testimony down to a few key issues. Dr. William E. Taylor and Jerrold H. Thompson will also make reply remarks in their rejoinder testimony.

**Q. ARE THERE ISSUES IN DR. ILEO'S TESTIMONY THAT YOU WOULD LIKE TO ADDRESS?**

A. Yes. I will focus on three key points of Dr. Ileo's testimony.

**Q. WHAT IS THE FIRST POINT OF DISCUSSION?**

A. The first issue is the new services test. Despite Dr. Ileo's protestations, there are two key factors in this discussion. The first is that this Commission has found in the past, that both the current and proposed rates for PAL services are reasonable. The second is that the FCC has found that rates as high as 4.8 times the relevant cost were also reasonable in the context of the new services test. Qwest's rates, both existing and proposed, fall well within this range. As a result, there is no evidence at all to suggest these rates are not reasonable. The new services test requires services to be above cost (to prevent subsidization by other services) and to contain a reasonable contribution.

**Q. WHAT IS THE SECOND ISSUE?**

1 A. The second issue is the topic of subsidy as it applies to payphone services. In  
2 this case Dr. Ileo simply misrepresents section 276 of the telecommunications  
3 act. As quoted by Dr. Ileo <sup>2</sup>, the Act states “any Bell operating company that  
4 provides payphone service – (1) shall not subsidize its payphone service directly  
5 or indirectly from its telephone exchange service operations or its exchange  
6 access operation.” This refers to “payphone service” not PAL. Payphone service  
7 is defined in the Act as “the provision of public or semi-public pay telephones, the  
8 provision of inmate telephone service in correctional institutions, and any  
9 ancillary services.” This is **not** Public Access Line service at all. PAL service is  
10 an access line, not a “payphone service”. Payphone service is provided by the  
11 members of the APA, other payphone providers, and by a separate division of  
12 Qwest.

13 Even though section 276 of the Act does not apply to PAL service, Dr. Ileo has  
14 even misrepresented the subsidy issue as it relates to payphone service. The  
15 Act says a company cannot subsidize its payphone operation with other profits.  
16 It does not say its payphone service cannot subsidize other operations. This is  
17 only a one way restriction. While Dr. Ileo may claim that payphone service must  
18 be “subsidy free; i.e., contain neither subsidies from or to other  
19 telecommunications services of ILECs<sup>3</sup> the Act does not support this statement at  
20 all.

21

22 **Q. WHAT IS THE THIRD ISSUE RAISED BY DR. ILEO THAT REQUIRES A**  
23 **REPLY?**

---

<sup>2</sup> Dr. Ileo surrebuttal, page 21, lines 21-23

<sup>3</sup> Dr. Ileo surrebuttal, page 19, lines 19-22

1 A. Dr. Ileo brings up the issue of wholesale versus retail in distinguishing between  
2 PAL rates and business exchange rates. In the telecommunications business,  
3 the terms wholesale and retail do not fit well with many services provided. Most  
4 services must be made available, at any location desired, on the same terms and  
5 conditions, regardless of the purchaser. In this sense, business exchange  
6 services and PAL services offer very similar functionality. PAL services do offer  
7 slightly higher functionality than do business exchange services, but the  
8 differences are relatively small, considering that the largest portion of the cost for  
9 these services is the network facility. Qwest offers many services where the  
10 "wholesale" prices and the "retail" prices are exactly the same. Take the  
11 example of private line service. Interexchange carriers are large purchasers of  
12 these services and they resell these services to their customers. "Retail"  
13 business customers also purchase these services under the same terms and  
14 conditions, for the exact same prices. For Qwest to offer these same services,  
15 providing the same functionality, at different prices to different classes of  
16 customers, would be considered discriminatory.

17 There are circumstances where regulatory commissions have ordered certain  
18 services to be offered at discounted prices to resellers. This is a way of offering  
19 a "wholesale" price to resellers of a "retail" service. In Arizona, this discounting  
20 process applies to PAL services, which are considered to be "retail" offerings.  
21 Competitive Local Exchange Providers (CLEC's) can purchase PAL services at a  
22 discount, for resale in providing payphone service. If PAL services were  
23 redefined as wholesale, this discount would no longer be required, even if the  
24 prices were the same.

25

1 **Q. HAS THE ARIZONA PAYPHONE ASSOCIATION (APA) MADE PREVIOUS**  
2 **CLAIMS AS TO THE WHOLESALE OR RETAIL NATURE OF PAL SERVICE?**

3 A. Yes. On March 18, 1998, the APA filed with the Commission a Motion for  
4 Clarification of Decision No.60635, dated January 30, 1998. In its motion, the  
5 APA requested that the Commission clarify that PALs are in fact business lines  
6 and subject to resale discounts.

7

8 **Q. DID THE COMMISSION CONCUR WITH THE APA ON THIS ISSUE?**

9 A. Yes. The Commission's order states; "We concur with the APA and Staff.  
10 Pursuant to Section 251 (c)(4), U S West must "offer for resale at wholesale rates  
11 any telecommunication service that the carrier provides at retail rates to  
12 subscribers who are not telecommunications carriers"."

13

14 **Q. WHAT THEN IS THE RETAIL RATE AND WHAT IS THE WHOLESALE RATE?**

15 A. The retail rate is the current tariffed rate and is available to subscribers that are  
16 not telecommunications carriers (CLECs). The wholesale rate is this same rate  
17 discounted by the resale business discount, established by the Commission.  
18 This discounted wholesale rate is available to CLECs.

19

20 **Q. ARE MEMBERS OF THE APA AS REPRESENTED BY DR. ILEO CLECS?**

21 A. I don't know, but those that are, are eligible to purchase PAL circuits at  
22 discounted "wholesale" prices and those that are not must purchase at "retail"  
23 rates.

24

1 **Q. DR. ILEO PLACES SOME EMPHASIS ON THE RECENT DECISION BY THE**  
2 **ARIZONA COURT OF APPEALS IN CONFIRMING COMMISSION DECISION**  
3 **NO. 61304. WOULD YOU CARE TO COMMENT ON THIS?**

4 A. Yes. Qwest has filed for reconsideration of this decision by the appeals court.  
5 There appear to be portions of the decision that are inconsistent with what I  
6 understand about the telecommunications act and the new services test. I will  
7 refrain from further comments pending resolution of Qwest's appeal.

8

9 **Q. DR. ILEO CLAIMS YOU DISAGREE WITH THE COMMISSION, THE COURT**  
10 **AND HIMSELF WITH THE STATEMENT THAT PAL PRICING SHOULD**  
11 **INCLUDE DIRECT COST AND A REASONABLE PORTION OF COMMON**  
12 **COST. DO YOU IN FACT, DISAGREE WITH THIS STATEMENT?**

13 A. Absolutely not. It appears that our disagreement focuses on the definition of  
14 "reasonable". I would like to add, however, that in determining what is  
15 reasonable; there are other constraints that are constantly dealt with in a  
16 regulated environment. These issues involve the public policy concerns of  
17 discrimination, network efficiency, and support for universal service. In an  
18 industry shifting from monopoly to competition, these factors affect the pricing of  
19 many services and there is still a need to balance these concerns.

20

21 **Q. DOES THIS CONCLUDE YOUR REJOINDER TESTIMONY?**

22 A. Yes, it does.

23

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
QWEST CORPORATION )  
(FORMERLY KNOWN AS U S WEST )  
COMMUNICATIONS, INC.), A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. )  
)  
STATE OF WASHINGTON )  
)  
COUNTY OF KING )

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
SCOTT A. MCINTYRE

ss

Scott A. McIntyre, of lawful age being first duly sworn, deposes and states:

- 1. My name is Scott A. McIntyre. I am Director – Product and Market Issues, of Qwest Corporation (formerly known as U S WEST Communications, Inc.) in Seattle, Washington. I have caused to be filed written testimony in support of USWC in Docket No. T-01051B-99-0105
- 2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
Scott A. McIntyre

SUBSCRIBED AND SWORN to before me this 12 th day of September, 2000.

  
Notary Public residing at  
Seattle, Washington.

My Commission Expires: 09/16/02

RECEIVED

BEFORE THE

ARIZONA CORPORATION COMMISSION

2000 SEP 19 P 3: 27

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )

DOCKET NO. T-01051B-99-0105

REJOINDER TESTIMONY OF

JERROLD L. THOMPSON

EXECUTIVE DIRECTOR- SERVICE COST INFORMATION

QWEST CORPORATION

SEPTEMBER 19, 2000

**REJOINDER TESTIMONY OF JERROLD L. THOMPSON**

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1 as in this proceeding.” With the additional information provided by Mr. Dunkel in  
2 his Surrebuttal Testimony, I now know that the Indiana Commission also was  
3 addressing Section 254 of the Telecom Act.  
4

5 In it’s recent *CALLS Order* the FCC addressed this very issue. Several parties  
6 made similar arguments to those made by Mr. Dunkel in this proceeding  
7 regarding the meaning of Section 254(k) of the Telecom Act.<sup>2</sup> The FCC stated  
8 the following:

9  
10 94. Indeed, these arguments have already been addressed and  
11 rejected by the United States Court of Appeals for the Eighth  
12 Circuit. In *Southwestern Bell v. FCC*, the Texas Office of Public  
13 Utility Counsel argued, among other things, that the Commission’s  
14 decision in the *Access Charge Reform Order* to increase the SLC  
15 cap for certain lines resulted in a “free ride by the IXCs on the  
16 common line facilities” and that loop costs were being shifted from  
17 competitive services to basic services, contrary to the intent of  
18 section 254(k) of the 1996 Act. Texas Counsel argued that as a  
19 result of section 254(k), the recovery of joint and common costs,  
20 such as NTS loop costs, must be borne mutually both by end users  
21 and by IXCs. Texas Counsel asserted that it was improper for the  
22 Commission to shift additional NTS loop cost recovery from the  
23 access rates LECs charge IXCs for interstate access onto rates  
24 end users pay for certain telephone lines. Texas Counsel  
25 contended that increasing the SLC cap imposed on end users  
26 allowed IXCs to evade their fair share of the common line costs.  
27 Texas Counsel maintained that this approach violated section  
28 254(k) “in that the existing proportion of NTS loop cost recovery by  
29 the IXCs through competitive services would be reduced through  
30 increases on end users for basic services.”

31  
32 95. The Eighth Circuit upheld the Commission’s increases to  
33 various LEC SLC caps, however, and found that “Texas Counsel’s  
34 contention that increasing the SLC price ceiling violates the  
35 prohibition against using non-competitive services to subsidize  
36 competitive services [wa]s unpersuasive.” In doing so, the court

---

<sup>2</sup> Mr. Dunkel’s Surrebuttal Testimony p. 37, lines 12-14.

1           reaffirmed the Commission's long standing view that the subscriber  
2           "causes" local loop costs, whether the subscriber uses the service  
3           for intrastate or interstate calls. These costs are, in any event,  
4           recovered from the end user, either through direct end-user  
5           charges or indirectly through higher rates or additional charges paid  
6           to IXCs. The court further affirmed the Commission's conclusion  
7           that it was appropriate and rational for the Commission to impose  
8           these costs on the end user. The court concluded as a result that  
9           increasing SLC caps on certain lines did not result in a windfall for  
10          IXCs.<sup>3</sup> (Footnotes omitted, emphasis added).

11  
12          Not only have the FCC and the courts rejected the notion that the loop is a joint  
13          cost which is required to be recovered from various services, but the FCC and  
14          the courts have also rejected the assertion that flat rate recovery of loop costs  
15          from the end user violates section 254(k) of the Telecom Act. The FCC also has  
16          clearly stated its "long standing view" that the subscriber **causes** local loop costs  
17          and should pay for those costs through flat rate charges. The issues before this  
18          Commission are directly related to this FCC dispute. There is no question that  
19          the FCC has declared that the loop is a direct cost, not a joint cost. Further, the  
20          FCC has declared that with regard to the interstate loop cost revenue  
21          requirement, the proper manner of recovery of the cost is from a flat charge  
22          assessed to the end user. The FCC has used a transition plan that has occurred  
23          over many years to accomplish this type of recovery. Qwest, through the  
24          testimonies of its witnesses are requesting the Arizona Corporation Commission  
25          to recognize and start this same type of transition.

26  

---

<sup>3</sup> *Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45. Released May 31, 2000 at 94-95.*



1 cost will diminish as competition grows. Good examples of this are evidenced  
2 within this proceeding by representatives of two competing segments of the  
3 industry, namely a long distance carrier and a payphone provider. Each segment  
4 is spending considerable sums of money in this proceeding advancing  
5 arguments to reduce contributions from the services that Qwest provides to  
6 them, while implicitly shifting that contribution to other services.

7  
8 Dr. Johnson expresses agreement that there are contributions from these other  
9 services today, but sees no reason that the Commission should agree to change  
10 that situation to any large degree.<sup>4</sup> Qwest, on the other hand, believes that the  
11 Commission should continue the transition toward a more competitive  
12 environment that a previous Arizona Commission established in the Company's  
13 last rate case (Docket No. E-1051-93-183) where the Commission concluded  
14 that there would be growth in competition in the future and that rate rebalancing  
15 was appropriate.<sup>5</sup>

16  
17  
18 **REJOINDER OF MS. STARR**

19  
20 **Q. MS. STARR CRITICIZES QWEST FOR INCLUDING COSTS OF EXCHANGES**  
21 **PROPOSED TO BE SOLD IN ITS COST STUDIES WHILE EXCLUDING**  
22 **THOSE FROM ITS REVENUE REQUIREMENT PURSUANT TO THE**  
23 **COMMISSION'S PROCEDURAL ORDER. DO YOU HAVE A RESPONSE?**

---

<sup>4</sup> Dr. Johnson Surrebuttal Testimony, p. 15, lines 14-17.

<sup>5</sup> Decision No. 58927 page 72.

1 A. Yes. I have prepared Confidential Exhibit JLT-1, Rejoinder Testimony. This  
2 exhibit illustrates loop costs on an original deaveraged basis, on a deaveraged  
3 basis without the exchanges proposed in the sale, and on a deaveraged basis as  
4 ordered by the Commission in Docket No. T-00000A-00-0194 without the  
5 exchanges proposed in the sale. In addition, I have provided carrier access  
6 costs on a basis without the exchanges proposed in the sale.

7

8 **Q. MS. STARR QUESTIONS QWEST'S USE OF A DIFFERENT COST OF**  
9 **MONEY IN ITS TSLRIC STUDIES THAN WHAT IT PROPOSES IN THE**  
10 **REVENUE REQUIREMENT PORTION OF THIS CASE. IS THERE A REASON**  
11 **FOR THIS?**

12

13 A. Yes. As explained in the Rejoinder Testimony of Mr. Peter C. Cummings, the  
14 weighted average cost of capital used in Qwest's TSLRIC studies is appropriate  
15 and different than the Commission allowed cost of capital used in the revenue  
16 requirement portion of this proceeding.

17

18 **Q. IS MS. STARR'S COMPARISON OF QWEST'S COSTS TO ITS PROPOSED**  
19 **SWITCHED ACCESS RATES VALID?**

20 A. The conclusions Ms. Starr reaches are unsupported. She states: "Unless those  
21 rates are reduced substantially, both consumers and competition in the state of  
22 Arizona will suffer." (p. 12). Ms. Starr does not provide information on how  
23 consumers or competition will suffer. Moreover, Ms. Starr does not seem to  
24 acknowledge that contributions above forward looking costs (even with  
25 reasonable allocations of joint and common costs) may be appropriate in a

1 proceeding where the Commission needs to provide Qwest with an opportunity to  
2 earn a reasonable return on its fair value rate base.

3  
4 **REBUTTAL OF DR. ILEO**

5  
6 **Q. FROM DR. ILEO'S SURREBUTTAL IT APPEARS THAT THERE IS MUCH**  
7 **DISAGREEMENT REGARDING THE PROPER ACTION BY THE**  
8 **COMMISSION FOR PAL RATES. WOULD YOU PLEASE COMMENT?**

9 A. Yes. It appears that there is not only disagreement in views but also  
10 considerable misunderstanding that has occurred in the earlier rounds of  
11 testimony on the subject of PAL rates<sup>6</sup> and what the Commission should do, if  
12 anything. On this subject, there are several issues that need to be clarified.

13  
14 **Q. WHAT IS THE FIRST ISSUE THAT YOU WANT TO CLARIFY?**

15 A. First, Dr. Ileo believes that Qwest has not complied with the FCC's directive to  
16 the state commissions in CC Docket No. 96-128, CC Docket No. 91-35,  
17 paragraph 163<sup>7</sup> which states (in part):

18  
19 We require LECs to file tariffs for the basic payphone services and  
20 unbundled functionalities in the intrastate and interstate jurisdictions  
21 as discussed below. LECs must file intrastate tariffs for these  
22 payphone services and any unbundled features they provide to  
23 their own payphone services. The tariffs for these LEC payphone  
24 services must be: (1) cost based; (2) consistent with the  
25 requirements of Section 276 with regard, for example, to the  
26 removal of subsidies from exchange and exchange access  
27 services; and (3) nondiscriminatory. States must apply these  
28 requirements and the Computer III guidelines for tariffing such

<sup>6</sup> When using PAL, public access line, I am referring to both the Basic PAL and the Smart PAL.

<sup>7</sup> Surrebuttal of Dr. Ileo, p.2 lines 16-21.

1 intrastate services. (*The new services test required in the Report*  
2 *and Order is described at 47 C.F.R. Section 61.49(g)(2)*).  
3 (Footnotes omitted, italics at end is from footnote 492).  
4

5 It is Qwest's position that it has satisfied this FCC requirement. Mr. McIntyre's  
6 Rebuttal Testimony provided an exhibit that showed the ratio of direct cost to  
7 proposed price (the FCC's New Services Test). In Mr. McIntyre's opinion, the  
8 relationship of price to direct cost is reasonable.<sup>8</sup> Dr. Taylor has reviewed  
9 Qwest's analysis of PAL rates and concluded that all statutory requirements  
10 have been met and that Qwest's pricing proposals are reasonable.<sup>9</sup>  
11

12 The standard that Dr. Ileo uses is a different one. He agreed with my  
13 supposition that he views a "subsidy" to be any price that exceeds TSLRIC plus  
14 a "reasonable" (his correction) common cost.<sup>10</sup>  
15

16 My Rebuttal Testimony expressed disagreement with this view of "subsidy". My  
17 understanding of how economists define subsidy (from the point of view of the  
18 service which is providing the subsidy) is where a price of a service is set at a  
19 level above a Stand Alone Cost, not above a TSLRIC plus reasonable common  
20 cost level. Inasmuch as Mr. Regan's Direct Testimony seemed to express a  
21 view that was similar to my understanding, my Rebuttal Testimony expressed  
22 my observation of an apparent conflict between Mr. Regan and Dr. Ileo.  
23

---

<sup>8</sup> Rebuttal Testimony of Scott McIntyre, pp. 20-26.

<sup>9</sup> Rebuttal Testimony of Dr. William E. Taylor, pp. 74-80.

<sup>10</sup> Surrebuttal of Dr. Ileo p.7.

1 Since a Stand Alone Cost study is required to identify a service whose price  
2 contains a subsidy, it was my view that Dr. Ileo had simply calculated a  
3 *contribution* not a *subsidy* in his analysis.  
4

5 Even if Dr. Ileo had calculated a *subsidy* from his analysis (which he did not), it  
6 is not related to the Telecom Act. On page 21 of his surrebuttal testimony, he  
7 quotes the Act:

8  
9 any Bell operating company that provides payphone service – (1)  
10 shall not **subsidize its payphone service** directly or indirectly from  
11 **its** telephone exchange service operations or its exchange access  
12 operations. (emphasis added)  
13

14 “**its**” in the sentence clearly means that which belongs to “any Bell operating  
15 company”. “**Payphone service**” is defined in Section 276 (d) which states:

16  
17 the term “payphone service” means the provision of public or semi-  
18 public pay telephones, the provision of inmate telephone service in  
19 correctional institutions, and any ancillary services.”  
20

21 Putting the two definitions together, it is clear that the Act was talking about a  
22 prohibition against a Bell operating company subsidizing its payphone subsidiary  
23 from its regulated telephone operations. This is not the way that Dr. Ileo is  
24 interpreting the law. Dr. Ileo has misconstrued the law and has not proven that  
25 Qwest’s rate proposals have violated anything.  
26

27 **Q. WHAT IS YOUR SECOND ISSUE TO CLARIFY?**

28 A. Second, Dr. Ileo believes that to have a lawful PAL rate the price should be set  
29 at a proper TSLRIC/TELRIC<sup>11</sup> plus reasonable common costs. Although the

---

<sup>11</sup> His terminology in this regard has caused considerable confusion. On one hand, Dr. Ileo has said that

1 FCC's New Services test is an initial screening process for a reasonable price  
2 for a new interstate carrier access service (i.e., not interconnection or unbundled  
3 network element- "UNE"), it is the tool that is required to test to see whether PAL  
4 rates comply with the statutes. According to Dr. Ileo, compliance occurs when  
5 the amount of common cost recovery, after direct costs have been recovered, is  
6 reasonable. He directs the Commission to use the same common cost  
7 guidelines for PAL rates as they used to determine UNEs.<sup>12</sup>

8  
9 Qwest's position is that PAL is a rate for a business service,<sup>13</sup> not an UNE. UNE  
10 rates cannot be set in a rate of return proceeding such as this. Section  
11 252(d)(1)(A)(i) of the Telecom Act forbids it. In spite of his use of the TELRIC  
12 terms, I don't believe Dr. Ileo is requesting UNE rates for PAL services. Instead,  
13 he states that PAL services are "wholesale" probably suggesting that they are  
14 more akin to carrier access than they are to business rates. Qwest disagrees.  
15 Regardless of how Qwest may refer to payphone providers in an operational  
16 sense, payphone providers are not equivalent to interexchange carriers (IXCs)  
17 (i.e., "wholesale"). IXCs are common carriers certified to do common carriage in  
18 Arizona. These carriers may now also be rate of return regulated.<sup>14</sup> Payphone  
19 providers do not provide common carriage, nor are they rate of return regulated.  
20 They are equivalent to business customers that use telephone lines directly in  
21 their business,<sup>15</sup> like alarm companies.

---

the "wholesale nature of PAL" is the only TELRIC aspect he has recommended (Surrebuttal p.25, lines 21-23). On the other hand he says that the right way to do the analysis uses a "TRILIC framework" and "TRILIC input values" from the ACC's TRILIC Decision 60635.

<sup>12</sup>He advises the Commission that it should look to the FCC's TRILIC pricing guidelines for determination of the reasonable portion of common costs (Direct p.22, lines 21-24).

<sup>13</sup> See the Rebuttal Testimony of Scott A. McIntyre, p. 19 line 7.

<sup>14</sup> Court of Appeals Opinion Filed 8-29-00, *U S WEST v. Arizona Corporation Commission*

<sup>15</sup> In fact, in Docket No. U-3021-96-448 (et al), APA requested the Commission clarify that PAL was a

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22

The significance of whether PAL services are “wholesale” or retail lies in the distinction Dr. Ileo makes of the related allocation of marketing, advertising, and customer information costs.<sup>16</sup> Dr. Ileo uses the ACC’s UNE Decision No. 60635 as the basis for his calculations. Qwest disagrees. Rates set in this proceeding should recover direct costs as defined in the ACC rules Sec. R14-2-1102, joint and common costs, and also provide Qwest the opportunity to earn a reasonable return on its Fair Value rate base (i.e., a type of embedded cost).<sup>17</sup> Because the purpose of this proceeding is to “Determine the earnings of the Company, the Fair Value of the Company for ratemaking purposes, to fix a just and reasonable rate of return thereon and to approve rate schedules”, rates set in this proceeding need to do just that. Any exception for PAL rates would advantage those consumers over other consumers.

Probably the key issue in the determination of whether Qwest’s proposed prices meet the FCC’s New Services test is whether the mark up is reasonable. Mr. McIntyre believes it is a reasonable mark up. Dr. Taylor’s testimony is that it is a reasonable mark up.<sup>18</sup> Further, as Dr. Taylor explains, the FCC has never provided guidance on what would constitute a reasonable overhead loading (mark up) in a tariffed rate subject to the New Service test.<sup>19</sup> Information request number 3 to the APA stated the following:

---

*business* line that was subject to a business line resale discount. The Arbitrator, Mr. Rudibaugh, agreed.

<sup>16</sup> See Surrebuttal Testimony of Dr. Ileo, p.25 lines 21-22.

<sup>17</sup> Dr. Ileo believes that mark ups of PAL services consistent with other similar services is a violation of Section 276 of the Telecom Act (Surrebuttal p.13, lines 8-9).

<sup>18</sup> Rebuttal Testimony of Dr. William E. Taylor, pp. 75-80.

<sup>19</sup> Rebuttal of Dr. William E. Taylor, p. 74.

1 Please explain in detail and with particularity the APA's  
2 understanding of what the allowable mark-up is over direct cost for  
3 a service that is subject to the FCC's "new services" pricing test  
4 found at 47 C.F.R. 61.49(g). Please provide all justification or  
5 documentation relied upon in reaching your conclusion.

6  
7 Response: To the best of the APA's knowledge and belief, the FCC has  
8 not specified an "allowable mark-up over direct cost" that should be  
9 employed by a state regulatory agency in applying the "new services" test  
10 as suggested at pages 21-22 of Dr. Ileo's August 9, 2000 Direct  
11 Testimony in this proceeding. Attachment 1 contains copies of documents  
12 cited by Dr. Ileo on those pages, except with respect to CC Docket No. 94-  
13 1 for which 47 CFR § 61.49 is included as a substitute.  
14

15 It seems there is general agreement that the FCC has not provided information  
16 for the Commission to use in determining the proper mark up or over head  
17 loading that should be used to determine whether it believes the rate passes the  
18 New Services test.

19  
20 **Q. WHAT IS YOUR THIRD ITEM OF CLARIFICATION?**

21 A. The third item is the loop cost that I proposed in my Supplemental Direct  
22 testimony. I stated "with the intent to avoid prolonged unnecessary debate as to  
23 the appropriate assumptions for loop costs, I have directed that the cost studies  
24 incorporate the Commission ordered loop rate from Docket No. U-3021-96-448  
25 (et al), Decision No. 60635."<sup>20</sup> Dr. Ileo has taken issue with my recommended  
26 substitution of the UNE rate for the loop cost.<sup>21</sup> Dr. Ileo believes that the loop  
27 cost used in the PAL cost studies should reflect specific characteristics of PAL

---

<sup>20</sup> It is important to note that the use of the UNE loop cost was a *reduction* from the original loop cost in the TSLRIC studies in my Direct testimony.

<sup>21</sup> Surrebuttal of Dr. Ileo, p.25, lines 11-13. Direct at p. 10, lines 20-23, and p. 11, lines 9-11.

1 services. In addition, Dr. Ileo requests the Commission to explain how it made its  
2 calculations that resulted in the loop cost of \$21.98.<sup>22</sup>

3  
4 Qwest's position is that the use of the UNE loop cost has avoided significant  
5 debate of the type introduced into this proceeding by Dr. Ileo. Other than the  
6 conceptual debates regarding the direct versus joint cost, no other party has  
7 criticized the use of the UNE loop cost. This is not a new phenomenon. The  
8 approach of using the UNE loop cost in TSLRIC studies has successfully  
9 reduced unnecessary debate in other proceedings that I have participated in.  
10 For example, in a recent New Mexico rate case, the Staff witness proposed that  
11 the UNE loop cost be used in the TSLRIC studies because "it would not be a  
12 productive use of the Commission's time to rehash the issues regarding proper  
13 methods...of the USWC loop cost study into determining the appropriate costs of  
14 USWC's loop facilities."<sup>23</sup> Just as in this case I revised the New Mexico cost  
15 studies to accept Staff's proposal and much of the controversy around loop costs  
16 disappeared.

17  
18 The loop cost is one of the primary costs for many services. The Commission  
19 spent many months evaluating the proper inputs and assumptions necessary to  
20 determine a reasonable loop cost in Arizona in its Decision No. 60635. If the  
21 Commission were to accept Dr. Ileo's request for additional clarification on details  
22 of the loop cost determination and accepted Dr. Ileo's recommendation that PAL  
23 loops be treated uniquely from all other loop costs, then equity would require that  
24 all loop costs be developed on a class of service basis reflecting individual

---

<sup>22</sup> Direct at p. 15-17.

<sup>23</sup> Direct Testimony of William Dunkel, Utility Case No. 3008, March 13, 2000, pp. 97-98.

1 characteristics for each service. This would not be productive. Basically Dr.  
2 lleo's argument is a deaveraging argument. He wants PAL lines to be  
3 deaveraged from all other lines for the PAL cost study. This is not necessary for  
4 the New Services test, nor for the Commission to determine whether Qwest's  
5 PAL rates are reasonable.

6  
7 **Q. WHAT IS YOUR FOURTH POINT OF CLARIFICATION?**

8 A. The fourth point of clarification concerns Dr. lleo's comment that I never  
9 mentioned the recent findings of the United States Court of Appeals (Eighth  
10 Circuit). He believes that I may have not familiarized myself with that Court's  
11 conclusions.<sup>24</sup>

12  
13 Dr. lleo is incorrect. As I stated in my Rebuttal testimony, like Dr. lleo,<sup>25</sup> I am not  
14 an attorney. However, I have read and am familiar with the Eighth Circuit  
15 decision. I am familiar with the multitude of requests for stay of the decision that  
16 were filed last week. I am familiar with the potential that the decision could be  
17 moved to the U S Supreme Court and I am familiar with comments filed by  
18 parties such as AT&T that question whether the Court's mandate will ever  
19 issue.<sup>26</sup> In general, my recommendation is that the Commission should carefully  
20 weigh any decision to implement the Eighth Circuit decision in Arizona at this  
21 time.

22  
23 **Q. WHAT IS YOUR FIFTH ITEM OF CLARIFICATION?**

---

<sup>24</sup> Surrebuttal of Dr. lleo, p.14, lines 11-13.

<sup>25</sup> Direct Testimony of Dr. lleo, p. 18 line 4, and p.19 line 14.

<sup>26</sup> See Docket No. T-00000A-00-0194, AT&T's Comments filed August 4, 2000.

1 A. Dr. Ileo strongly disagrees that I be given an opportunity in this round of  
2 testimony to comment on the cost study adjustments he made to Qwest's  
3 TSLRIC studies.<sup>27</sup> He also states that my concern for unjustly delaying this  
4 proceeding by the Commission granting his request for clarification in its  
5 calculation of loop costs in its Decision No. 60635 is inconsistent with my request  
6 to provide information regarding my review of his adjustments.

7  
8 I will not provide new information on Dr. Ileo's adjustments that will "shift the  
9 burden of proof and impose added litigation costs on the APA."<sup>28</sup> I see no reason  
10 to respond to Dr. Ileo's adjustments because they are inappropriate. The effect  
11 of his adjustments is to modify Qwest's cost studies to correspond in a selective  
12 way to the Commission's UNE Decision No. 60635. With the exception of the  
13 loop substitution I have already discussed, I do not agree that Decision No.  
14 60635 has relevance in this proceeding. That Decision was from a proceeding  
15 that was for a different purpose with different parties and rules to accomplish a  
16 different goal. His adjustments also are designed to single out PAL costs and  
17 treat them in a different manner than all other costs in this proceeding. I do not  
18 agree that adjustments of that nature are required by the Telecom Act or by the  
19 FCC's rules. Therefore, Dr. Ileo's cost adjustments should not be addressed in  
20 this proceeding.

21  
22 **PAY TELEPHONE SURCHARGE FOR 800 SERVICELINE CALLS**  
23

---

<sup>27</sup> Surrebuttal of Dr. Ileo, p.4-5.

<sup>28</sup> Surrebuttal Testimony of Dr. Ileo, p. 5 line 3.

1 **Q. ARE YOU SPONSORING A NEW COST STUDY FOR THIS PROCEEDING?**

2 A. Yes. The cost study is entitled "Payphone Usage Charge". The cost information  
3 is attached as Confidential Exhibit JLT-2, Rejoinder Testimony.  
4

5 **Q. WHY ARE YOU FILING THIS INFORMATION AT THIS TIME?**

6 A. The Chief Administrative Law Judge issued an order requiring Qwest to file  
7 information related to its request for tariff approval in this proceeding. Arizona  
8 rules require Qwest to file cost data with this type of filing. This order was issued  
9 August 29, 2000. This is the only opportunity Qwest had to comply with the  
10 order.  
11

12 **Q. WHAT IS THE NATURE OF THIS NEW CHARGE?**

13 A. This service is described in detail in the Rejoinder Testimony of Mr. David L.  
14 Teitzel. However, it is a surcharge assessed to 800 Serviceline customers of  
15 Qwest who use that service from payphones. Qwest makes payments of 24¢ to  
16 payphone providers for each call pursuant to the FCC mandate. In addition,  
17 Qwest incurs costs related to this service from the National Payphone Clearing  
18 House for lists and assistance in distributing payments to payphone providers.  
19 The proposed rate discussed by Mr. Teitzel allows Qwest to recover its direct  
20 costs and provide a modest recovery of shared and common costs including  
21 administrative overhead.  
22  
23

24 **CONCLUSION AND RECOMMENDATION**

25

1 **Q. WHAT IS YOUR CONCLUSION AND RECOMMENDATION TO THE**  
2 **COMMISSION?**

3 A. The Commission should find, as has the FCC, that the loop is a direct cost of  
4 basic service and should provide for rate rebalancing as has been proposed by  
5 Qwest witnesses in this proceeding.

6  
7 The Commission should reject the arguments and requests of Dr. Ileo as they  
8 are based on flawed perceptions and incorrect conclusions.

9  
10 The Commission should accept Qwest's cost filing for Pay Telephone Surcharge  
11 for 800 Serviceline Calls.

12

13 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

14 A. Yes.

15

**BEFORE THE  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A ) DOCKET NO. T-01051B-99-0105  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**EXHIBITS OF**

**JERROLD L. THOMPSON**

**EXECUTIVE DIRECTOR- SERVICE COST INFORMATION**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**Redacted**

**ARIZONA**

<b>Zone</b>	<b>Original Proposed Loop</b>	<b>Original Proposed Loop Without Sale Exchanges</b>	<b>ACC Interim Order Without Sale Exchanges</b>
1	\$20.12	Redacted	Redacted
2	\$40.65	Redacted	Redacted
3	\$63.70	Redacted	Redacted

**Redacted**

**ARIZONA**

<b>Element Description</b>	<b>Switched Access Original</b>	<b>Switched Access Without Sale Exchanges</b>
<b>Local Switching with shared Trunk Port – per MOU</b>	Redacted	Redacted
<b>Local Switching Without shared Trunk Port – per MOU</b>	Redacted	Redacted
<b>End Office Shared Trunk Port – per MOU</b>	Redacted	Redacted
<b>End Office Dedicated Trunk Port – per DSO</b>	Redacted	Redacted

**Redacted**

ARIZONA

**PAYPHONE USAGE CHARGE**

<b>Unit</b>	<b>Direct</b>	<b>Network Support</b>	<b>Direct + Network Support</b>	<b>Directly Attributable</b>	<b>Common</b>	<b>Fully Allocated</b>
Per Message	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. )

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
Jerrold L. Thompson

ss

STATE OF COLORADO )

COUNTY OF DENVER )

I, Jerrold L. Thompson, of lawful age being first duly sworn, depose and states:

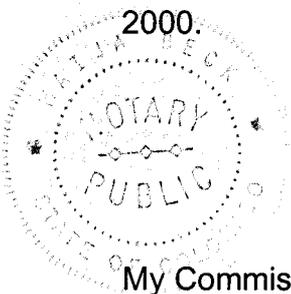
1. My name is Jerrold L. Thompson. I am the Executive Director-Service Cost Information for Qwest Corporation ("Qwest") (formerly U S WEST Communications Inc.) in Denver, Colorado. I have caused to be filed written testimony and exhibits in support of Qwest in Docket No. T-01051B-99-0105.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

Jerrold L. Thompson  
Jerrold L. Thompson

SUBSCRIBED AND SWORN to before me this 12<sup>th</sup> day of September,  
2000.

Maija Beck  
Notary Public residing at  
Denver, Colorado



My Commission Expires: May 8, 2004

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BEFORE THE ARIZONA CORPORATION COMMISSION

2000 SEP 19 P 3:27

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION )  
 OF U S WEST COMMUNICATIONS, INC., )  
 A COLORADO CORPORATION, FOR A )  
 HEARING TO DETERMINE THE EARNINGS )  
 OF THE COMPANY, THE FAIR VALUE OF ) DOCKET NO. T-01051B-99-105  
 THE COMPANY FOR RATEMAKING )  
 PURPOSES, TO FIX A JUST AND )  
 REASONABLE RATE OF RETURN )  
 THEREON AND TO APPROVE RATE )  
 SCHEDULES DESIGNED TO DEVELOP )  
 SUCH RETURN )

REJOINDER TESTIMONY OF

WILLIAM E. TAYLOR, Ph.D.

SENIOR VICE PRESIDENT  
NATIONAL ECONOMIC RESEARCH ASSOCIATES, INC.

ON BEHALF OF

QWEST CORPORATION

September 19, 2000

REJOINDER TESTIMONY OF WILLIAM E. TAYLOR, Ph.D.

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1 My rejoinder testimony responds specifically to Mr. Harry M. Shooshan III  
2 (representing Staff on the price cap regulation plan), Dr. Ben Johnson and Mr.  
3 William Dunkel (representing RUCO and Staff, respectively, on the treatment of  
4 loop costs and Qwest's competitive zone proposal), Dr. Lee Selwyn (representing  
5 AT&T on Qwest's competitive zone proposal), Dr. Francis R. Collins (representing  
6 Cox on Qwest's competitive zone proposal), Ms. Arleen M. Starr (representing  
7 AT&T on the pricing of carrier access service), and Dr. Michael J. Ileo  
8 (representing APA on payphone issues).

9 **STAFF'S PRICE CAP PLAN FOR QWEST**

10 **Q. TO WHAT ISSUES REGARDING THE PRICE CAP PROPOSALS OF THE**  
11 **STAFF AND QWEST ARE YOU RESPONDING?**

12 A. I am responding to some of the issues raised in Mr. Shooshan's surrebuttal  
13 testimony, particularly (1) the degree to which Staff's proposed price cap plan  
14 permits rate rebalancing, (2) the use of a "full-blown" total factor productivity  
15 ("TFP") study to determine the productivity factor in the plan, (3) Mr. Shooshan's  
16 analysis of the Qwest productivity data, (4) the use of company-specific rather than  
17 industry-wide data, (5) the use of intrastate (separated) data, (6) the need for a  
18 service quality adjustment in the price cap formula, and (7) Mr. Shooshan's  
19 mischaracterization of the Qwest price cap proposal for its Basket 1 as a revenue  
20 cap with no mechanism for flowing through productivity gains.

1 **Staff's Plan Permits No Additional Pricing Flexibility for Qwest**

2 **Q. MR. SHOOSHAN CLAIMS [AT 5] THAT, CONTRARY TO THE CLAIM IN YOUR**  
3 **REBUTTAL TESTIMONY [AT 9], STAFF'S PLAN PERMITS QWEST TO**  
4 **RECOVER ITS FIXED LOOP COSTS OVER A WIDER RANGE OF SERVICE**  
5 **AND OFFERINGS. IS THIS AN ACCURATE CHARACTERIZATION OF YOUR**  
6 **TESTIMONY?**

7 A. No. My Rebuttal Testimony [at 9] addresses Staff's *price cap plan* and criticizes  
8 the structure of that plan because "(b)y isolating carrier access services in Basket  
9 Two, Mr. Shooshan's current plan specifically *prevents* recovery of fixed loop costs  
10 over a wider range of services." That is, Staff's proposed plan prevents rate  
11 rebalancing through the price cap mechanism because the pricing flexibility that  
12 price cap regulation provides—raise or lower prices within a basket without any  
13 constraint as long as the average price for the basket meets the price cap—cannot  
14 be used to reduce carrier access charges or increase residential basic exchange  
15 rates. That is, there is no mechanism in Staff's proposed plan to reduce the implicit  
16 subsidy to residential basic exchange service by reducing the contribution  
17 contained in carrier access charges.

18 **Q. SPECIFICALLY, WHAT "WIDER RANGE OF SERVICES AND OFFERINGS"**  
19 **FOR RECOVERING FIXED LOOP COSTS DOES MR. SHOOSHAN CONTEND IS**  
20 **PROVIDED BY THE STAFF'S PLAN?**

1 A. Mr. Shooshan loosely refers [at 5] to rate rebalancing by offering new services and  
2 packaged services. However, Staff's Plan contains no *additional* ability (even of  
3 the type cited by Mr. Shooshan) to recover loop costs. Specifically, he states

4 Under the Staff Plan, Qwest has the ability to rebalance by taking advantage of  
5 (1) retail pricing flexibility for services in Basket 3 (including new services and  
6 service packages); and (2) the same service packaging freedom as is afforded  
7 their competitors.

8 However, services in Basket 3 have already been classified as competitive and are  
9 currently subject to pricing flexibility. The only *additional* pricing flexibility  
10 potentially offered in Staff's Plan is that provided by the structure of price caps, i.e.,  
11 the ability to raise and lower prices within a basket. But the basket structure and  
12 pricing rules proposed by Staff rule out that source of additional flexibility.

13 Indeed, applying Staff's proposed price cap adjustment formula would only  
14 make things worse. With a productivity factor of 4.2 percent and an expected  
15 inflation rate between 2 and 3 percent, the price cap formula would require that  
16 prices in Basket 1 fall, on average, by 1 or 2 percent each year. Because  
17 residential basic exchange service is such a large component of that basket  
18 (measured by revenue), it would be difficult to meet the required average price  
19 reduction without reducing residential basic exchange rates even further below  
20 cost. Requiring price reductions for services already priced below cost is the  
21 opposite of "providing a wider range of services and options" to recover fixed loop  
22 costs.

1 **Q. MR. SHOOSHAN CLAIMS [AT 5] THAT YOU ASSERT THAT “UNDER THE**  
2 **STAFF PLAN, NO RATES IN BASKET 1 COULD BE INCREASED....[TAYLOR**  
3 **AT 6,7].” DO YOU MAKE THAT ASSERTION?**

4 A. No. The only reference to rates in Basket 1 on pages 6-7 of my testimony says:

5 The Staff's plan explicitly prevents increases in residential basic exchange  
6 prices through its “hard cap” on all basic exchange service prices in Basket  
7 One.

8 which I believe to be a correct statement about Staff's Plan. I can find no other  
9 reference in my testimony to pricing rules for Basket 1.

10 **Q. MR. SHOOSHAN CLAIMS [AT 6] THAT “PRICES FOR SOME SERVICES IN**  
11 **BASKET 1 (E.G., EXISTING SERVICE PACKAGES) COULD BE**  
12 **INCREASED....” DO YOU AGREE?**

13 A. I agree in theory, but not in practice. In practice, under Staff's Plan, rates in Basket  
14 1 will have to fall, on average, by 1 or 2 percent per year. Because revenue from  
15 residential basic exchange services is a large fraction of the revenue in that  
16 basket—and because reducing prices of services already priced below cost is  
17 unprofitable for the firm and bad policy for customers and competitors—it would be  
18 difficult for Qwest to meet its average price reduction for Basket 1. For example, if  
19 revenue from basic residential exchange services were 50 percent of the revenues  
20 in Basket 1, prices of the remaining services in Basket 1 would have to fall by 2 to  
21 4 percent per year to prevent further reductions in residential basic rates. If prices  
22 of some other services or service packages were actually increased, even greater  
23 price reductions would be required for the remaining services in Basket 1.

1 **Q. MR. SHOOSHAN STATES [AT 6] THAT “WHILE REASONABLE PEOPLE**  
2 **MIGHT DISAGREE ABOUT HOW MANY DEGREES OF FREEDOM TO GIVE**  
3 **QWEST UNDER THE CIRCUMSTANCES, I BELIEVE IT UNREASONABLE FOR**  
4 **DR. TAYLOR TO SUGGEST THAT THE STAFF PLAN ‘RULES OUT ANY KIND**  
5 **OF RATE REBALANCING AS PART OF ITS PROPOSED REDUCTION IN**  
6 **CARRIER ACCESS CHARGES.’” IS YOUR SUGGESTION UNREASONABLE?**

7 A. No, the suggestion cited by Mr. Shooshan is precisely correct. Staff’s Plan requires  
8 20 percent annual reductions in intrastate carrier access charges. Nowhere in  
9 Staff’s Plan is that rate reduction offset by an ability to increase a rate, i.e., to rate  
10 rebalance. Prices of other services in Basket 2 are frozen, and carrier access  
11 charge reductions do not trigger offsetting price increases in Basket 2. Prices of  
12 services in Basket 1 must be reduced under Staff’s Plan (in real terms by 4.2  
13 percent annually), and the reduction in carrier access charges in Basket 2 in no  
14 way affects this requirement on prices in Basket 1. Pricing rules for services in  
15 Basket 3 are unchanged under Staff’s Plan, and no *additional* ability to raise rates  
16 or package services to offset carrier access reductions is proposed in Basket 3 as  
17 part of Staff’s Plan. Thus, my comment is correct that, *as part of its proposed*  
18 *reduction in carrier access charges*, Staff’s Plan rules out any kind of rate  
19 rebalancing.

1 **Staff's Proposed Productivity Offset is Calculated Incorrectly**

2 **Q. MR. SHOOSHAN ASSERTS [AT 7-9] THAT IT IS "APPROPRIATE" TO USE**  
3 **HISTORICAL DATA FROM 1995-1998 TO ESTABLISH A PRODUCTIVITY**  
4 **TARGET FOR THE PRICE CAP PLAN. ARE HIS REASONS VALID?**

5 A. Not in my opinion. Mr. Shooshan gives two reasons [at 7] for the period he selects:  
6 (1) data should follow Qwest's most recent rate case so revenue changes would  
7 better track output changes and (2) data before the 1993 rate case reflects a  
8 different industry structure. The first reason is irrelevant because the revenue data  
9 used by Mr. Shooshan is adjusted for price changes. The second is specious:  
10 obviously any historical period differs in many ways from the future. The important  
11 question is: differs in what respect? Mr. Shooshan claims that more recent data  
12 "are best able to predict the future growth in Qwest's output," but that is not what  
13 we are asking the data to do. Rather, at any point in time, a productivity study  
14 measures the difference in rates of change in outputs and inputs, and there is no  
15 reason to suppose that including or excluding any particular year of data would  
16 result in a more accurate estimate. Indeed, historical estimates of U.S. productivity  
17 growth and productivity growth for the telecommunications industry show generally  
18 that productivity growth measured over long periods of time (e.g. 10 year intervals)  
19 is reasonably stable.

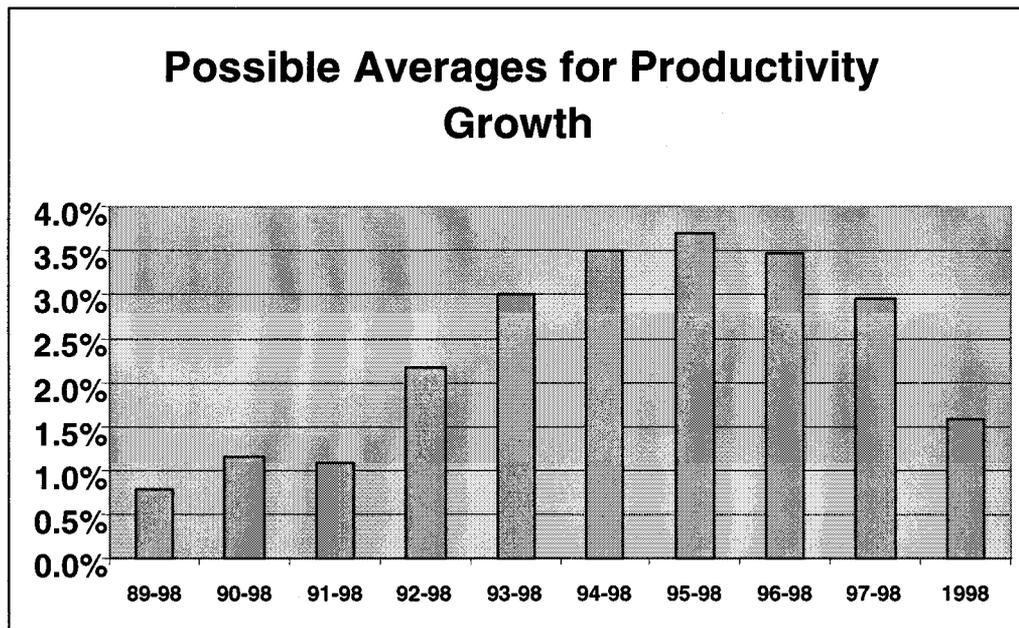
1 **Q. IF MR. SHOOSHAN'S REASONS ARE INVALID, HOW SHOULD THE**  
2 **COMMISSION DECIDE OVER WHICH TIME PERIOD TO CALCULATE AN**  
3 **HISTORICAL PRODUCTIVITY TARGET?**

4 A. Generally speaking, when historical data have been used to establish a productivity  
5 target for a price cap plan, analysts have examined the largest relevant set of data  
6 possible because productivity and price data are quite volatile from year to year.  
7 Most analysts would agree that an important feature of their analysis would be  
8 robustness or stability. It makes no sense to set a productivity target using data for  
9 some short period if a small change in the period used (adding or dropping a year)  
10 gives rise to a large change in the target. A target set in that manner would  
11 certainly be arbitrary, since there is no hard and fast rule that tells the Commission  
12 precisely which historical period is or is not relevant to future productivity growth.

13 **Q. GIVEN THE DATA HE USED, IS MR. SHOOSHAN'S CALCULATION OF A**  
14 **PRODUCTIVITY FACTOR OF 3.7 PERCENT ROBUST?**

15 A. Not at all. His calculation of the productivity offset is extremely sensitive to the time  
16 period he selects. If, as Mr. Shooshan claims [at 7], "the most recent data" are  
17 best, then the answer would be 1.6 percent (the value for 1998), not 3.7 percent. If  
18 all available data were used, i.e., the average for 1989 through 1998, the answer  
19 would be 0.8 percent. The range of possible choices of a productivity factor  
20 implied by the data used by Mr. Shooshan is shown below. Each bar corresponds  
21 to an average of the productivity data over different periods of time, starting with  
22 the most recent 1998 observation. The bar for 1998 is the average for 1998, the

1 bar for 1997-1998 is the average productivity change between 1997 and 1998, and  
2 the bar for 1989-1998 is the average productivity change over the 1989- 1998  
3 period. It should be clear from the chart below that the average selected by Mr.  
4 Shooshan is by no means representative of the data; instead, it represents an  
5 average over the period which gives the largest possible average productivity  
6 growth.



16 **Q. MR. SHOOSHAN JUSTIFIES [AT 9] HIS USE OF DEFLATED REVENUES AND**  
17 **COSTS TO MEASURE TFP BECAUSE A TFP STUDY IS EXPENSIVE,**  
18 **COMPLEX, AND UNNECESSARY. DO YOU AGREE?**

19 A. No. I agree that it is *not* necessary to use a TFP study to set a productivity factor in  
20 a price cap plan. However, basing the productivity factor on a rough approximation  
21 to TFP growth makes no sense: there are better alternatives that make fewer

1 demands on the data. For example, the most direct and relevant measure of the  
2 historical performance of a firm or industry is its real rate of change of output  
3 prices. After all, the measurement is being used to determine a reasonable target  
4 for the *future* real rate of growth of output prices (inflation less X); a very  
5 reasonable way to determine a reasonable target is to look at the historical real  
6 rate of growth of output prices.

7 **Q. MR. SHOOSHAN STATES [AT 8] THAT NO SINGLE METHOD (INDUSTRY-  
8 WIDE OR COMPANY-SPECIFIC) IS USED UNIFORMLY ACROSS THE U.S. TO  
9 SET THE PRODUCTIVITY TARGET. DO YOU AGREE?**

10 A. I agree that state and federal regulatory authorities use different methods to set the  
11 productivity target in telecommunications price cap plans. I disagree with the  
12 implication his statement carries because, to my knowledge, very few state or  
13 federal price cap plans base their productivity offsets on measures of *company-*  
14 *specific* productivity growth. That is because any plan of that nature would likely  
15 distort the regulated company's incentive to increase productivity growth. In  
16 theory, a five-year price cap plan based on company-specific productivity growth  
17 amounts to cost-of-service regulation with a five-year lag. For that reason,  
18 California and the FCC, for example, explicitly acknowledge the distortion in

1 incentives when company-specific productivity measures are used and base their  
2 productivity factors on industry-wide data.<sup>1</sup>

3 **Q. DO YOU AGREE WITH MR. SHOOSHAN'S ASSESSMENT [AT 9] THAT HIS**  
4 **"METHODS AND DATA WERE REASONABLY APPLIED IN THIS**  
5 **PROCEEDING?"**

6 A. No. Even if Mr. Shooshan had analyzed his data correctly, his application of the  
7 data would remain incorrect. First, the data purport to apply to Qwest's intrastate  
8 services, and, if Mr. Shooshan were correct, would suggest that Qwest  
9 experienced an annual reduction in unit costs of 3.7 percent for those services,  
10 hence justifying a 4.2 percent annual reduction in prices for those services as a  
11 reasonable target. But, that isn't the target in Staff's Plan. The Staff Plan requires  
12 a 4.2 percent annual reduction in prices for Basket 1 services *and* a 20 percent  
13 annual reduction in carrier access prices in Basket 2. In total, the productivity  
14 target actually used in Staff's Plan is not consistent with the data used to set the  
15 target.

---

<sup>1</sup> California Public Utilities Commission, *Decision 89-10-031*, October 12, 1989, Finding of Fact 47: "A productivity adjustment based on information outside the company's control would provide strong incentives for efficient operations...." FCC, CC Docket No. 94-1, *First Report and Order*, April 7, 1995, at ¶146: "The current X-factor embodies our original assessment of the extent to which the productivity of the LEC industry as a whole has, in the past, exceeded the productivity of the general economy. This use of an industry-wide average productivity factor is consistent with our goal of creating a price regulation plan that replicates the incentives provided by competition. The LECs are, in effect, made to compete against the industry average. As in competitive markets, those that are more efficient and more innovative than average can achieve above average profits, while those that lag the industry in performance will also lag in earnings..."

1           Second, Mr. Shooshan applies the wrong formula in using productivity  
2 growth to set an X—the productivity offset—in a price cap plan. As I showed in my  
3 Rebuttal Testimony [at 11], by ignoring U.S. productivity growth, his method  
4 *overstates* the value of X that should be used in a price cap plan, even assuming  
5 that his measure of historical productivity growth is correct. Unlike some issues  
6 under discussion, this point is not controversial,<sup>2</sup> and no one in this proceeding  
7 (including Mr. Shooshan) has disagreed with it.

8           Third, the use of unseparated intrastate data to measure firm productivity  
9 growth is incorrect. Unless the production process is separable, there is no well-  
10 defined measure of productivity growth for subsets of services of the firm. And  
11 since common facilities are used pervasively to supply intrastate and interstate  
12 services, the production process in telecommunications is manifestly *not*  
13 separable. Practically speaking, it is easy to see that the concept of intrastate TFP  
14 growth in Mr. Shooshan's Surrebuttal Testimony [at 9] makes no sense. Take a  
15 simple example in which productivity growth is generated by technical progress  
16 and new technology is introduced into the network when switches are replaced.  
17 Switches will be replaced more rapidly when usage volumes increase, but it  
18 doesn't matter for replacing the switch whether the usage in question is intrastate  
19 or interstate. So an increase in intrastate usage will cause switches to be replaced  
20 more rapidly which will cause unit costs for interstate services (as well as intrastate

---

<sup>2</sup> See fn. 1 above, where the FCC acknowledges that the X-factor measures the difference between LEC productivity growth and the productivity growth of the general economy.

1 services) to fall. In this example, there is no increase in interstate output but there  
2 is an increase in interstate inputs (as switches are replaced and separations sends  
3 some costs to the interstate jurisdiction). Hence, interstate TFP—as measured by  
4 Mr. Shooshan—will appear to fall, so that interstate unit costs (and interstate unit  
5 prices) should rise. But, in fact, productivity growth has increased and unit costs  
6 for both interstate and intrastate services have fallen, so that prices for both  
7 interstate and intrastate services will fall.

## 8 **Service Quality**

9 **Q. MR. SHOOSHAN DEFENDS [AT 10] HIS INCLUSION OF A SERVICE QUALITY**  
10 **ELEMENT IN THE ANNUAL PRICE CAP ADJUSTMENT BECAUSE**  
11 **REGULATORS MUST CONTROL SERVICE QUALITY AS WELL AS PRICE. DO**  
12 **YOU AGREE?**

13 A. Yes. However, the point of my Rebuttal Testimony [at 13] to which Mr. Shooshan  
14 refers is *not* that service quality regulation isn't required. Indeed, Qwest already  
15 has service quality standards with self-effectuating refunds and penalties in place  
16 which were set to provide proper incentives for Qwest to supply an efficient level of  
17 service quality. There is nothing about the introduction of price cap regulation  
18 which necessitates either (1) more stringent service quality rules or (2) a different  
19 structure of penalties.

20 **Q. MR. SHOOSHAN JUSTIFIES [AT 11] THE ADDITIONAL PENALTY IN HIS**  
21 **PRICE CAP PROPOSAL BECAUSE IF HIS "SWORD OF DAMOCLES" HAS TO**

1       **BE USED, “CONSUMERS WILL AT LEAST BE ASSURED THAT THE PRICES**  
2       **THEY PAY WILL MORE CLOSELY MATCH THE QUALITY OF SERVICE THEY**  
3       **ARE RECEIVING.” IS THIS REASONING CORRECT?**

4    A. No. Under the existing system of refunds and penalties, customers who receive  
5       poor service pay only for poor service. Under Mr. Shooshan’s proposal, if carrier  
6       access or interconnection customers receive poor service, his Sword of Damocles  
7       will fall, and customers in Basket 1 will receive larger price reductions than  
8       otherwise. There is absolutely *no* connection between the customers who receive  
9       poor service and the customers who receive the penalty. That is why I criticized—  
10      in my Rebuttal Testimony [at 14]—the inclusion of service quality factors in the  
11      price cap annual adjustment formula as “far too blunt an instrument.”

12   **Q. HOW SHOULD THE COMMISSION REGULATE SERVICE QUALITY FOR A**  
13   **FIRM UNDER PRICE CAP REGULATION?**

14   A. In general, service quality rewards and penalties should be set so that the  
15      regulated firm would find it in its self-interest to meet each service quality standard.  
16      Given that such rewards and penalties are in place, an overall adjustment to the  
17      price cap formula based on service quality amounts to double counting and results  
18      in distorted incentives. If such rewards and penalties are not in place or are  
19      inadequate, the Commission should institute a proceeding to determine them; they  
20      are too important to set as a part of a price cap proceeding.

21           Service-specific and sometimes customer-specific rewards and penalties  
22      are generally a more accurate mechanism for service quality incentives than

1 changes in the price cap formula, which does not affect the actual price charged for  
2 any particular service to any particular customer.

3 **Qwest's Proposed Price Cap Plan**

4 **Q. MR. SHOOSHAN SUGGESTS [AT FN. 15] THAT QWEST'S PROPOSED**  
5 **TREATMENT OF BASKET 1 "CHOOSES NOT TO SPECIFY A PRODUCTIVITY**  
6 **OFFSET AT ALL." IS THIS A CORRECT INTERPRETATION OF QWEST'S**  
7 **PROPOSAL?**

8 A. No. Qwest's proposal has exactly the same *structure* as the one proposed by Mr.  
9 Shooshan. The productivity offset specified in the Qwest plan is the rate of U.S.  
10 inflation: a number expected to fall between 2 and 3 percent. To see this, note that  
11 capping average prices in Basket 1 at the going-in rate for the duration of the Plan  
12 is mathematically identical to requiring that average prices in that Basket meet a  
13 price cap index set, in effect, at U.S. inflation rate minus U.S. inflation rate, i.e.,  
14 zero. Thus, the Staff Plan and the Qwest proposal have exactly the same structure  
15 and incentive properties: the difference is the Staff plan proposes a productivity  
16 factor of 4.2 percent (which corresponds to a price cap annual adjustment of U.S.  
17 inflation minus 4.2 percent) while the Qwest plan proposes a productivity factor  
18 equal to inflation (which corresponds to a price cap annual adjustment of U.S.  
19 inflation minus U.S. inflation, i.e., zero).

20 **Q. MR. SHOOSHAN CRITICIZES [AT 16] QWEST'S BASKET 1 PROPOSAL**  
21 **BECAUSE "THE LACK OF AN 'INFLATION LESS PRODUCTIVITY" INDEX**



1 not demand the loop to gain access to the network, and subsequently to various  
2 network services, then the network is placing its facilities in vain. Put another way,  
3 the carrier places its network facilities—including the multi-functional local loop—  
4 precisely because it believes that a customer may want to access the network and  
5 network services. The design issue is one of engineering efficiency, but no matter  
6 what design is eventually chosen and facilities placed, the bottom line aspiration of  
7 the carrier is to earn revenue (and a return to its entrepreneurship) by selling  
8 network access and network services to the customer. Therefore, it always comes  
9 back to the customer: the customer's decision to purchases access and services  
10 drives the carrier to place facilities and, in so doing, to incur cost. Cost causation  
11 runs from the customer to the carrier—the customer makes the economic decision  
12 that causes a cost to arise and the carrier fulfills the customer's need and incurs  
13 the cost on the customer's behalf. Therefore, regardless of whether the carrier  
14 places facilities *in anticipation of* or *in response to actual* demand, the cost arises  
15 because there is that demand (on the consumer side) and the cost is incurred  
16 initially by the carrier (on the supply side). The idea of setting a price for the local  
17 loop is for the consumer to compensate the supplier, regardless of how the loop, or  
18 the rest of the network, may have been designed.

19 Dr. Johnson [at 6] faults my understanding of cost causation for allegedly  
20 failing to realize that

21 ... the cost of a local loop is incurred because someone—perhaps an aspiring  
22 subscriber in years past, perhaps a real estate developer or home builder,  
23 perhaps a phone company executive—made a decision to install loop plant  
24 along a particular route ... The decisions that lead to the act of installing these

1 facilities can be seen as the proximate cause of the cost. Subsequently, if  
2 consumers don't decide to purchase telephone service, the plant will often sit  
3 idle; if they do decide to purchase service, it will be utilized. ... Thus, [Dr.  
4 Taylor's] assumption that the loop costs set forth in Qwest's studies can be  
5 directly traced to customer decisions to join the network is simply not valid.  
6 Most of these costs would continue, regardless of whether or not particular  
7 customers purchase telephone service.

8 Economics teaches us to connect the dots between the supplier (the carrier with  
9 the network) and the cost-causing customer. Where the carrier installs a loop in  
10 anticipation of demand, the carrier temporarily absorbs the cost but expects to  
11 recover it nonetheless from a customer. Whether the supplier temporarily holds  
12 the cost on the customer's behalf and the customer eventually assumes it, or the  
13 cost is recovered from the customer at the point of installation, is a distinction  
14 without a difference. The fact is that to supply adequate service to customers who  
15 demand it, carriers with networks to build must plan ahead and often install  
16 facilities they eventually hope to sell well before demand actually manifests itself.  
17 Cows are born and raised long before I demand my glass of milk. After all, if there  
18 were no customers, no network would be built. That, however, does not alter the  
19 manner that cost is ultimately caused—by a customer's decision, whether actual or  
20 anticipated. And, as Dr. Johnson seemingly accepts [at 6], that cost is pretty much  
21 the same in either situation.

22 **Q. ARE YOU SAYING THEN THAT IT DOES NOT ULTIMATELY MATTER HOW,**  
23 **OR EVEN WHETHER, THE LOCAL LOOP IS USED BY THE CUSTOMER?**

24 A. Yes, but only for determining who pays whom and how much for the loop (or  
25 network access service). The cost of an item cannot be partitioned or doled out to

1 different service providers irrespective of cost, depending on how many, or the type  
2 of, uses to which that item is put. For example, suppose Tom decides to take the  
3 loop only for the privilege of *receiving* calls, Dick takes it to both make and receive  
4 local and toll calls, but Harry takes it to use a wide range of services. Under Mr.  
5 Dunkel's logic, the cost of the loop would look very different for the three  
6 customers; therefore, by that logic, different amounts should be recovered from  
7 each customer. As absurd as that is, it gets even worse when one considers the  
8 possibility that in some months Dick could use directory assistance or Harry could  
9 make no calls at all. In other words, as customers vary their use of different  
10 network services, the cost of the loop—as calculated by Mr. Dunkel—would vary as  
11 well. Imagine Qwest, or any local exchange carrier that provisions the local loop as  
12 part of residential basic exchange service trying to recover cost in accordance with  
13 this customer-to-customer and month-to-month variation in the use of the loop. It is  
14 pointless trying to recover the cost, not from customers but, instead, from the  
15 carriers that provide services, because all that does is shift the source of recovery  
16 but solves none of the accounting problems.

17 The difficulty of cost recovery is not, however, the central issue here. The  
18 more important issue is what it would imply for economic efficiency to effect such  
19 cost recovery by applying rates that reflect *average* usage of different customers.  
20 A customer with above-average use relative to the rate being charged will over-  
21 consume, while a customer with below-average use will pay too much for the

1 actual consumption. This, in fact, would amount to a subsidy of one class of  
2 customers by another, where none is needed.

3 None of these complications can arise when the cost of the loop is  
4 recognized as being what it is—the value of resources expended to provide a  
5 single physical facility. Since that cost can be determined fully and unambiguously,  
6 it can also be recovered directly from all customers, regardless of their actual  
7 usage of network services over time or their choice of service providers. Happily,  
8 the loop's cost is invariant to how it is used. The value of resources used to  
9 provide the loop does not change with the patterns of use associated with either of  
10 Tom, Dick, or Harry in the example above. As a result, a single and unique charge  
11 directly to the customer should be used to recover the cost of the loop while  
12 providing correct incentives for Tom, Dick and Harry.

13 Finally, whether the loop is eventually used by a customer (the point Dr.  
14 Johnson raises) may present a cost recovery issue, but it is fundamentally not a  
15 cost causation issue. That is, if the customer does not actually materialize—  
16 despite there being at least the promise of one which led to the carrier installing the  
17 loop in the first place—then the supplier does not get to recover that cost from the  
18 customer. That cost would be considered stranded if the loop proved to be non-  
19 fungible, i.e., could not be sold to some other customer instead. That fact,  
20 however, should have little bearing (if any) on the way the loop cost arises and is  
21 recovered when customers are actually served.

1 **Q. DR. JOHNSON CONTENDS [AT 7] THAT QWEST'S OWN RATE PROPOSALS**  
2 **IGNORE COST PATTERNS BECAUSE PROPOSED RATES FOR CERTAIN**  
3 **SERVICES EXCEED THE COSTS THAT ARE ACTUALLY CAUSED FOR THEM.**  
4 **DO YOU AGREE WITH DR. JOHNSON'S DISCUSSION OF COST CAUSATION**  
5 **IN THIS CONTEXT?**

6 A. No. All that cost causation does in this case is to identify a cost with a cost-causer,  
7 i.e., draw a connection between the economic decision that gives rise to a cost and  
8 the cost itself. The principle does *not*, however, say anything about how that cost  
9 should be recovered, i.e., what the level of price ought to be. Dr. Johnson's  
10 contention is irrelevant to the proper application of the cost causation principle.

11 **Q. MR. DUNKEL ARGUES [AT 22] THAT LOOP FACILITIES WOULD CONTINUE**  
12 **TO BE REQUIRED EVEN IF ANY PARTICULAR SERVICE THAT USES IT**  
13 **WERE ELIMINATED. DOESN'T THAT PROVE THE LOOP IS A SHARED**  
14 **FACILITY?**

15 A. No. There is no denying the fact that the local loop is required within a wireline  
16 network to deliver *any* wireline service. However, it is important—and should be  
17 obligatory in any serious analysis of this issue—to keep in view just *how* and *in*  
18 *what context* the local loop is provisioned. There is a long tradition in this country  
19 and elsewhere for the local loop or network access to be provided as a bundled  
20 element of basic exchange service. In order to gain access to the network, even if  
21 I were to make no subsequent *use* of it, I must first contact the local exchange  
22 carrier serving my area. Even then, I cannot sometimes order network access

1 service just by itself although I may wish (for whatever reasons) to only seek  
2 access for the purpose of receiving, not making, calls. Instead, more than likely,  
3 my local exchange carrier will offer me a choice of plans, all of which combine  
4 network access with certain local usage services in some measure. Where local  
5 measured service is available, customers can purchase pure network access,  
6 unaccompanied by additional local exchange services. I could choose to subscribe  
7 to additional optional services through the same carrier at that time, though I would  
8 retain the option to sign up for those services at a later time. The essential fact  
9 remains, however, that the only way I could avoid the cost of the loop is by  
10 discontinuing residential basic exchange service from that local exchange carrier  
11 altogether. I could not selectively drop the loop but continue to consume the other  
12 services.

13 **Q. BUT, SUPPOSE (AS MR. DUNKEL ASKS US TO [AT 22]) THAT QWEST WERE**  
14 **TO WITHDRAW ITS RESIDENTIAL BASIC EXCHANGE SERVICE, BUT NOT**  
15 **THE LOOP OR ITS OTHER SERVICES. WOULDN'T THE LOOP STILL BE**  
16 **NEEDED AND DOESN'T THAT MAKE THE LOOP A SHARED FACILITY?**

17 A. Absolutely not. Recognizing that the scenario is hypothetical, it is likely that Qwest  
18 would sell the loop as part of a bundle with some other service, e.g., toll. If it were  
19 to do so, Qwest's economically rational price for the *bundle* of the loop and toll  
20 service would reflect the cost of that bundle. Thus, if AT&T or WorldCom—or any  
21 carrier that only sells long distance service—were to also provide the loop facility

1 for delivering their service, each would have to devise a price that reflected the full  
2 cost of the loop as well as of toll usage.

3 If the loop were really a shared facility, it would have to be considered  
4 shared by both Qwest (its original provider) and all other carriers that provide  
5 services over it. The pertinent *economic* point, however, is that the loop's cost  
6 would still exist *even if* the other carriers did not provide any service over it.  
7 Therefore, the loop cost should not be recovered from other carriers because it is a  
8 cost specific to the provider of the loop even though other carriers may use it to  
9 deliver their services.<sup>3</sup>

10 **Q. HOW SHOULD THE COMMISSION VIEW THIS DISAGREEMENT?**

11 A. There are really two facts that the Commission must consider. First, if Qwest were  
12 to withdraw residential basic exchange *usage* service but not the loop, then the  
13 loop would have to be provisioned with some other service.<sup>4</sup> The long tradition of  
14 the loop being provided as part of basic exchange service probably comes from the

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<sup>3</sup> See, e.g., Alfred E. Kahn and William B. Shew, "Current Issues in Telecommunications: Pricing," *Yale Journal on Regulation*, 4, 1987, at 191-256, and Steve G. Parsons, "Seven Years After Kahn and Shew: Lingering Myths on Costs and Pricing Telephone Service," *Yale Journal on Regulation*, 11, 1994, at 149-170.

<sup>4</sup> Dr. Johnson argues [at 16] that the loop cost would continue to be incurred even if "local service" were withdrawn. I do not disagree with this argument, provided that by "local service" he means what I have identified in my testimony as only the *usage* component of residential basic exchange service. If, as is unlikely in the real world, Qwest were to withdraw its residential basic exchange service *in total*, then the cost of every component of that service—including the local loop—would be avoided. However, that does not mean that the customer could not continue to receive network services from non-Qwest sources over loops provided by those sources. My argument is not that a loop is not needed to receive services other than residential basic exchange service, only that it would have to be someone else's loop to carry other services if Qwest were to withdraw its residential basic exchange service.

1 fact that telephone customers have, by and large, wished to have the ability at least  
2 to make and receive *local* calls. Had that been true of some other service, say,  
3 custom calling features, then the loop would likely have been provisioned along  
4 with those features. In fact, now that loops can be unbundled, it has become  
5 possible to get network access on a stand-alone basis. Regardless of how the  
6 loop is provisioned—by itself or bundled with some usage service, the price of the  
7 loop would not be parceled out.

8 Second, if the loop were provisioned not by Qwest, but some other carrier,  
9 then the loop cost would most definitely be avoided by *Qwest*, although not by the  
10 other carrier that actually provisions it. So, if Qwest discontinued basic exchange  
11 service, and customers chose to obtain their loops from some other carrier, then  
12 the cost of the loop would not disappear but it wouldn't be Qwest's to recover,  
13 regardless of whether Qwest continued to provide other network services.

14 These two facts are sufficient for the Commission to conclude that the cost  
15 of the loop is not a shared cost among the services that use the loop. If it were, the  
16 Commission would have to require that Qwest recover its unbundled loops from  
17 several different sources, not just the carrier that leases those loops from Qwest on  
18 behalf of its customers. Mr. Dunkel's hypothetical scenario (and protestations  
19 about "engineering facts") may obscure the issue, but it doesn't alter the implication  
20 of the cost causation principle—that the loop cost is caused by the customer's  
21 decision to gain access to the network. For this reason also, much of Mr. Dunkel's  
22 testimony on this issue [especially at 24-30] has little support from economics.

1 **The Shared Loop Cost View is Not Universally Held**

2 **Q. MR. DUNKEL CONTESTS [AT 23] YOUR CLAIM THAT THE VIEW THAT THE**  
3 **LOOP'S COST IS SHARED HAS BEEN DISCREDITED IN THE ECONOMICS**  
4 **LITERATURE. DO YOU ACCEPT HIS ALLEGATION THAT ECONOMISTS WHO**  
5 **HAVE REJECTED THE "SHARED COST" VIEW ARE NOT DISINTERESTED**  
6 **PARTIES?**

7 A. No. The economics literature that explains why the cost of the loop is not a shared  
8 cost is not confined to the two articles cited by Mr. Dunkel, one by Alfred Kahn and  
9 William Shew, and the other by myself. This issue has been addressed mainly in  
10 litigation and regulatory proceedings (such as the present one), and it is, therefore,  
11 no surprise that economists who have pronounced on it have done so as expert  
12 witnesses for parties involved in those proceedings. However, not all economists  
13 who have rejected the "shared cost" view have been witnesses for local exchange  
14 carriers. For example, Professor John Mayo, testifying on behalf of AT&T, has  
15 rejected that view of the loop. Specifically, in a 1996 case, he disagreed with the  
16 notion of recouping the loop cost through an allocation mechanism, stating instead:

17 It is well known in the economic analysis of the telecommunications industry  
18 that there is a well-defined demand for, and supply of, access to the  
19 telecommunications network. The costs of providing that access can, and  
20 should be borne by the consumers that cause these costs to be incurred."<sup>5</sup>

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<sup>5</sup> Rebuttal Testimony of John W. Mayo, on behalf of AT&T, Maryland Public Service Commission Case No. 8715, March 14, 1996, at 9. See also Rebuttal Testimony of John W. Mayo, on behalf of AT&T, *In re: Investigation into NTS Cost Recovery, Phase I*, Florida Public Service Commission Docket No. 860984-TP, June 1, 1987.

1 Other economists sharing Mayo's view include several academic  
2 economists like John T. Wenders of the University of Idaho, Lester D. Taylor of the  
3 University of Arizona, Jean-Jacques Laffont of the Université des Sciences  
4 Sociales de Toulouse and the Institut Universitaire de France, and Jean Tirole of  
5 the Massachusetts Institute of Technology.<sup>6</sup> Apart from the articles referred to by  
6 Mr. Dunkel, other papers of note on the issue of the loop cost are those by  
7 Professor Alfred Kahn and Steve Parsons.<sup>7</sup>

8 Moreover, Mr. Dunkel is wrong to dismiss Professor Kahn's work as being  
9 that of just another witness for local exchange carriers. As a non-economist, Mr.  
10 Dunkel can be excused for failing to recognize that Professor Kahn has been for  
11 many years one of the most eminent and respected scholars and experts on the  
12 economics of regulated industries. His textbook, *The Economics of Regulation*,

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<sup>6</sup> Professor Wenders has long been known in telecommunications circles as an expert on the economics of the industry, particularly after the publication of his book, *The Economics of Telecommunications: Theory and Policy*, Cambridge, MA: Ballinger, 1987. Professor Lester Taylor's book, Lester D. Taylor, *Telecommunications Demand in Theory and Practice*, Boston: Kluwer Academic Publishers, 1994, is widely acknowledged as being the foremost source of information about the demand for telecommunications services. His article, "Pricing of Telecommunications Services: Comment on Gabel and Kennet," *Review of Industrial Organization*, 8, 1993, at 15-19, is of particular note in the present context. Professors Laffont and Tirole have individually and together authored a large number of books and scholarly articles on industrial organization, the branch of economics that studies firm structure and market conduct, and the antitrust laws. Their most recent book, *Competition in Telecommunications*, Cambridge, MA: MIT Press, 2000, addresses several pertinent and current issues in telecommunications. See especially Ch. 5 for the view that the fixed cost of the loop should be recovered from the customer. Laffont and Tirole's book has drawn high praise from economists like Carl Shapiro, Richard Schmalensee, and William Baumol who have themselves written and testified extensively on telecommunications matters on behalf of a variety of telecommunications companies.

<sup>7</sup> Alfred E. Kahn, "Pricing of Telecommunications Services: A Comment," *Review of Industrial Organization*, 8, 1993, at 39-41; William E. Taylor, "Efficient Pricing of Telecommunications Services: The State of the Debate," *Review of Industrial Organization*, 8, 1993, at 21-37; and Steve G. Parsons, "Seven Years After Kahn and Shew: Lingering Myths on Costs and Pricing Telephone Service," *Yale Journal on Regulation*, 11, 1994, at 149-170.

1 has become a modern classic and is widely considered essential reading for all  
2 students of regulatory economics.<sup>8</sup> On the other hand, as a frequent participant in  
3 regulatory proceedings, Mr. Dunkel might be expected to have recognized  
4 Professor Kahn as the former Chairman of the New York Public Service  
5 Commission, the former Chairman and deregulator of the Civil Aeronautics Board,  
6 and former President Carter's point man for fighting the high inflation of the late  
7 1970s.

8 **Q. HOW DO YOU RESPOND TO THE CLAIMS BY MR. DUNKEL [AT 24] OR DR.**  
9 **JOHNSON [AT 4] THAT VARIOUS REGULATORS AND COURTS TAKE THE**  
10 **OPPOSITE VIEW OF THE COST OF THE LOOP?**

11 A. I don't deny the fact that several observers of the industry hold the opposite view—  
12 after all this *is* a contested issue, and we wouldn't be discussing it if it weren't.  
13 There are also economists in this proceeding like Dr. Johnson who subscribe to  
14 that opposite view. However, as well-intentioned and strongly held the opposite  
15 view of these parties may be, they are not firmly anchored in structured economic  
16 reasoning. The classic example, of course, is the tendency—also displayed by Mr.  
17 Dunkel and Dr. Johnson—to equate “shared use” with “shared cost” or to regard  
18 the loop's cost as shared because the loop creates value for other services. It is  
19 also possible for the treatment of the loop cost as a shared cost to arise for public  
20 policy, rather than economic efficiency, reasons. The desire to hold residential

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<sup>8</sup> Alfred E. Kahn, *The Economics of Regulation*, Volumes I and II, Cambridge, MA: MIT Press, 1988.

1 basic exchange service prices at an acceptably low level can easily justify the  
2 “shared cost” fallacy in the minds of policymakers. That fact, however, does not  
3 mean that such a view is justified by economic theory.

4 Indeed, contrary to the assertion by Mr. Dunkel and Dr. Johnson, the FCC  
5 treats loop costs as a fixed cost to be recovered entirely from the customer.  
6 Moreover, not all state Commissions have ruled the way of Mr. Dunkel or Dr.  
7 Johnson on the loop cost issue. A notable exception to the rule is California which  
8 explicitly considered the issue of economic efficiency and determined that “it would  
9 not be appropriate to treat the loop as a shared cost.”<sup>9</sup>

10 **Q. PLEASE INDICATE THE FCC’S CURRENT THINKING ON THIS ISSUE.**

11 A. In a recent decision,<sup>10</sup> the FCC accepted many of the salient features of an  
12 integrated proposal by the Coalition for Affordable Local and Long Distance  
13 Service (“CALLS”)—a group of prominent local exchange and long distance  
14 carriers including AT&T and Sprint—for universal service and access charge  
15 reform. In that decision, the FCC determined to replace implicit subsidies  
16 historically embedded in the interstate access rate structure with explicit (interstate  
17 portion of) support needed for universal service. To this end, the FCC increased  
18 the subscriber line charge on residential and business customers with the aim

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<sup>9</sup> Public Utilities Commission of the State of California, Decision, Docket No. 96-08-021, August 2, 1996.

<sup>10</sup> FCC, *In the Matter of Access Charge Reform* (CC Docket No. 96-262), *Price Cap Performance Review for Local Exchange Carriers* (CC Docket No. 94-1), *Low Volume Long Distance Users* (CC Docket No. 99-249), and *Federal-State Joint Board on Universal Service* CC Docket No. 96-45, Sixth (continued...)

1 eventually to recover all of the interstate portion of the non-traffic-sensitive local  
2 loop in fixed flat-rated charges. The following excerpts from the *CALLS Order*  
3 demonstrate the FCC's commitment to the view that the cost of the local loop is  
4 not—and should not—be shared with usage services.

5 Whether a LEC allocates all of its interstate loop costs to the end user or to the  
6 IXC, the LEC's competitive position as compared to other suppliers of local  
7 exchange facilities remains the same. Section 254(k) [of the Federal Act] was  
8 not designed to regulate the apportionment of loop costs between end users  
9 and IXCs because this allocation does not involve improperly shifting costs from  
10 a competitive to non-competitive service.<sup>11</sup>

11 The Eighth Circuit upheld the Commission's increases to various LEC  
12 SLC caps, however, and found that "Texas Counsel's contention that increasing  
13 the SLC price ceiling violates the prohibition against using non-competitive  
14 services to subsidize competitive services [wa]s unpersuasive." In doing so,  
15 the court reaffirmed the *Commission's long standing view that the subscriber*  
16 *"causes" local loop costs, whether the subscriber uses the service for intrastate*  
17 *or interstate calls.* These costs are, in any event, recovered from the end user,  
18 either through direct end-user charges or indirectly through higher rates or  
19 additional charges paid to IXCs. The court further affirmed the Commission's  
20 conclusion *that it was appropriate and rational for the Commission to impose*  
21 *these costs on the end user.* The court concluded as a result that increasing  
22 SLC caps on certain lines did not result in a windfall for IXCs.<sup>12</sup>

23 Similarly, the court in *Southwestern Bell* rejected the argument that increasing  
24 the SLC cap violates the second sentence of section 254(k) by causing  
25 services included in the definition of universal service to bear more than a  
26 reasonable share of the joint and common costs of facilities used to provide  
27 those services. ... [Section 254(k)] places a continuing obligation on the  
28 Commission to ensure that the treatment of joint and common costs, *such as*  
29 *corporate overheads,* prescribed by our accounting, cost allocation,  
30 separations, and access charge rules will safeguard the availability of universal  
31 service. Opponents argue that by eliminating the PICC and increasing the SLC  
32 cap, the Commission violates section 254(k) by allocating 100 percent of the  
33 joint and common costs to the common line elements paid by the end user.

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(...continued)

Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249,  
and Eleventh Report and Order in CC Docket No. 96-45 ("*CALLS Order*"), May 31, 2000.

<sup>11</sup> *CALLS Order*, ¶92 (footnotes omitted).

<sup>12</sup> *Id.*, ¶95 (footnotes omitted, emphasis added).

1 The Commission, however, has complied with the requirements of Section  
2 254(k) by allocating joint and common costs to various interstate services,  
3 including ... common line and switching ... and ... special access services. ...  
4 Because the SLC is a method of recovering properly allocated loop costs, not  
5 an allocation of those costs between supported and unsupported services,  
6 section 254(k) is not implicated.<sup>13</sup>

7 **Q. MR. DUNKEL [AT 30-31] FAULTS YOUR ARGUMENT THAT INTER-**  
8 **EXCHANGE CARRIERS (“IXCs”) CAN USE QWEST’S LOCAL LOOPS FOR**  
9 **FREE, ASSERTING INSTEAD THAT THE IXCs PAY A CARRIER COMMON**  
10 **LINE CHARGE (“CCLC”) FOR THE PRIVILEGE OF USING THOSE LOOPS. DO**  
11 **YOU AGREE?**

12 A. No, Mr. Dunkel is mistaken in characterizing the CCLC as a cost-based charge  
13 paid by IXCs to use Qwest’s local loops.<sup>14</sup> Rather, the CCLC is a pure subsidy  
14 element that shifts part of the burden of recovering the cost of the loop from the  
15 cost-causer—the end-user customer that orders the loop—to IXCs. Nowhere is  
16 this fact clearer than in the interstate domain where the FCC has recently  
17 undertaken a fundamental change in the structure of access charges. Specifically,  
18 the FCC has moved to eliminate all pure subsidy elements and to migrate to higher  
19 flat-rated subscriber line charges which are appropriate for recovering the fixed,  
20 non-traffic-sensitive costs of the loop. From an economic efficiency standpoint, that  
21 is precisely the kind of change that needs to happen in the intrastate domain as

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<sup>13</sup> *Id.*, ¶196 (footnotes omitted, emphasis added).

<sup>14</sup> Dr. Johnson makes the same error when he asserts [at 12] that “Qwest routinely charges toll carriers like AT&T and MCI [sic] for “access” to its customers. The fees it collects help recover the cost of the loops which are used in providing that access.”

1 well with pure subsidy elements eliminated and residential basic exchange rates  
2 raised.

3 In light of Mr. Dunkel's claim, it is important to examine what costs the IXC  
4 *does* cause for Qwest. Any time Qwest has to switch a long distance call (either  
5 from the calling customer to the IXC or from the latter to the called party), it incurs  
6 traffic-sensitive switching costs and other costs related to inter-office transport.  
7 These costs are legitimately recovered in switched access rates.<sup>15</sup> However, the  
8 CCLC has no role in this; it is included in the switched access rate solely for paying  
9 for part of Qwest's cost to provide the loop and to keep residential basic exchange  
10 rates low.

11 Moreover, the argument that the CCLC recovers part of an interstate  
12 assignment of non-traffic sensitive loop costs, though historically correct, no longer  
13 has economic significance. Carriers pay CCL charges based on the number of  
14 minutes they originate and terminate: from an economic perspective, the CCLC is  
15 part of the price of a switched minute and has nothing to do with loops which are  
16 supplied by other parties. There is also no longer any indirect effect: that is, if loop  
17 costs were to increase, there would be no effect on the CCLC which is regulated  
18 under the FCC's price cap rules.

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<sup>15</sup> True cost-based compensation of Qwest by the IXC only occurs for network elements such as switching and transport between Qwest's end office and the IXC's point of presence. It should *not* include any compensation for the loop connection to the consumer instead. Hence, the CCLC that is currently applied to recover part of the loop's cost is not justified by cost causation and is not cost-based.

1 **Q. WHAT MOTIVE DOES MR. DUNKEL ATTRIBUTE TO QWEST FOR WANTING**  
2 **TO GRANT IXCs “FREE ACCESS” TO ITS LOCAL LOOPS, AND DO YOU**  
3 **AGREE?**

4 A. Mr. Dunkel remarks [at 32]:

5 [S]witched access service is one of the services that Qwest believes is a  
6 potentially competitive service.... Therefore, by supporting reduced switched  
7 access rates with monopoly services (i.e., basic exchange service) rate  
8 increases, Qwest can discourage competition for the access service (by making  
9 the service less profitable), and still “remain relatively neutral” with respect to  
10 the total revenues it receives.

11 Of course, this suspicion is unfounded. First, all Qwest is seeking is the ability to  
12 raise its below-TSLRIC rates for residential basic exchange service *nearer* to  
13 actual cost. This is hardly a move to “support” or subsidize another service like  
14 switched access. Predictably, Mr. Dunkel would claim that Qwest’s residential  
15 basic exchange rates are already well above TSLRIC, so any increase in those  
16 rates would make available more contribution with which to support switched  
17 access. That claim, would, of course, be false.

18 Second, there is some irony in Mr. Dunkel’s claim that, by increasing its  
19 residential basic exchange rates, Qwest will attempt to *reduce* competition for its  
20 switched access service. The truth, of course, is quite the opposite. A very  
21 powerful reason for the slow emergence of residential basic exchange service  
22 competition in Arizona is that the rates Qwest is permitted to charge for that service  
23 are *too low* to make entry by equally and, perhaps, more efficient competitors  
24 worthwhile. Naturally, with less entry by competitive local exchange carriers  
25 (“CLECs”), the fewer sources there can be of a competing switched access

1 service. So, if Qwest truly wants to avoid competition for its switched access  
2 service, it would be better off seeking the status quo of below-cost rates for  
3 residential basic exchange service, rather than getting those rates to rise.

4 Mr. Dunkel is fundamentally wrong to claim—as he has so liberally—that  
5 Qwest intends to give the IXCs a free ride on the use of local loops. There is  
6 simply no benefit to Qwest from doing that. If anything, Qwest would be better off  
7 assessing higher, rather than lower, switched access charges and, as long as the  
8 CCLC is a usage-sensitive charge, increase its switched access contribution by  
9 encouraging IXCs to make greater use of those loops. That outcome, however, is  
10 hardly likely. If Qwest and the IXCs have a mutual interest in seeing the CCLC  
11 eliminated and access charges reduced, it is because such a move would enhance  
12 economic efficiency (by shifting the burden of cost recovery to true cost-causers)  
13 and improve the prospects for, and the quality of, local exchange competition. Mr.  
14 Dunkel's suggestion [at 34] to have Qwest assess flat-rated, rather than per-  
15 minute, charges on IXCs misses that point completely. Where there should be *no*  
16 subsidy, merely replacing a per-minute subsidy by a flat-rated subsidy is not the  
17 answer, as the FCC has clearly realized.

18 **Local and Toll Services are Not Joint Products and the Loop Cost is**  
19 **Not a Joint Cost**

20 **Q. DR. JOHNSON [AT 8] OFFERS A PARALLEL BETWEEN THE JOINT**  
21 **PRODUCTS NATURE OF HAMBURGER AND LEATHER SHOES AND THAT**

1       **ALLEGEDLY BETWEEN “LOCAL” AND TOLL SERVICES. WHAT IS THE**  
2       **POINT OF THIS PARALLEL AND DO YOU ACCEPT IT?**

3       A. No, I do not accept the point that Dr. Johnson attempts to make. Economic theory  
4       attributes two special properties to “joint products:”

- 5       1. The products must be produced in (or approximately in) fixed proportions to each  
6       other out of the same production process and employing the same production  
7       inputs.  
8       2. If cost (in production inputs) is incurred to produce any one of those products, then  
9       all other products that get produced jointly are available, in effect, at zero marginal  
10      (incremental) cost.

11      The first property is key because it narrows considerably the types of production  
12      that qualify for this classification. Celebrated examples of production in more or  
13      less fixed proportions are mostly agricultural: wool and mutton, beef and hides (or,  
14      in Dr. Johnson’s case, hamburger and leather shoes), or egg yolks and egg whites.  
15      From the perspective of the second property, the entire quantity of the “other”  
16      product is available without any additional cost whatsoever. So, in Dr. Johnson’s  
17      example, if cattle feed were the input for producing hamburgers, and a certain  
18      quantity of leather shoes (actually hides would be a better example) were  
19      produced, then there would be no additional cost to supply the leather shoes.  
20      Stated differently, the cost of cattle feed—the production input—should be  
21      regarded as a joint cost to produce the two joint products.

22             Dr. Johnson’s parallel between the hamburger-leather shoes case and the  
23      case of “local” and toll services is flawed for several reasons. First, I disagree with  
24      Dr. Johnson that the local loop plays the same role as cattle feed, namely, as a  
25      production input. As I explained in my Rebuttal Testimony [at 23-26], the local loop

1 (network access service) is an output that can be demanded in its own right and  
2 not, strictly speaking, an input, although, because it is used as a common delivery  
3 vehicle for network services, it has the appearance of an input.

4 Second, unlike beef and hides, Dr. Johnson's "local" service (which I  
5 assume to be local *usage* service) and toll service are *not* produced or consumed  
6 in fixed proportions. For example, for every minute of toll usage, I do not make six  
7 minutes of local calls (or *vice versa*). Every additional minute of toll service that the  
8 network has to provide costs it some incremental amount, regardless of whether I  
9 make six minutes of local calls or sixty. There is also the possibility that I take my  
10 local usage service from my local exchange carrier but my toll service *over the*  
11 *same loop* from another carrier. Products cannot be considered joint if they are  
12 produced by different firms.

13 Finally, Dr. Johnson appears to place the focus on *total* cost when the  
14 proper focus should be on *incremental* or marginal cost. For example, he states [at  
15 8]:

16 If demand for hamburger increases, the cattle feed used in fulfilling this demand  
17 will costlessly be available for use in producing more leather shoes. Similarly, if  
18 the demand for basic local service increases, the loops which are used in  
19 fulfilling this demand will costlessly be available for use in producing more toll  
20 service.

21 Obviously, as the number of loops installed increases, it would become  
22 possible to increase the consumption of both toll and local usage services.  
23 However, the real question is whether when the quantity of one product increases,  
24 does the quantity of the other increase as well, without any *additional* cost  
25 associated with the second product? Consider the beef cow in Dr. Johnson's

1 example. If demand for hamburgers increases, one way to meet increased  
2 demand is to fatten cattle further, i.e., put more beef on an existing cow. In the  
3 process of gaining weight, that cow may arguably also gain size and, hence, make  
4 available more hide to produce leather shoes. In that case, the additional weight of  
5 the cow comes at the additional cost of the cattle feed, but the additional hide  
6 comes at *no* additional cost at all.

7 Now, suppose Dr. Johnson is right and the loop is an input with the same  
8 economic function as cattle feed. If the customer decides to make additional local  
9 calls, will that either require more of a loop, incur more loop cost, or automatically  
10 lead to the making of additional toll calls (in some proportion)? The answer to all  
11 three questions is an obvious "no." The additional local calls *will* incur a cost (such  
12 as usage-sensitive network costs) but not on the loop. Also, more calls of either  
13 kind can be made without requiring any increment of the loop. Clearly, when the  
14 focus is properly placed on incremental cost (which, for the loop, has a central role  
15 in this proceeding), the parallel drawn by Dr. Johnson self-destructs.

## 16 **Economically Efficient Pricing in the Presence of Distortions**

17 **Q. MR. DUNKEL DEVOTES A CONSIDERABLE AMOUNT OF HIS TESTIMONY**  
18 **[AT 37-40] DECRYING THE USE OF RAMSEY PRICING PRINCIPLES FOR THE**  
19 **RECOVERY OF QWEST'S SHARED AND COMMON COSTS. DO YOU**  
20 **ACCEPT HIS ARGUMENTS IN THIS REGARD?**

1 A. No. Ramsey pricing owes its name to its progenitor, Frank Ramsey, who, over 70  
2 years ago, solved the problem of setting optimal taxes so as to minimize the  
3 distortion and loss of efficiency that every tax engenders.<sup>16</sup> This was among the  
4 first contributions to the welfare economics literature on the "Theory of the Second  
5 Best," i.e., the branch of economics devoted to studying how markets can be made  
6 to function with the least amount of efficiency loss in the presence of real-world  
7 distortions. While taxes are well-known distortions because they drive a wedge  
8 between price and marginal cost and, therefore, disrupt a fundamental condition for  
9 a form of economic efficiency known as *allocative* efficiency, in  
10 telecommunications, the best-known source of disruption of allocative efficiency  
11 are economies of scale and scope.<sup>17</sup> In the presence of those economies, the  
12 shared and other fixed costs of the firm represent a far larger proportion of the  
13 firm's total cost than its variable or incremental costs. In these conditions,  
14 enforcing the allocative efficiency condition of setting prices equal to underlying  
15 incremental or marginal costs fails to produce enough revenue for the firm to break  
16 even. Because of this failure, economists have long espoused the ideal regulatory

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<sup>16</sup> Frank Ramsey, "A Contribution to the Theory of Taxation," *Economic Journal*, 37, 1927, at 47-61. In this connection, also see William J. Baumol and David F. Bradford, "Optimal Departures from Marginal Cost Pricing," *American Economic Review*, 60, 1970, at 265-283.

<sup>17</sup> Economies of scale arise as the unit cost of production falls with increasing scale or volume of production. Thus, a firm with a larger scale can produce at a lower unit cost than two or more firms that between them have the same total scale as the larger firm. Economies of scope arise when it is cheaper (and more efficient) to produce several different products out of a common plant or facility than to have to each product produced out of a separate plant or facility. These arise whenever the different products have significant shared fixed costs so that the firm that produces them out of a common facility incurs those fixed costs only once. In contrast, when each such product is produced  
(continued...)

1 solution: allow the firm to recover its shared and other fixed costs by including  
2 contribution markups in its product prices, but impose an overall earnings  
3 constraint to prevent any monopoly exploitation. As for the markups themselves,  
4 several generations of economists have supported a mechanism for marking prices  
5 above marginal cost that minimizes the loss of efficiency as a consequence of such  
6 pricing. In other words, the economic prescription is a mechanism that introduces  
7 and, at the same time, controls a distortion, while allowing the firm to recover all its  
8 costs. The Ramsey pricing approach—which ensures that services are consumed  
9 in the same proportions that they would be consumed if all services were priced at  
10 marginal cost—is one such mechanism.

11 Ironically, what Mr. Dunkel fails to say is that, contrary to his  
12 characterization, Ramsey pricing minimizes social welfare loss in the presence of  
13 distortions and, at least from the standpoint of economic efficiency, is the most  
14 desirable course of action. In addition, Mr. Dunkel ignores the fact that an earnings  
15 constraint—that the firm earn its authorized cost of capital—accompanies such  
16 pricing. Moreover, Mr. Dunkel misses the fact that it is precisely by preventing  
17 consumers from substituting away from less price-elastic products toward more  
18 price-elastic products that Ramsey pricing minimizes the effects of price-cost

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(...continued)

by a different stand-alone firm, then each firm has to incur the same fixed cost that would otherwise be shared in a multi-product firm.

1 distortions.<sup>18</sup> Another way to think of it is that Ramsey pricing comes closest to  
2 ensuring that consumers would consume different products in the same relative  
3 proportions in the presence of those distortions as they would without the  
4 distortions (and with prices set at marginal cost).

5 **Q. WHAT WAS YOUR PURPOSE IN SUGGESTING RAMSEY PRICING FOR THE**  
6 **RECOVERY OF QWEST'S SHARED AND OTHER FIXED COSTS?**

7 A. My purpose in bringing up Ramsey pricing was to highlight the availability of  
8 second-best pricing techniques that can minimize the inefficiency that arises from  
9 distortions in real-world markets. In fact, the very Professor Baumol whom Mr.  
10 Dunkel cites so selectively [at 38] has long advocated Ramsey pricing for regulated  
11 telecommunications firms that have large shared and other fixed costs (i.e., scale  
12 and scope economies).<sup>19</sup>

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<sup>18</sup> In this connection, Mr. Dunkel [at 39] portrays customers with "inelastic demand," with low price elasticities as somehow susceptible to monopoly exploitation. He should know that no monopoly *with the freedom to set its own prices*, i.e., an unregulated monopoly, would ever operate on the inelastic portion of its demand curve. In other words, no profit-maximizing monopoly would, of its own volition, set prices that were so low as to have very low price elasticity. It is well known that as price rises, so does the price elasticity. A profit-maximizing monopoly would only set prices where the price elasticity is in the elastic, rather than the inelastic, range. The problem Mr. Dunkel alludes to—customers with very low price elasticities—only arises in the context of a *regulated* firm (and erstwhile monopoly) like Qwest which is *prevented* from setting compensatory prices or prices within the profit-maximizing and price-elastic range. This is hardly the result of exploitative behavior by Qwest.

<sup>19</sup> See William J. Baumol and J. Gregory Sidak, *Toward Competition in Local Telephony*, Cambridge, MA: MIT Press and Washington DC: American Enterprise Institute, 1994, especially Ch. 3. See also Alfred E. Kahn, *The Economics of Regulation*, Volumes I and II, Cambridge, MA: MIT Press, 1988, and Sanford V. Berg and John Tschirhart, *Natural Monopoly Regulation*, New York: Cambridge University Press, 1988.

1 **Q. ISN'T IT TRUE, HOWEVER, THAT RAMSEY PRICING RAISES SOME**  
2 **PROBLEMS EVEN AS IT ENHANCES ECONOMIC EFFICIENCY?**

3 A. Yes. While seeing the economic efficiency virtues of Ramsey pricing, economists  
4 also recognize the distributional equity problems with such pricing. The strength of  
5 Ramsey pricing—that higher percent markups in price can be incorporated for  
6 customers with the lowest price elasticities without causing a distortion in  
7 consumption—is also its most problematic feature because it appears to put the  
8 greatest burden of higher prices on those who can least escape them. Economists  
9 like Baumol and others have long recognized this fact. Another practical problem  
10 with applying Ramsey pricing in a multi-product world is that for selecting the  
11 markups in service prices with precision, it is necessary to have reliable estimates  
12 of both own-price and cross-price elasticities of demand for those services. As  
13 Baumol and Sidak note, this data requirement has often been a practical problem  
14 that regulators have been unable to overcome.<sup>20</sup> Nevertheless, Baumol and Sidak  
15 believe that

16 [R]egulators have accepted the usefulness of Ramsey theory as a source of  
17 general qualitative guidance rather than as a generator of precise and definitive  
18 prescriptions for pricing. Ramsey theory has, for example, been used to defend  
19 the legitimacy in terms of the general welfare of what in the regulatory arena is  
20 called “differential pricing”—that is, the use of discriminatory prices, in the  
21 economic rather than the legal sense. ... Ramsey theory has also been used to  
22 reject high markups on costs in the prices of goods whose demands are highly  
23 elastic, and to note that the self-interest of firms will normally lead them to avoid  
24 that sort of pricing behavior, in the understanding that charging prices for goods  
25 whose demands are elastic is a sure way to lose one’s customers. In sum,  
26 Ramsey-pricing analysis continues to play a significant role in regulation, and

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<sup>20</sup> Baumol and Sidak, *op cit.*, at 38.

1 one that may become more substantial in the future. But that role is  
2 nevertheless circumscribed, and Ramsey analysis is unlikely to determine the  
3 actual magnitudes of regulated prices.<sup>21</sup>

4 In trying to cast Ramsey Pricing in a very negative light, Mr. Dunkel does not either  
5 address the full context in which regulators and policymakers consider the use of  
6 Ramsey pricing or provide the balanced and reasoned analysis of the virtues and  
7 possible qualified uses of Ramsey pricing that Baumol and Sidak offer.

8 In response to the onerous data requirements of Ramsey pricing,  
9 economists have proposed several optimal pricing mechanisms—such as  
10 nonlinear pricing or multi-part tariffs—with the larger goal of reconciling the  
11 apparent conflict between economic efficiency and distributive equity.<sup>22</sup> Moreover,  
12 by relying on customers to self-select into different pricing plans, such pricing  
13 actually avoids having to observe price elasticities directly and, therefore,  
14 overcomes the most significant data hurdle faced by Ramsey pricing. With the  
15 increasing popularity of such pricing among *unregulated* firms with scale and scope  
16 economies (e.g., airlines, long distance telephone companies, and wireless  
17 companies), the Commission could find significant value in extending them to  
18 regulated carriers like Qwest as well.

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<sup>21</sup> *Id.*, at 39. Footnotes omitted, but see footnotes for examples of regulatory cases in which Ramsey pricing has been used.

<sup>22</sup> See, e.g., Stephen J. Brown and David S. Sibley, *The Theory of Public Utility Pricing*, New York: Cambridge University Press, 1986, Robert B. Wilson, *Nonlinear Pricing*, New York: Oxford University Press, 1993, or Mitchell and Vogelsang, *op cit.*, Chs. 4 and 5. Also see Baumol's own efforts at that reconciliation in his book, *Superfairness*, Cambridge, MA: MIT Press, 1986, Ch. 6.

1           **PRICING CARRIER SWITCHED ACCESS ABOVE INCREMENTAL COST**

2   **Q. MS. STARR ACKNOWLEDGES [AT 13] THE SEPARATE AFFILIATE**  
3   **PROVISION OF SECTION 272 OF THE TELECOMMUNICATIONS ACT OF 1996.**  
4   **HOWEVER, SHE CLAIMS THAT REQUIRING SEPARATE AFFILIATES STILL**  
5   **DOES NOT PREVENT QWEST FROM PRICING ITS SWITCHED ACCESS**  
6   **SERVICE TO FAVOR ITS OWN AFFILIATE FOR TOLL SERVICE OVER AT&T**  
7   **AND OTHER IXCs. DO YOU AGREE?**

8   A. No. The separate affiliates provision is not an empty requirement because it  
9   requires that access impose the same cost on Qwest's long distance affiliate as it  
10   does on competing IXCs. Ms. Starr is incorrect to say that "the Qwest affiliate is  
11   paying the "price" of access, but the corporation is really only incurring the "cost" of  
12   access." That is only true if accounting, rather than economic, costs are used. As I  
13   explained in my Rebuttal Testimony [at 33-36], the price paid by the affiliate for  
14   switched access is really a cost at the corporate level because, when the affiliate—  
15   not the IXC—carries the long distance call, Qwest forgoes the contribution that it  
16   could have earned from selling switched access to the IXC instead. The error in  
17   Ms. Starr's analysis stems from missing this subtle, but important, economic point.

1           **QWEST'S COMPETITIVE ZONE PROPOSAL AND MARKET SHARE ISSUES**

2           **Excessive Reliance on Market Shares Obscures Whether Qwest is**  
3           **Capable of Anti-Competitive Behavior**

4   **Q. DR. SELWYN ASSERTS [AT 5] THAT YOUR DISCUSSION OF THE**  
5   **RELEVANCE OF MARKET SHARE AS AN INDICATOR OF A FIRM'S MARKET**  
6   **POWER IS "ENTIRELY THEORETICAL AND IGNORES ENTIRELY THE**  
7   **CONTEXT OF ACTUAL LOCAL EXCHANGE MARKET CONDITIONS EXTANT**  
8   **IN ARIZONA." DO YOU AGREE?**

9   A. Not at all. I base my assessment of the role of market share on the U.S.  
10   Department of Justice *Merger Guidelines*. The *Merger Guidelines* (1) outline the  
11   enforcement policy and (2) describe the analytical framework and specific  
12   standards used by both the Federal Trade Commission ("FTC") and the  
13   Department of Justice ("DOJ") to enforce the antitrust laws. Inasmuch as these  
14   enforcement agencies rely routinely on the *Merger Guidelines* to inform their  
15   analysis of markets, assess market concentration, and evaluate the likely effects of  
16   market power in real markets, I hardly think my analysis is "entirely theoretical"  
17   when I do the same.

18   **Q. HAVING CALCULATED THAT QWEST SUPPOSEDLY CONTROLS 95.78% OF**  
19   **THE MARKET FOR RESIDENTIAL BASIC EXCHANGE SERVICE IN ARIZONA,**  
20   **DR. SELWYN ARGUES [AT 6] THAT QWEST "HAS THE ABILITY TO**  
21   **EXERCISE SUBSTANTIAL MARKET POWER TO CONTROL PRICE LEVELS**  
22   **AND LIMIT COMPETITIVE ENTRY." MORE GENERALLY, DR. JOHNSON [AT**

1       **23] QUESTIONS YOUR UNWILLINGNESS TO USE MARKET SHARE AS**  
2       **ANYTHING MORE THAN A SUPPORTING STATISTIC FOR JUDGING THE**  
3       **STATE OF MARKET COMPETITION. DO YOU AGREE?**

4       A. No. First, the *Merger Guidelines* do not make an immutable *a priori* distinction  
5       between the effects of a high or low market share on a firm's ability to exercise  
6       market power. Rather, they set out "general standards" and specifically allow any  
7       presumption following from the general standards to "be overcome" with a showing  
8       that other factors, e.g., entry analysis, may warrant a different conclusion.

9               Second, the *Merger Guidelines* specifically recognize other factors that may  
10       determine the course of future competition:

11               The post-merger level of market concentration and the change in  
12       concentration resulting from a merger affect the degree to which a  
13       merger raises competitive concerns. However, in some situations,  
14       market share and market concentration data may either understate or  
15       over state the likely future competitive significance of a firm or firms in  
16       the market of the impact of a merger. (*Merger Guidelines*, ¶1.52)

17       Accordingly, the *Merger Guidelines* direct the enforcement agencies to:

18               consider reasonably predictable effects of recent and ongoing changes  
19       in the market conditions in interpreting market concentration and market  
20       share data. (*Id.*, ¶1.521)

21               There is no question that telecommunications markets, particularly those for  
22       basic exchange services, are in transition from monopoly to competition. The  
23       Telecommunications Act of 1996 ("1996 Act"), state laws, and follow-on federal and  
24       state policies have created the structural conditions for that transition. There have  
25       been, and will continue to be, *ongoing changes* in the relevant market conditions.  
26       The effects of those changes are also *predictable* in some essential respects:  
27       incumbent carriers like Qwest have, and will continue to, lose market share to

1 competitive entrants. However, no matter the actual speed with which that market  
2 share will erode,<sup>23</sup> there is no question that Qwest cannot re-create the entry  
3 barriers that have been removed or re-monopolize a market in which safeguards  
4 against monopoly control have been, and are being, deployed.

5 Third, contrary to Dr. Selwyn's claim, Qwest has *no* ability to exercise  
6 market power and/or control price levels. The term "market power" specifically  
7 refers to a firm's ability to profitably raise and maintain price(s) above the  
8 competitive level.<sup>24</sup> Qwest cannot exercise such power. With its service prices  
9 and earnings subject to regulatory control, Qwest simply has not had, and does not  
10 presently have, the ability to set prices unilaterally. If granted pricing flexibility for  
11 the competitive zones, Qwest's ability to set prices in the future will be constrained  
12 by the market.<sup>25</sup> In those competitive zones, Qwest's competitors already have  
13 facilities in place to serve both business and residential customers, and can extend

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<sup>23</sup> Just as Dr. Selwyn calculates a nearly 96% market share for Qwest in Arizona, Dr. Johnson reports [at 33] that ILECs received about 94% of local service revenues in 1999. The intent again is to make it seem that a market share at that level necessarily signifies substantial market power. Yet, ILECs including Qwest were—and are—by and large unable to charge residential basic exchange rates at or above incremental cost. In the same vein, Dr. Collins argues [at 10] that market power can be manifested in ways other than pure price control. For example, he says that one such way would be "removal of a high enough percentage of total potential market revenue to chill the *pro-forma* business cases run by competitors to decide if market entry is warranted." How exactly is that supposed to happen? More to the point, given that Qwest's residential basic exchange rates are below cost, what must Qwest do to remove a "high enough percentage of total potential market revenue?" Dr. Collins provides no insight into this question.

<sup>24</sup> Note that the *competitive level* does *not* necessarily refer to strict equality of price and incremental cost. Even in competitive markets, firms may settle on prices above incremental cost, given their need to recover shared and other fixed costs.

<sup>25</sup> Qwest is already at a competitive disadvantage in parts of Arizona where Cox is able to sell residential basic exchange service at a lower price than Qwest, particularly when bundled with cable television service. See Dunkel Surrebuttal Testimony [at 46].

1 capacity sufficiently to thwart any attempt by Qwest to restrict output and raise  
2 prices above competitive levels.

3 Finally, contrary to Dr. Selwyn's claim, Qwest has *no* ability to limit  
4 competitive entry. The 1996 Act removed legal barriers to entry and imposed  
5 duties on incumbent local exchange carriers that, in effect, mitigated economic and  
6 technical barriers to entry. Qwest is required to interconnect with CLECs, make  
7 available unbundled network elements ("UNEs"), and offer its retail services for  
8 resale at a discount. Qwest has no ability to prevent CLECs from pursuing  
9 customers using any of these options. As Professor Kahn pointed out recently, the  
10 provisions of Sections 251 and 252 of the 1996 Act have made the local exchange  
11 market more contestable than at any other time in the history of  
12 telecommunications.<sup>26</sup>

13 **Q. HOW DO YOU RESPOND TO DR. JOHNSON'S USE [AT 23-25] OF THE**  
14 **LERNER INDEX (MODIFIED FOR THE DOMINANT FIRM-COMPETITIVE**  
15 **FRINGE MARKET) TO ASSERT THAT THE LARGER THE DOMINANT FIRM'S**  
16 **MARKET SHARE, THE GREATER WILL BE ITS MARKET POWER?**

17 A. Dr. Johnson's advocacy of the Lerner Index for a market with a dominant firm with  
18 a competitive fringe is fine so far as it goes, but its use is not justified in the context  
19 of residential basic exchange service in Arizona. That is because the form of the

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<sup>26</sup> Alfred E. Kahn, *Letting Go: Deregulating the Process of Deregulation*, Michigan State University Utilities Papers, East Lansing, MI: Michigan State University, 1998, at 54-60.

1 Lerner Index that Dr. Johnson uses pre-supposes *profit-maximizing behavior* on  
2 the part of the dominant firm for the service or market in question.<sup>27</sup> In no sense,  
3 can it be argued that Qwest is able to price its residential basic exchange service  
4 (or the underlying residential access line) in a profit-maximizing manner. As has  
5 been testified to, residential basic exchange rates are, in fact, *below* incremental  
6 cost in many parts of Arizona. And even those who might disagree that residential  
7 basic exchange services are priced below cost cannot claim that residential basic  
8 exchange service is price-elastic at current prices—which it would be if a monopoly  
9 supplier were maximizing profit. Therefore, the Lerner Index is not applicable when  
10 market share is measured in terms of residential access lines or revenues from  
11 residential basic exchange service.

12 **Q. DR. SELWYN ASSERTS [AT 8] THAT YOUR SELECTION OF REVENUES OR**  
13 **PROFITS AS THE APPROPRIATE BASIS FOR MEASURING MARKET SHARE**  
14 **AMOUNTS TO “BLOWING SMOKE” BECAUSE YOU DIDN’T BACK UP THAT**  
15 **SELECTION WITH ANY QUANTITATIVE DATA. IS THIS A FAIR**  
16 **CHARACTERIZATION?**

17 A. No, and Dr. Selwyn is, or should be, aware that detailed quantitative data on the  
18 revenues and/or profits of individual CLECs on a statewide basis are not publicly

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<sup>27</sup> See William M. Landes and Richard A. Posner, “Market Power in Antitrust Cases,” *Harvard Law Review*, 94, 1981, or Richard A. Posner and Frank H. Easterbrook, *Antitrust Cases, Economic Notes, and Other Materials*, Second Edition, St. Paul, MN: West Publishing Co., 1981, Appendix: Introduction to the Economics of Antitrust.

1 available. I note that he has not presented any data of his own to refute my  
2 conclusion.

3 More importantly, it is a generally accepted fact that entrants first target high  
4 revenue or profit-yielding business customers located in mainly densely-populated  
5 urban areas. In contrast, residential customers located in less densely-populated  
6 areas that present a low revenue/profit potential are a far lower priority for those  
7 entrants.<sup>28</sup> This would suggest that the average per line revenue/profit from the  
8 typical CLEC customer is higher than the average per line revenue/profit from the  
9 average Qwest customer. Thus, a market share analysis based on revenue/profit  
10 per residential access line in Arizona would produce a lower market share for  
11 Qwest than an analysis based on access lines alone. Using revenue/profit rather  
12 than access lines amounts to assigning a higher weight to each CLEC-served  
13 access line and a lower weight to each Qwest-served access line in any weighted  
14 average calculation of revenue or profit per line across all carriers. This, again, is  
15 likely to produce a lower market share for Qwest than a simple access line-based  
16 analysis.

17 **Q. DR. SELWYN REPORTS THAT THE FCC REACHED AN OPPOSITE**  
18 **CONCLUSION REGARDING THE MEASUREMENT OF MARKET SHARE**  
19 **USING LINES INSTEAD OF REVENUES. HE CITES AN FCC ANALYSIS OF**  
20 **DS1 AND DS3 MARKET SHARE USING LINES RATHER THAN REVENUES,**

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<sup>28</sup> The FCC has, in fact, confirmed this trend. See FCC, *Local Competition: August 1999*.

1       **AND REMINDS THE COMMISSION THAT “THE FCC FOUND THAT A MARKET**  
2       **SHARE BASED UPON CHANNELS (LINES) WOULD ACTUALLY OVERSTATE**  
3       **THE EXTENT OF COMPETITION RELATIVE TO A MARKET SHARE STATISTIC**  
4       **BASED UPON RELATIVE REVENUES.” SHOULD THE COMMISSION DISMISS**  
5       **YOUR CONCLUSION AS INCORRECT?**

6       A. No. My testimony was not that any market share analysis based on revenue/profit  
7       would result in a lower market share. Instead, it was that ILECs and CLECs do not  
8       compete for lines *per se*, but rather for that which lines make possible, namely,  
9       revenues and profits. On this basis, I testified that an appropriate market share  
10      analysis—if one were to be deemed relevant at all—would be better based on  
11      revenues or profits, not lines. The FCC’s conclusions regarding alternative  
12      measures of market share using lines and revenues for DS1 and DS3 circuits are  
13      in no way indicative of the likely outcome when market share using both access  
14      lines and revenues is analyzed for residential basic exchange service in Arizona. If  
15      every access line sold in Arizona generated exactly the same amount of revenue or  
16      profit, the distinction would not matter. But, as I stated earlier, that is not likely to  
17      be the case. Unlike the case of market share for DS1 or DS3, a market share  
18      analysis of Arizona’s residential access lines will more likely reveal a lower market  
19      share for Qwest when revenue/profit is used than when the lines themselves are  
20      used.

21      **Q. DR. SELWYN ALSO ASSERTS [AT 8-9] THAT QWEST’S CURRENT**  
22      **“GROSSLY ABOVE-COST PRICES FOR MANY OF ITS SERVICES” IS**

1       **EVIDENCE THAT YOUR PROPOSAL TO USE POTENTIAL CAPACITY TO**  
2       **MEASURE MARKET SHARE “FAILS ON ITS VERY FACE.” DO YOU AGREE?**

3       A. No. First, the services Dr. Selwyn refers to (namely, vertical features and DSL) are  
4       considered optional and discretionary. Thus, it is very likely for incumbent and  
5       entrant carriers alike to price those services above incremental cost, i.e., to make  
6       them contribute to the recovery of their shared and other fixed costs. That is hardly  
7       a surprising finding: he has simply discovered the obvious fact that firms recover  
8       their shared fixed and common costs by marking up prices for their various  
9       services as market conditions permit.

10       Second, this issue has only arisen because I stated in my Rebuttal  
11       Testimony [at 40] that a capacity-related measure of market share is a more  
12       meaningful indicator of potential barriers to entry or strategic behavior by a firm  
13       and, hence, a predictor of potential market power more worthy of attention. It is  
14       unclear whether Dr. Selwyn disagrees with that notion. That notwithstanding, my  
15       observation is supported by the *Merger Guidelines* which, as I explained earlier,  
16       represent the *practical* basis for the pertinent enforcement policy and analytical  
17       framework used by both the FTC and the DOJ.

18       Market shares will be calculated using the best indicator of firms' *future*  
19       competitive significance. Dollar sales or shipments generally will be  
20       used if firms are distinguished primarily by differentiation of their  
21       products. Unit sales generally will be used if firms are distinguished  
22       primarily on the basis of their relative advantages in serving different  
23       buyers or groups of buyers. Physical capacity or reserves generally will  
24       be used if it is these measures that most effectively distinguish firms.  
25       (*Merger Guidelines*, ¶1.41; emphasis added)

1 Many telecommunications services are not differentiated in that a minute of  
2 local or toll service from one carrier appears to the consumer exactly like a minute  
3 of that service from another carrier. For the services that are nearly homogeneous,  
4 competing telecommunications carriers have limited ability to pursue the custom of  
5 any particular buyer or group of buyers. For these reasons, I believe it is  
6 appropriate to follow the *Merger Guidelines*' suggestion to market share in terms of  
7 physical capacity, rather than revenue or access lines.

8 Finally, Dr. Selwyn mischaracterizes my testimony by taking it out of context.  
9 This could prove confusing to the Commission. In his discussion of the supply  
10 elasticity as an indicator of entrants' ability to counter any strategic attempt by the  
11 incumbent to restrict output and raise prices, Dr. Selwyn claims that I have  
12 conceded that the supply elasticity is low and thus agree with him that CLECs in  
13 Arizona have little or no ability to rapidly serve additional demand for residential  
14 access lines. That is simply not true. The relevant passages from page 10 of Dr.  
15 Selwyn's testimony are reproduced below.

16 Q. Does Dr. Taylor appear to agree with you that the supply elasticity reflecting  
17 competitor's ability to rapidly satisfy market demand is, in fact, quite low?

18 A. Yes. At page 43 of his rebuttal testimony, Dr. Taylor explicitly concedes that  
19 "[n]aturally, it takes considerable time and effort on the part of those entrants to  
20 bring about significant erosion in the market share of the incumbent firm."

21 **Q. DO YOU AGREE WITH DR. SELWYN THAT THE SUPPLY ELASTICITY FOR**  
22 **THE PROVISION OF RESIDENTIAL ACCESS LINES IN ARIZONA IS LOW?**

23 A. No. In addition to the ready capacity of the facilities-based CLECs already in  
24 operation, competitors have every opportunity to use resale or UNEs to serve

1 demand. In practical terms, there is probably little or no capacity constraint in the  
2 markets for which Qwest is seeking a competitive zone declaration.

3 The statement that Dr. Selwyn has taken out of context appeared in my  
4 Rebuttal Testimony [at 43] in my discussion of the reliability of the Herfindahl-  
5 Hirschman Index ("HHI") as an indicator of market concentration when  
6 concentration is *decreasing*. The relevant passage from my Rebuttal Testimony is  
7 reproduced below, including the sentence (shown with emphasis) that Dr. Selwyn  
8 cites in his testimony.

9 There is an important asymmetry between increasing and decreasing  
10 concentration in a market and, for this reason, the HHI is typically of no  
11 practical value when concentration is decreasing. When a market with a  
12 single firm is opened to competition, the HHI—measured on the basis of  
13 whatever outcome or driver—necessarily starts out at its ceiling value of  
14 10,000 (100 percent squared) and then declines as that firm loses  
15 market share to new entrants. *Naturally, it takes considerable time and*  
16 *effort on the part of those entrants to bring about significant erosion in*  
17 *the market share of the incumbent firm.* Does that mean that the HHI in  
18 that market would have to fall from 10,000 to near 1,800 before the  
19 market could be declared competitive? Absolutely not. The critical test  
20 there is not whether the HHI has fallen precipitously but, rather, whether  
21 the incumbent firm has the ability to exercise market power even in the  
22 early stages of competition when the HHI is necessarily high. Without  
23 that ability to exercise market power, a high HHI says nothing about the  
24 actual and potential state of competition in the market. This fact is  
25 particularly true for regulated telephone companies whose initial market  
26 share of 100 percent was due to regulation rather than to any inherent  
27 characteristic of the firm or the technology.

28 **Q. HOW DO YOU RESPOND TO DR. JOHNSON'S ARGUMENT [AT 25] THAT**  
29 **GRANTING QWEST'S COMPETITIVE PROPOSAL COULD DISCOURAGE**  
30 **COMPETITIVE ENTRY IN ARIZONA?**

31 **A.** This rationalization for not granting Qwest a legitimate request for a competitive  
32 zone declaration where competition has taken hold amounts to nothing less than

1 "infant industry" protection. In the long run, such protection almost always proves  
2 to be counter-productive because it (1) encourages too much entry by relatively  
3 less efficient competitors, (2) suppresses or shifts consumer demand  
4 inappropriately, so that lower quality or higher-priced service from less efficient  
5 competitors is not eliminated from the market, and (3) encourages the incumbent  
6 firm to seek other markets. In any event, Dr. Johnson's rationalization is counter to  
7 both the spirit and the letter of the 1996 Act which made no distinctions or  
8 preferences about which class of carriers should be trusted to lead the charge  
9 toward competition. Ironically, Dr. Johnson *is* correct when he remarks rather  
10 tellingly [at 25] that:

11           Given a choice between competing in a state where the incumbent has been  
12           largely deregulated and one where the incumbent is subject to traditional  
13           prohibitions against discriminatory pricing practices, new carriers would logically  
14           find the latter market more attractive.

15 **Q. BUT, ISN'T DR. JOHNSON ONLY SAYING THAT COMPETITORS WOULD**  
16 **FAVOR ENTERING ONLY THE MARKETS WHERE DISCRIMINATORY**  
17 **PRICING PRACTICES BY THE INCUMBENT ARE PREVENTED BY**  
18 **REGULATION?**

19 A. If that is what he is saying, then a closer look is warranted at the overall context of  
20 his statement. First, in states where the incumbent has been deregulated, it is very  
21 likely that regulators and public policymakers have first determined that such  
22 deregulation is safe, pro-competitive, and in the public interest. Therefore, the lack  
23 of competitive entry in those states can only signify either an unwillingness to  
24 compete or less efficiency on the part of potential competitors.

1           Second, it is a myth that service prices would be the same everywhere  
2 within a carrier's service area even under competition. Competition may move  
3 prices towards cost, but incremental costs of services are not the same  
4 everywhere. For example, the cost of wireline basic exchange service is sensitive  
5 to cable lengths and relative densities of customer locations. Also, price  
6 discrimination—in the economic, not the legal, sense—is not necessarily a bad  
7 thing and often occurs under competition for differentiated products. Price  
8 discrimination, e.g., multi-part prices (to which I referred earlier) can actually be  
9 economic efficiency-enhancing and give customers more freedom to choose the  
10 pricing plans that best suits them. In competitive long distance and wireless  
11 markets, such price discrimination—across customers and by service area—is  
12 already practiced. If Dr. Johnson's objection to "discriminatory pricing" only  
13 pertains to anti-competitive pricing (not justified by cost differences or economic  
14 efficiency criteria), then I am perfectly willing to join in that objection.

15 **Q. DR. SELWYN [AT 13-14] DISPUTES YOUR CRITICISM OF THE HHI IN THE**  
16 **PRESENT CONTEXT. PLEASE RESPOND.**

17 A. The disagreement between us concerns what useful purpose can be served by  
18 using HHIs in the present context. Dr. Selwyn examines the absolute measure of  
19 the HHI to draw conclusions about market power. I disagree with the  
20 indiscriminate use of the HHI (to examine market power) outside of merger  
21 analysis and, as I stated in my Rebuttal Testimony [at 41-43], market events that  
22 trigger *increasing* concentration. I consider the approach embraced by the DOJ

1 and the FTC in the *Merger Guidelines* to be consistent with this thinking. When  
2 challenging a merger on the grounds that the combined company would have  
3 market power, the *Merger Guidelines* ask to examine two factors: (1) the absolute  
4 level of the HHI itself and (2) the change in that HHI as a result of specific market  
5 events. Contrary to what Dr. Selwyn's believes, an HHI by itself cannot provide  
6 sufficient information to conclude whether a firm possesses market power. The  
7 *Merger Guidelines* state that, by itself, an HHI above 1800 is insufficient to  
8 conclude that the combined firm will possess market power.<sup>29</sup> A more meaningful  
9 test of market power when market share is *decreasing*, as in Arizona's local  
10 exchange markets, is one that examines directly whether the incumbent or  
11 dominant firm has both the incentive and the ability to directly restrict output, deter  
12 entry, and raise prices above competitive levels. The mere fact that the firm's  
13 market share is still in the 90+% range—which is natural so soon after competition  
14 was introduced and the structural conditions for it were created—is not evidence of  
15 any of those three anti-competitive practices. Nor does the fact that prices have to  
16 exceed incremental cost in order to help recover shared and fixed costs (and, in

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<sup>29</sup> Mr. Dunkel responds [at 53-54] to my computation of an HHI of 3,197 for the interstate long distance market at the time the FCC granted AT&T non-dominant carrier status by pointing out that the HHI in the parts of Arizona where Qwest is seeking a competitive zone declaration is considerably higher. As I stated above, a revenue-based HHI is not appropriate for making determinations about the potential for anti-competitive behavior, particularly in those parts of Arizona. In my Rebuttal Testimony [at 44], I had asked how even an HHI of 3,197 in the long distance market could pass muster unless the FCC had implicitly decided to not lay so much stock in the HHI for determining whether AT&T was deserving of non-dominant carrier status.

1 some cases, to contribute to the implicit subsidy for universal service) sufficient to  
2 conclude that the incumbent's prices reveal anti-competitive behavior.

3 **Q. DR. SELWYN ALSO DISPUTES [AT 15] YOUR EXAMPLE IN WHICH YOU**  
4 **CALCULATE AN HHI OF 1,720 FOR A HYPOTHETICAL MARKET SERVED BY**  
5 **A FACILITIES-BASED CARRIER SERVING 40% OF THE MARKET AND 30**  
6 **RESELLERS EACH WITH A 2% MARKET SHARE. IS THERE ANY TRUTH TO**  
7 **THAT CRITICISM?**

8 A. No. Dr. Selwyn's states his criticism of my example [at 15] as follows:

9 There are, in fact, two separate "markets" here, one for the provision of the  
10 underlying services by the sole facilities-based carrier, and the second for the  
11 provision of retail services by the facilities-based carrier and its 30 resellers.

12 Dr. Selwyn faults me for failing to take account of the wholesale market served by  
13 the single facilities-based carrier. Specifically, he states that my example fails  
14 because I fail to report the actual HHI for the market for the underlying facilities-  
15 based service which, by virtue of having only one participant, must have an HHI of  
16 10,000.

17 This criticism is completely off the point. The concern in the present  
18 proceeding is with the strength and quality of competition in Arizona's *retail*  
19 telecommunications markets, most particularly for residential basic exchange  
20 service. It is most decidedly not with the degree of competition in wholesale  
21 markets. From that standpoint, the relevant product market for the computation of  
22 the HHI must include not merely the facilities-based carrier but also all of the 30  
23 resellers from whom the retail service is available. If Qwest were to increase retail

1 service prices, customers would be free to shift to any of 31 carriers, not merely the  
2 one facilities-based carrier. For that market, my computation of an HHI of 1,720 is  
3 beyond dispute.

4 **Q. DR SELWYN ACCUSES YOU [AT 18] OF BEING “DELIBERATELY**  
5 **MISLEADING.” HOW DO YOU RESPOND?**

6 A. I disagree. Consider first Dr. Selwyn’s observation that I failed to provide a specific  
7 paragraph citation to support the statement in my Rebuttal testimony [at 51] that “in  
8 first undertaking reform of interstate *switched access* charges, the FCC adopted a  
9 market-based, rather than an overtly-regulatory approach.” While it is true that I  
10 did not provide a specific citation, I refrained from doing so because my  
11 characterization of the FCC’s approach is a readily apparent and important theme  
12 throughout the *Access Reform First Report and Order*.<sup>30</sup> If a specific reference is  
13 necessary, I direct Dr. Selwyn’s attention to ¶263 of that Order.

14 Dr. Selwyn goes on to say that “nothing in the First Report and Order  
15 expressly confers any pricing flexibility authority upon any ILEC; at best the  
16 Commission expressed an intention to pursue this course in the future.” The  
17 problem with this criticism is that I never said or implied that the FCC expressly  
18 conferred any such authority on Qwest or any other ILEC! In the *First Report and*  
19 *Order*, the FCC relied on market forces as the basis for *reforming* switched access

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<sup>30</sup> FCC, *In the Matter of Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charges*, First Report and (continued...)

1 charges. Apparently, Dr. Selwyn ignores the fact that, faced with a choice between  
2 relying on market forces to reform the access charge regime or using a prescriptive  
3 approach, i.e., setting access charges at total *element* long run incremental cost  
4 (“TELRIC”), the FCC chose the former. The point that I was making with apparent  
5 support from the FCC was that, where possible, market forces should be preferred  
6 to an overtly regulatory and prescriptive approach for the purpose of setting prices.  
7 In this proceeding, the Commission can choose to either rely on market forces for  
8 setting prices or continue to use a regulatory approach. While Dr. Selwyn and I  
9 disagree on the right approach, when I compared the choice facing the  
10 Commission with the FCC’s choice in the *Access Charge First Report and Order*, I  
11 was not “deliberately misleading” as Dr. Selwyn suggests.

12 The same comment applies to Dr. Selwyn’s further charge that, by  
13 dovetailing passages from the FCC’s 1999 *Access Reform Fifth Report and Order*  
14 and a passage from the 1997 *Access Reform First Report and Order*, I had meant  
15 to give the impression that the passages all pertained to the same case or even to  
16 the same service (switched access). Regardless of impressions, I never concealed  
17 the fact that the sources were different (footnotes 35-38 in my Rebuttal Testimony),  
18 Moreover, on page 52 of that testimony, I also acknowledged that the FCC’s  
19 principles were “adopted in a different context (i.e., forbearance from regulation of

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(...continued)

Order (“*Access Reform First Report and Order*”), CC Dockets 96-262, 94-1, 91-213, and 95-72, released May 16, 1997.

1 exchange access services).” The point of that exercise was to inform the  
2 Commission about the FCC’s new orientation regarding regulated service prices in  
3 the new competitive era ushered in by the 1996 Act and other laws and policies.  
4 Clearly, the FCC has shown a keen appreciation of the damage to social welfare  
5 and economic efficiency that can occur from persisting with outmoded pricing  
6 restrictions as market conditions change in the direction of increasing competition.  
7 The purpose of all economic regulation should be to simulate conditions that would  
8 prevail in competitive markets. Thus, as actual competition starts to take hold,  
9 regulators can help the process along by gradually liberalizing the conditions under  
10 which regulated firms operate.

11 **Fears of Anti-Competitive Pricing by Qwest are Not Justified**

12 **Q. IF THE COMMISSION GRANTS QWEST’S COMPETITIVE ZONE PROPOSAL,**  
13 **DR. SELWYN BELIEVES [AT 16] THAT QWEST WILL BE ABLE TO**  
14 **“EFFECTIVELY CROSS-SUBSIDIZE THE SERVICES IN [SIC] FURNISHES**  
15 **UNDER “COMPETITIVE” CONDITIONS WITH HIGHER RATES AND**  
16 **REVENUES FROM MONOPOLY AREAS.” HE ALSO APPEARS TO DISAGREE**  
17 **[AT 27] WITH THE NOTION THAT, SINCE WHOLESALE RATES WILL**  
18 **CONTINUE TO BE REGULATED, QWEST CANNOT EXERCISE MARKET**  
19 **POWER OVER ITS RETAIL SERVICES. HOW DO YOU RESPOND?**

20 **A.** First, let me clear up an apparent misstatement in Dr. Selwyn’s testimony [at 27].  
21 Dr. Selwyn asks the question:

1 But what about the argument that since wholesale rates will continue to be  
2 regulated, Qwest cannot exercise market power over its wholesale services?  
3 I believe he meant to say "...Qwest cannot exercise market power over its retail  
4 services." The sole basis for Dr. Selwyn's disagreement with this position is the  
5 erroneous belief that

6 Qwest retains strong incentives to shift as many joint costs as possible from its  
7 retail to its wholesale operations and to attempt to set wholesale rates (even if  
8 regulated) at levels that include disproportionate allocations of such costs.

9 Dr. Selwyn incorrectly implies that Qwest will be able to engage in anti-competitive  
10 pricing and cross-subsidization.

11 **Q. WHY DO YOU BELIEVE THAT DR. SELWYN IS WRONG?**

12 A. There are several reasons why Dr. Selwyn's concerns are unfounded and make  
13 little economic sense. First, Dr. Selwyn seems to be arguing that Qwest will use its  
14 control over an alleged bottleneck (wholesale services) in order to subsidize and  
15 price retail service in an anti-competitive manner, e.g., below economic costs. The  
16 problem with this argument is that Qwest cannot, even if it had the incentive—  
17 which as I describe below it does not—easily shift costs between retail and  
18 wholesale services. The Commission has rules, regulations and procedures in  
19 place that are intended to prevent the misassignment of costs that Dr. Selwyn is  
20 concerned with. Certainly, the adoption of a price cap plan (as proposed by Staff  
21 and Qwest in this proceeding) would be a step in that direction.

22 More importantly, Qwest has no ability to use its alleged control over  
23 wholesale services in order to price retail services anti-competitively because there

1 are two fundamentally different pricing standards for Qwest's wholesale and retail  
2 operations.

3 **Q. PLEASE EXPLAIN THAT POINT.**

4 A. Qwest's wholesale operations include UNEs and interconnection services that it  
5 makes available to its competitors. The pricing methodology for wholesale services  
6 is based on the FCC's Interconnection Order which prescribed the use of forward-  
7 looking economic costs.<sup>31</sup> On the other hand, the prices of retail services in  
8 Arizona are currently determined by rate-of-return and revenue requirement  
9 considerations and could, in the future under price cap regulation, be more market-  
10 responsive or subject to caps (as conditions warrant). Thus, there can be no  
11 practical way for Qwest to "misassign" or shift costs because the manner in which  
12 service prices are determined will remain unaffected by any attempt to shift costs.

13 **Q. ARE THERE OTHER REASONS WHY DR. SELWYN'S CONCERNS ARE**  
14 **UNFOUNDED?**

15 A. Yes. First, Dr. Selwyn appears to fear that Qwest will engage in predatory pricing  
16 in order to drive competitors from the market and then recoup losses by pricing  
17 above the competitive level.<sup>32</sup> But, that is hardly a viable strategy for the context in

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<sup>31</sup> The 8<sup>th</sup> Circuit Court recently ruled that the FCC can mandate prices for UNEs and interconnection that are based on forward-looking costs as long as they are based on the ILEC's actual network, not a hypothetical network. See *Iowa Utilities Board v. FCC and the United States*, U.S. Court of Appeals for the 8<sup>th</sup> Circuit, No. 96-3321, July 18, 2000.

<sup>32</sup> In alleging the possibility of "*anticompetitive pricing* and cross-subsidization," I assume Dr. Selwyn is referring to predatory pricing and, in the context of the supply of a retail service (e.g., intraLATA toll) with support from a wholesale service (switched access), to price squeeze as well.

1 which Qwest operates. Competitors have entered Qwest's markets because of the  
2 profitable opportunities that exist and because entry barriers are low. Despite the  
3 current imbalance in market shares, the structural conditions exist to make the  
4 telecommunications markets in Arizona contestable. A predatory pricing strategy  
5 could only work if Qwest could not only sustain the initial losses associated with  
6 such a strategy but also raise and defend permanent entry barriers in order to keep  
7 competitors from re-entering and to maintain prices above competitive levels.<sup>33</sup>  
8 That scenario is simply unthinkable: complete deregulation of Qwest is not  
9 imminent, nor is there a possibility that the substantial capacity investments now  
10 being made by several competitors in Arizona will vaporize overnight under  
11 predatory pricing pressure from Qwest.

12 Second, Dr. Selwyn appears to believe that Qwest has, or is seeking, the  
13 flexibility to price its wholesale services (in particular, switched access) not only  
14 above costs but at even higher than current levels. That suspicion is misplaced,  
15 however, because it is very much in Qwest's interest to bring certain wholesale  
16 service prices (particularly, switched access) down from current levels, as  
17 competitive supply of those services develops. For example, Qwest has asked  
18 regulators to initially reduce and eventually remove implicit subsidy contributions

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<sup>33</sup> Predatory pricing has been defined as "pricing at a level calculated to exclude from the market and equally or more efficient competitor." See W. Kip Viscusi, John M. Vernon, and Joseph E. Harrington, Jr., *Economics of Regulation and Antitrust*, Second Edition, Cambridge, MA: MIT Press, 1996, at 272. This source also explains why predatory pricing is an unwise *strategy* and has never been shown to succeed.

1 from its wholesale service rates in conjunction with either rate rebalancing or  
2 universal service reform.

3 The whole specter of price squeeze raised by Dr. Selwyn is, in my opinion,  
4 totally misplaced. Apart from the fact that imputation practices *are* effective  
5 safeguards against price squeeze, there is also a fundamental finding from  
6 economic theory that a profit-maximizing monopoly in an upstream wholesale  
7 market gains *absolutely no advantage* by trying to monopolize a competitive  
8 downstream retail market (using price squeeze or other tactics) *if* the retail product  
9 uses the wholesale input *in fixed proportions*.<sup>34</sup> Even if Qwest truly monopolized  
10 the carrier access market (which it does not as substitutes for Qwest's switched  
11 access service are available), it cannot leverage its monopoly power in the  
12 wholesale market to become a profit-maximizing monopoly in the retail market.  
13 That is because the retail service—most likely, intraLATA toll—uses the wholesale  
14 service—most likely, switched access—in fixed proportions. The point is: *even if*  
15 Qwest wanted to monopolize the retail markets in which it operates, it would *not*  
16 gain anything more from its troubles than if it were to just compete in those  
17 markets. There is, thus, no incentive—let alone ability—for Qwest to attempt to  
18 monopolize the retail markets that are presently competitive.

19 **Q. DR. SELWYN ALSO CLAIMS [AT 28] THAT IMPUTATION WILL NOT WORK AS**  
20 **AN ADEQUATE SAFEGUARD. IS THERE ANY TRUTH TO THIS CLAIM?**

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<sup>34</sup> *Id.*, at 235-236.

1 A. None whatsoever. Dr. Selwyn states that “competitors are not adequately  
2 protected by any “imputation’ requirement” because the Commission will have no  
3 ability to assess the costs of Qwest’s (effectively deregulated) retail operations,  
4 which must necessarily be added to the cost of wholesale services to prevent an  
5 anticompetitive price squeeze from being perpetrated upon competitors.” But as I  
6 have just explained, Qwest has neither the incentive nor the ability to attempt to  
7 monopolize retail markets that are presently competitive. On the point of  
8 imputation itself, Dr. Selwyn’s worry about its safeguarding ability is similar to that  
9 expressed by Ms. Starr [at 12-13]. As I demonstrated in my Rebuttal Testimony  
10 [at33-36], their worries are unfounded. Imputation, properly viewed (i.e., when the  
11 ILEC’s opportunity costs are taken account of), completely eliminates any  
12 possibility of price squeeze. Moreover, imputation is needed as a safeguard only  
13 as long as competitive alternatives to the wholesale services in question do not  
14 exist. That situation is rapidly changing.

15 **PRICING PAYPHONE ACCESS LINES ABOVE INCREMENTAL COST**

16 **Q. PLEASE SUMMARIZE DR. ILEO’S REBUTTAL ARGUMENTS.**

17 A. Dr. Ileo criticizes my Rebuttal Testimony on the issue of Public Access Line (“PAL”)  
18 services. He argues [at 21, 25, and 29] that:

19 1. I am mistaken in my view of Section 276 of the 1996 Act as it pertains to subsidies  
20 *from* payphone services *to* other telecommunications services. He argues that  
21 Section 276 of the 1996 Act requires the removal of subsidies *from* payphone  
22 services as well as *to* payphone service.

1 2. I have mischaracterized his direct testimony as equating the Commission's task in  
2 this proceeding to setting UNE rates. He argues that he has not equated the two  
3 tasks.

4 3. Nothing in my Rebuttal Testimony supports a finding that Qwest's PAL rates are  
5 reasonable. Dr. Ileo reaches this conclusion based on the argument that I have  
6 neither conducted a PAL cost study nor performed a Ramsey Pricing study, and  
7 my testimony contradicts Qwest's own reasons for including a TELRIC-based UNE  
8 rate in the costs of PAL.

9 **Q. HOW DO YOU RESPOND TO DR. ILEO'S CRITICISMS?**

10 A. Dr. Ileo's arguments are unfounded. First, my understanding of Section 276 of the  
11 1996 Act and its implications for removing subsidies is correct, and comports with  
12 the conclusions from most other regulatory proceedings I am aware of that have  
13 implemented that section of the 1996 Act. Second, although Dr. Ileo may not  
14 explicitly equate the Commission's task in this proceeding to setting UNE rates, his  
15 Direct Testimony nevertheless makes numerous references to Commission  
16 Decision No. 60635, arguing how the results from that proceeding should be used  
17 in the current proceeding. In fact, Dr. Ileo's Direct Testimony makes more  
18 references to the Commission's UNE proceeding than there are pages in his Direct  
19 Testimony. Third, I do not need to perform either a PAL cost study or a Ramsey  
20 Pricing study to conclude that Qwest's rates are reasonable. Qwest's PAL rates  
21 are in accordance with the principles I discussed in my Rebuttal Testimony [at 58-  
22 60 and 64-71]. Qwest's incorporation of cost elements based on TELRIC is not  
23 inconsistent with my testimony, nor is it inappropriate.

1 **Q. HOW DO YOU RESPOND TO DR. ILEO'S ASSERTION [AT 22] THAT YOU ARE**  
2 **MISTAKEN IN YOUR VIEW OF SECTION 276 OF THE 1996 ACT? PLEASE**  
3 **EXPLAIN HOW YOUR INTERPRETATION DIFFERS FROM DR. ILEO'S.**

4 A. It is apparent that Dr. Ileo and I disagree about the following paragraph in the Act,  
5 namely, Section 276(a):

6 any Bell operating company that provides payphone service – (1) shall not  
7 subsidize its payphone service directly or indirectly from its telephone exchange  
8 service operations or its exchange access operations

9 As I understand Dr. Ileo's position, he argues [at 22] that this paragraph  
10 prohibits subsidies *from* payphone services *to* other services. I disagree and,  
11 although I am not a lawyer, find no support for that conclusion in this paragraph of  
12 the 1996 Act. According to the plain language of the paragraph above, the 1996  
13 Act prohibits subsidies *to* Qwest's payphone services "*from* its telephone exchange  
14 service operations or its exchange access operations."<sup>35</sup> That prohibition was  
15 intended (at a minimum) to remove the explicit payphone element in the interstate  
16 non-traffic sensitive costs recovered in the interstate carrier common line and  
17 subscriber line charges.

18 **Q. ON THE SUBJECT OF SUBSIDIES, DR. ILEO ARGUES [AT 7] THAT QWEST**  
19 **WITNESS MR. THOMPSON'S TESTIMONY INAPPROPRIATELY DISCUSSES**  
20 **STAND-ALONE COSTS WITH RESPECT TO PAL COSTING AND PRICING. IS**  
21 **DR. ILEO CORRECT?**

---

<sup>35</sup> Emphasis added.

1 A. No. It is entirely appropriate for Mr. Thompson to raise the issue of SAC when  
2 discussing subsidy calculations. Dr. Ileo states [at 9-10] that he does not disagree  
3 with the definition of a subsidy inherent in the theory of SAC, only that the  
4 differences between SAC and “TELRIC plus a reasonable allocation of common  
5 costs” are invariably small. Whether or not that assessment is correct, it is beside  
6 the point: the test of subsidy he offers [at 7], namely, a service provides a subsidy  
7 *whenever* its price exceeds TELRIC and a reasonable share of common costs, is  
8 wrong. As I explained in an earlier section, for a service to provide a subsidy, its  
9 price must exceed its SAC. So Dr. Ileo would have to demonstrate that his  
10 preferred standard (TELRIC plus a reasonable share of common costs) is indeed  
11 the same as SAC. Simply asserting that it is so is a far cry from proving that result  
12 with hard data or evidence.

13 **Q. DR. ILEO ARGUES [AT 24] THAT HIS TESTIMONY DOES NOT DRAW A**  
14 **COMPARISON BETWEEN THE COMMISSION’S TASK IN THIS PROCEEDING**  
15 **AND ITS DECISION NO. 60635. PLEASE RESPOND.**

16 A. Dr. Ileo may not explicitly draw that comparison, but his testimony certainly links  
17 the current proceeding with a UNE rate-setting proceeding. For example, he  
18 recommends [at 48] that the Commission clarify its Decision No. 60635, and  
19 require PAL-specific cost studies using the very cost methodology that was used to  
20 set UNE prices. To that end, he even recommends using the same allocation of  
21 common costs that the Commission prescribed for setting UNE rates.

1           The Commission's task in this proceeding is *not* to set PAL rates based on  
2           UNE rates, rather it is to ensure that Qwest (1) does not subsidize its payphone  
3           service from telephone exchange services or exchange access operations and (2)  
4           does not prefer, or discriminate in favor of, its payphone services. Qwest has  
5           satisfied both requirements by setting its PAL rate at TSLRIC plus a reasonable  
6           contribution to common costs, and by making PAL service available to its own  
7           payphone affiliate and competing independent payphone service providers on  
8           exactly the same charges, terms, and conditions. The critical requirement, of  
9           course, is that Qwest's tariffed rates for BPAL and SPAL pass the FCC's "new  
10          services test." The new services test does not set a rate in the same sense that a  
11          UNE proceeding does, but rather it considers whether proposed rates for BPAL  
12          and SPAL services are (1) cost based, (2) consistent with the requirements of  
13          Section 276 of the 1996 Act, and (3) non-discriminatory. As I discussed in my  
14          Rebuttal Testimony [at 71-78], Qwest's proposed rates in this proceeding pass the  
15          new services test.

16       **Q. BECAUSE YOUR REBUTTAL TESTIMONY CRITICIZES THE USE OF TELRIC**  
17       **FOR SETTING PAL RATES, DR. ILEO [AT 27] DOUBTS YOUR**  
18       **ENDORSEMENT OF QWEST'S COST STANDARD IN THIS CASE. PLEASE**  
19       **RESPOND.**

20       A. Dr. Ileo's doubts stem from my opposition to the use of a TELRIC methodology in  
21       the current proceeding and Qwest's basing a portion of its PAL cost standard on  
22       results from a TELRIC study used to set UNE rates. However, Qwest's cost

1 support in this proceeding is not entirely TELRIC-based, which would be incorrect  
2 for the reasons I reviewed in my Rebuttal Testimony. Dr. Ileo appears to be  
3 creating an issue where there is none. Simply put, Qwest has used a proper cost  
4 standard for PAL services in this proceeding.

5 **Q. DOES THAT CONCLUDE YOUR REJOINDER TESTIMONY?**

6 A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. )  
COMMONWEALTH OF MASSACHUSETTS )  
COUNTY OF MIDDLESEX )

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
WILLIAM E. TAYLOR

ss

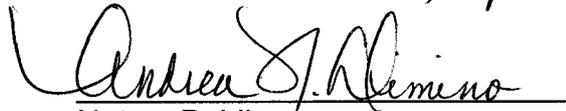
William E. Taylor, of lawful age being first duly sworn, depose and states:

1. My name is William E. Taylor. I am Senior Vice President, National Economic Research Associates, Inc., of Cambridge, Massachusetts. I have caused to be filed written rejoinder testimony in support of Qwest in Docket No. T-1051B-99-105.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
William E. Taylor

SUBSCRIBED AND SWORN to before me this 15<sup>th</sup> day of September, 2000.

  
Notary Public  
Cambridge, MA

My Commission Expires: 9-24-04



**REJOINDER TESTIMONY OF CARL INOUE**

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14

On the other hand, the Qwest plan gives Arizona customers assurance that the Company will not use pricing flexibility in Basket 1, Basic and Essential Services, to increase earnings while providing Qwest with a reasonable opportunity to rebalance rates. The Qwest plan features an overall price cap on the services in Basket 3, whereas, Staff's plan has no cap. The Qwest plan offers a much greater likelihood of permanently de-linking customer rates from ROR regulation, whereas, Staff's plan offers no permanent de-linking. And, the Qwest plan provides an efficient and streamlined mechanism to move services from Basket 1 to Basket 3 in response to increasing competition. By contrast, Staff's plan relies upon the time consuming, resource intensive, and litigious traditional regulatory process.

All in all, the Qwest plan is a much fairer price regulation plan.

1                   **RESPONSE TO MR. SHOOSHAN'S PROPOSED PLAN**

2  
3           ***Pricing Flexibility and Basket 3***  
4

5   **Q.    MR. SHOOSHAN STATES THAT THE INTENT OF STAFF'S PLAN IS TO**  
6           **PROVIDE QWEST WITH THE "SAME" PRICING FLEXIBILITY AS ITS**  
7           **COMPETITORS. (SHOOSHAN SURREBUTTAL, P. 3, L. 8-9) HAS HE**  
8           **ACCOMPLISHED THAT?**

9    A.    No. For example, competitors offer 1FR and 1FB local exchange service to  
10           residential and business customers in the Qwest service territories. These  
11           competitors may change their prices and terms and conditions without a  
12           regulatory proceeding before the Commission. Nowhere in Staff's proposed plan  
13           is Qwest granted the same pricing flexibility as competitors.

14  
15   **Q.    WHAT IS YOUR PRINCIPLE POINT ABOUT STAFF'S PROPOSED PLAN AND**  
16           **HOW HAS IT BEEN ADDRESSED IN MR. SHOOSHAN'S SURREBUTTAL**  
17           **TESTIMONY?**

18    A.    My principal point in rebuttal testimony is that Staff's plan "does not provide  
19           Qwest with any new pricing flexibility for its existing services" and offers little  
20           prospects for increased flexibility. (Inouye Rebuttal, p. 2, 3-7)

21  
22           Mr. Shooshan states in his testimony that price regulation "provides the  
23           incumbent with a **greater flexibility** to respond to competitors." (Shooshan  
24           Testimony, p. 7, L10-11, emphasis added) Nevertheless, Staff's plan does not  
25           provide greater pricing flexibility.<sup>1</sup> Furthermore, Staff's plan relies on the existing

---

<sup>1</sup> I also testified that Staff's proposed plan actually took away from Qwest's existing pricing flexibility. Mr. Shooshan's surrebuttal testimony clarifies that that was not his intent when he constructed Attachment 1 to his testimony by assigning the Qwest services to either Basket 1, Basket 2, or Basket 3.

1 regulatory process to determine whether Qwest would be granted new pricing  
2 flexibility.

3  
4 It is reasonable that any price regulation plan provide Qwest with greater pricing  
5 flexibility at the outset of the plan. Furthermore, it is reasonable that any  
6 mechanism relied upon during price regulation to provide additional pricing  
7 flexibility should be streamlined. My rebuttal testimony demonstrated that Mr.  
8 Shooshan's plan provided no new pricing flexibility for existing service and little  
9 prospect for improvement during the life of the plan, points that Mr. Shooshan  
10 now concedes in his surrebuttal testimony.

11  
12 In his surrebuttal testimony, Mr. Shooshan concedes that Staff's plan provides  
13 no meaningful pricing flexibility and opportunity to rebalance rates in Basket 1.  
14 (Shooshan Surrebuttal, p. 16, L. 23-27) In responding to my point that Staff's  
15 plan provides little prospect for increased pricing flexibility during the term of the  
16 plan (Inouye Rebuttal, p. 5-6), Mr. Shooshan states he would not object to  
17 applying a "less rigorous test" to determine whether increased pricing flexibility  
18 should be granted. (Shooshan Surrebuttal, fn. 17)

19  
20 In both of the above instances, Mr. Shooshan fails to offer concrete proposals to  
21 fix the flaws in Staff's plan and does not modify the terms of Staff's plan.

22  
23 The obvious fix is to simply apply the test Mr. Shooshan supports for determining  
24 whether Qwest should be granted greater pricing flexibility and to do so in this  
25 docket. The test Mr. Shooshan supports is that "at least one competitor exist."

---

1 (Shooshan Testimony, p. 11, L. 21-25) Staff should simply check documents  
2 filed with the Commission by CLECs to determine where and which services  
3 CLECs offer. Or, Staff should verify the same information by simply calling the  
4 CLECs.<sup>2</sup>

5  
6 If Mr. Shooshan's test was applied in this docket, I believe the Basket 3 list of  
7 services would appear substantially as in my Exhibit CTI-1, attached to my  
8 rebuttal testimony. No time consuming, resource intensive and litigious  
9 regulatory proceeding is necessary to verify that Mr. Shooshan's test has been  
10 met.

11  
12 **Q. WOULD APPLYING MR. SHOOSHAN'S TEST IN THIS DOCKET ELIMINATE**  
13 **A SIGNIFICANT DIFFERENCE BETWEEN THE STAFF AND QWEST PRICE**  
14 **REGULATION PLANS?**

15 A. Yes. I believe that applying Mr. Shooshan's test now in this docket would  
16 substantially eliminate one of the important differences between Staff's and  
17 Qwest's price regulation plans, i.e., the distribution of services between Basket 1  
18 and Basket 3.

19  

---

<sup>2</sup> The latter is exactly the process employed by the Oregon Commission. (Oregon Public Utility Commission, Telecommunications Division Interoffice Correspondence, Marlene Gorsuch to Commissioners Eachus, Smith, and Hamilton, March 28, 2000, attached as Rejoinder Exhibit CTI-1. See also, Inouye Rebuttal, p. 13.

1 ***Access Service***

2 **Q. MR. SHOOSHAN OPPOSES OFFSETTING REDUCTIONS IN ACCESS**  
3 **CHARGES WITH INCREASES IN BASIC LOCAL EXCHANGE SERVICES. DO**  
4 **YOU AGREE?**

5 A. No. Staff's plan requires access charge reductions without offsetting price  
6 increases of other services or without any upward pricing flexibility provided  
7 elsewhere in the plan. This portion of Staff's plan amounts to a diminishment of  
8 any increased revenues granted by the Commission in the revenue requirement  
9 and rate design portions of this docket.<sup>3</sup> This is simply unreasonable.

10

11 As will be discussed later in this testimony, the evidence of the past 5 years  
12 suggests that access charge revenue reductions would not likely be offset by  
13 efficiency improvements. (See the sub-section "Price Indexing Basket 1")

14

15 ***Pricing Flexibility in Basket 1***

16

17 **Q. MR. SHOOSHAN STATES THAT THE "HARD CAP" IS A LEGITIMATE TOOL**  
18 **FOR "PROTECTING" CUSTOMERS WHO "RELY" ON QWEST BASIC**  
19 **SERVICES. (SHOOSHAN SURREBUTTAL, P. 16, L. 20-22) DO YOU AGREE?**

20 A. No, I do not. It is incongruous that basic services priced below cost would be  
21 hard capped while access services, which are priced above cost, would have  
22 programmed rate reductions. Fairness and equity would deem that the two be  
23 treated similarly, which the Qwest plan does by putting both classes of services  
24 in Basket 1.

25

---

<sup>3</sup> It should be noted that under ROR regulation, reduction of access charges could not be achieved without offsetting price increases of other services, unless a revenue requirement reduction was demonstrated.

1 Furthermore, the fact that customers “rely” on Qwest basic services does not  
2 justify Mr. Shooshan’s broad inclusion of services in Staff’s Basket 1. Customers  
3 may “rely” on Qwest basic services, while at the same time have the alternative  
4 of substituting the Qwest services with that of CLECs. Staff’s “hard cap” is not  
5 necessary to “protect” customers when CLEC alternatives exist.

6  
7 Applying in this docket the “less rigorous” test Mr. Shooshan proposes for  
8 determining whether pricing flexibility should be provided would eliminate the  
9 unfairness of hard capping services when customers have CLEC alternatives.  
10 As discussed above, the test could be applied quickly and efficiently in this  
11 docket and would resolve a significant difference between the Staff and Qwest  
12 plans.

13  
14 **Q. DOES MR. SHOOSHAN CONCEDE THAT HIS “HARD CAP” WILL TOO**  
15 **“TIGHTLY CONSTRAIN” QWEST?**

16 **A.** Yes. In his testimony, Mr. Shooshan claimed that his price regulation proposal  
17 does provide pricing flexibility in Basket 1. In surrebuttal, Mr. Shooshan  
18 concedes the point that no meaningful rebalancing or pricing flexibility is  
19 provided in Basket 1.<sup>4</sup> (Shooshan Surrebuttal, p. 16-17; Inouye Rebuttal, p. 6-7)

---

<sup>4</sup> Mr. Shooshan contradicts himself in his surrebuttal testimony beginning at page 5, L. 22, to page 6, L.6. and that at pages 16-17. In conceding my testimony that no Basket 1 service price could be increased above its existing level and, therefore, no meaningful rebalancing or pricing flexibility is being offered, Mr. Shooshan cannot also testify, as he does beginning at page 5, that Dr. Taylor is incorrect in stating that no Basket 1 service price could be increased. Furthermore, Mr. Shooshan’s surrebuttal testimony on pages 5-6 that the hard cap applies only to “basic” services in Basket 1 and not to other non-basic services in Basket 1 is misleading and an inconsequential point. The only non-basic services in Basket 1 are “existing service packages,” much of which Qwest already has pricing flexibility that Mr. Shooshan concedes at page 16 were never meant to be included in Basket 1. Whatever existing service packages left in Basket 1 would be so small in the weighted averaged price of the entire basket as to be inconsequential.

1           Nevertheless, Mr. Shooshan makes no modifications to bring his proposed price  
2           regulation plan in conformity with his original testimony.

3  
4           **Q.    WOULD IT BE REASONABLE FOR THE COMMISSION TO ADOPT A PRICE**  
5           **REGULATION PLAN MR. SHOOSHAN ADMITS IS FLAWED?**

6           A.    No, it would not be. As I demonstrated in my rebuttal testimony, there is no  
7           opportunity in Staff's proposed plan to rebalance the rates of services in Basket  
8           1. Furthermore, I demonstrated that the price index formula is flawed against the  
9           Company's interests. Mr. Shooshan concedes these points.

10  
11           Mr. Shooshan suggests that the Commission correct these flaws by modifying  
12           the range of services that are subject to the "hard cap" and adjust the price cap  
13           formula. He does not state what specifically the Commission should adopt.

14  
15           **Q.    HOW SHOULD THESE FLAWS IN STAFF'S PLAN BE FIXED?**

16           A.    The fixes should be the placement of access services in Basket 1 and the  
17           substitution of an overall weighted average price cap for the entirety of Basket 1  
18           in place of the service specific "hard caps." Additionally, the range of services  
19           should be limited to that I proposed in my Exhibit CTI-2, which would closely  
20           reflect the result of applying Mr. Shooshan's "less rigorous" test discussed  
21           above. These "fixes" are exactly the features of the Qwest price regulation plan.

22  
23           *Service Quality*

24  
25           **Q.    MR SHOOSHAN JUSTIFIES A SERVICE QUALITY COMPONENT WITH AN**  
26           **ANALOGY OF A "SWORD" TO HOLD OVER THE COMPANY TO INDUCE**  
27           **PERFORMANCE. HOW DO YOU RESPOND?**

1 A. The point in my rebuttal testimony is that the three service areas Mr. Shooshan  
2 expressed a concern (access to centers, held orders, and out of service repair)  
3 all had the level of customer payments increased less than 2 months before Mr.  
4 Shooshan's testimony was filed. To use Mr. Shooshan's analogy, those  
5 increased customer payments are the "sword of Damocles" currently being held  
6 over the Company's head to induce it to perform.

7

8 **Q. MR. SHOOSHAN STATES THAT CUSTOMERS NEED TO BE ASSURED**  
9 **THAT PRICES MORE CLOSELY MATCH THE QUALITY OF SERVICE**  
10 **RECEIVED. HAS MR. SHOOSHAN DEMONSTRATED THAT SUCH HAS NOT**  
11 **ALREADY BEEN ACHIEVED?**

12 A. No, he has not. Mr. Shooshan has presented no evidence that the customer  
13 payments currently required by the Commission do not already provide a  
14 reasonable match between price and service quality. Without such evidence,  
15 Mr. Shooshan has no support or basis to claim that additional customer  
16 payments should be included in any price regulation plan.

17

18 **Q. IS THE EVIDENCE MR. SHOOSHAN PRESENTS FROM OTHER STATES**  
19 **SUPPORTIVE?**

20 A. No. It is irrelevant that 13 other states developed service quality payments in  
21 conjunction with their price regulation plans without the knowledge of whether  
22 those plans were developed in a situation in which service quality standards and  
23 defined levels of customer payments already exist, as they do in Arizona.

24

1 ***Term of the Plan***

2

3 **Q. IS THE TERM OF THE PLAN LINKED TO THE REVENUE REQUIREMENT**  
4 **OUTCOME OF THIS DOCKET?**

5 A. Yes, it is. As I stated in my rebuttal testimony, year 2000 earnings point to a  
6 significant decline in earnings. Given the earnings trend and Staff's revenue  
7 requirement proposal in this docket, Qwest is unable to commit to a price  
8 regulation plan longer than the initial 3-year term in the Qwest proposed plan.

9

10 **Q. IS MR. SHOOSHAN CORRECT THAT UNCERTAINTY WILL BE REMOVED**  
11 **WHEN THE COMMISSION DETERMINES REVENUE REQUIREMENT IN THIS**  
12 **DOCKET? (SHOOSHAN SURREBUTTAL, P. 13)**

13 A. No. Undertaking a price regulation plan of defined length involves uncertainties  
14 that are not limited to the starting point revenue requirement from a rate case.  
15 As I stated in my rebuttal testimony, the Company is uncertain about the trend in  
16 earnings, given service improvement initiatives. Furthermore, an acceptable  
17 revenue requirement to start a price regulation is not a definitive number. Qwest  
18 recognizes that there may be tradeoffs between the level of revenue requirement  
19 and the term of the plan. For these reasons, Qwest proposes a 3-year initial  
20 term plan with a renewal option.

21

22 **Q. IS THE ISSUE OVER THE TERM OF THE PLAN OR OVER WHO HAS THE**  
23 **OPTION TO DETERMINE WHETHER TO EXTEND THE PLAN?**

24 A. Given Mr. Shooshan's testimony that he does not strongly object if the plan was  
25 shorter than 5 years (Shooshan Surrebuttal, p. 13, L. 16-17), it appears the issue  
26 is over who has the option to determine whether to extend the plan. The fact of  
27 the matter should be that if Staff was comfortable with a 5 year plan, it should not

1 object to the modification that at 3 years Qwest would have the option to end the  
2 plan.<sup>5</sup> If Qwest were to renew, the plan would ultimately have at least the 5-year  
3 duration Staff proposed. If Qwest did not renew, the duration would be shorter.

4  
5 Given the current financial trends, the 3-year initial term with the option to renew  
6 does nothing more than make the election into price regulation by Qwest more  
7 likely.

8  
9 **Q. WHICH PRICE REGULATION PLAN HAS THE BETTER PROVISIONS**  
10 **GOVERNING WHAT HAPPENS AT THE END OF THE PLAN?**

11 A. I would submit that the Qwest price regulation plan has better provisions than  
12 does Staff's plan.

13  
14 Under Staff's plan, Qwest would have the right to decide whether to opt into an  
15 extension of the existing price regulation plan, a modified or new plan, or return  
16 to ROR regulation.<sup>6</sup> The Commission may decide to extend the plan, make  
17 modifications, or offer a new plan. But, Qwest would not be bound to accept the  
18 Commission's decision. Absent such an election, Qwest would return to ROR  
19 regulation.

20  

---

<sup>5</sup> If the 3 year renewal, for a total of 6 years, as compared to Staff's 5 years, is an issue, Qwest would agree that the renewal term would be 2 years.

<sup>6</sup> Mr. Shooshan states that the Staff plan anticipates that the Commission would decide whether and for how long to extend the plan beyond the initial proposed 5-year term and cites page 3 of his initial testimony. Nothing at page 3 describes how the Commission would have this exclusive right. It is Qwest's position that price regulation cannot be imposed upon the Company. Therefore, Qwest would have the rights described above, absent any provision that provided otherwise.

- 1 The Qwest plan includes a provision that eliminates the possibility of returning to
- 2 ROR if Qwest renews the plan after the initial 3-year term.<sup>7</sup>

---

<sup>7</sup> Conditioned only upon the Commission and FCC having granted 271 approval.



1 separate proceeding is not necessary to verify the existence of at least one  
2 competitor. Such verification could be done quickly and efficiently by Staff by  
3 checking documents filed with the Commission by CLECs, or by calling the  
4 CLECs.

5  
6 **Q. WHAT WOULD BE THE OUTCOME OF SUCH A VERIFICATION?**

7 A. I believe that the verification would result in substantial residential and business  
8 basic local services, beyond the primary line, being placed in Basket 3.

9  
10 ***Wholesale Services***

11  
12 **Q. MR SHOOSHAN STATES THAT IT APPEARS DISAGREEMENT OVER**  
13 **WHOLESALE SERVICES IS LIMITED TO THE PLACEMENT OF ACCESS**  
14 **SERVICES IN BASKET 1 OR BASKET 2. (SHOOSHAN SURREBUTTAL, P.**  
15 **15, FN 16) DO YOU AGREE?**

16 A. Yes. Qwest does not see the need for a separate basket for wholesale services  
17 because different pricing rules apply. With Staff's acknowledgement that special  
18 access has been merged into the Private Line tariff, which has been previously  
19 classified as competitive, the only difference appears to be the placement of  
20 switched access services. The placement of access services in the appropriate  
21 basket was addressed in the sub-section "Access Service."

22  
23 ***Inflation Indexing Basket 1***

24  
25 **Q. MR. SHOOSHAN SPECULATES THAT THE ABSENCE OF INFLATION**  
26 **INDEXING FOR BASKET 1 RELATES TO MR. TAYLOR'S TESTIMONY ON**  
27 **THE PRODUCTIVITY FACTOR. IS THAT TRUE?**

1 A. No, I do not believe that would be accurate. Qwest's proposal to dispense with  
2 inflation indexing of the overall weighted average price of the Basket 1 services  
3 reflects the point of view that at current levels of inflation, what an appropriate  
4 productivity factor should be, and a 3-6 year duration, inflation indexing would be  
5 more trouble than its worth. Plus, the way in which Mr. Shooshan proposes to  
6 use inflation indexing in combination with "hard caps" makes the application of  
7 inflation indexing unfair by working downward, but not upward. (Inouye Rebuttal,  
8 p. 7, fn. 6) Mr. Shooshan concedes the latter point. (Shooshan Surrebuttal, p.  
9 16) Given the above, inflation indexing was simply not included in the Qwest  
10 proposed price regulation plan.

11  
12 **Q. DOES THE ELMINATION OF INFLATION INDEXING DENY ARIZONA**  
13 **CUSTOMERS THE BENEFIT OF INCREASED EFFICIENCIES QWEST**  
14 **COULD BE EXPECTED TO ACHIEVE UNDER PRICE REGULATION?**  
15 **(SHOOSHAN SURREBUTTAL, P. 16, L. 13-16)**

16 A. No. Mr. Shooshan's premise that Qwest can be expected to be more efficient  
17 under Staff's 5-year price regulation plan is a false one. There appears to be  
18 little reason to believe the incentive to be cost efficient under Staff's plan would  
19 be significantly different than under ROR regulation, given that the term of price  
20 regulation closely matches the usual regulatory lag under ROR regulation.  
21 Arizona rate cases are fairly infrequent, 5 years being the regulatory lag since  
22 the last rate case. Mr. Shooshan's premise that Qwest can be expected to be  
23 more efficient in Arizona lacks support.

24  
25 Furthermore, there is no evidence that the efficiency gains would be large  
26 enough to support Mr. Shooshan's contention that inflation indexing would result

1 in a benefit to customers, as opposed to a detriment. In the last U S WEST rate  
2 case, the Commission granted a \$31.6 million rate increase,<sup>8</sup> subsequently  
3 increased to \$59.3 million after court appeals were exhausted. In this case,  
4 Staff's revenue requirement witnesses are proposing another rate increase,  
5 albeit small.<sup>9</sup> The period since the last rate case matches the period of the data  
6 Mr. Shooshan relies upon to calculate his productivity factor. His productivity  
7 factor, therefore, aligns with Staff's revenue requirement position. Since the  
8 Company's cost efficiency has not been great enough to enable Staff's revenue  
9 requirement witnesses to propose a rate reduction, then logically Mr. Shooshan  
10 cannot claim that inflation indexing will benefit customers through a reduction of  
11 the overall price cap of Basket 1.

12  
13 Furthermore, Mr. Shooshan's proposed "consumer productivity dividend" is  
14 unjustified because it also relies upon the premise that Qwest has greater  
15 incentive to be cost efficient under price regulation.

16  
17 ***Basket 3 Price Cap***  
18

19 **Q. MR. SHOOSHAN SEES ADVANTAGES IN THE QWEST PROPOSED BASKET**  
20 **3 OVERALL PRICE CAP. DO YOU AGREE?**

21 **A.** Yes. From a the point of view of customer protection, the Qwest proposal is  
22 more advantageous than the Staff proposal.

23  

---

<sup>8</sup> Arizona Corporation Commission, Decision No. 58927, Docket No. E-1051-93-183, January 3, 1995.

<sup>9</sup> The Commission has yet to rule in favor of Staff's proposed rate increase, or on Qwest's proposed larger rate increase.

1 **Q. MR. SHOOSHAN QUESTIONS WHETHER PRICE REDUCTIONS WOULD BE**  
2 **FILED WITH THE COMMISSION. PLEASE COMMENT.**

3 A. It is the Company's proposal that notice would be given to the Commission when  
4 prices are reduced.

5  
6 ***Competitive Zones***  
7

8 **Q. MR. SHOOSHAN POINTS OUT THAT OREGON IS USING COMPETITIVE**  
9 **ZONES IN THE CONTEXT OF "TRUE" PRICE REGULATION. (SHOOSHAN**  
10 **SURREBUTTAL, P. 17) IS THAT STATEMENT COMPLETE?**

11 A. No, it is not. The competitive zone statute was passed by the Oregon legislature  
12 in 1993 with the Oregon Public Utility Commission's support. At the time, U S  
13 WEST was regulated by the Oregon Commission under the terms of an  
14 alternative form of regulation that was similar in many aspects to both Staff's and  
15 Qwest's proposed price regulation plans. The Oregon Commission saw no  
16 reason why competitive zones were not compatible with the alternative form of  
17 regulation then in effect.<sup>10</sup>

18  
19 **Q. PLEASE COMMENT ON MR. SHOOSHAN'S CLAIM THAT QWEST'S**  
20 **PROPOSED PLAN IS NOTHING MORE THAN A PROPOSAL TO EXTEND**  
21 **REGULATORY LAG FOR 3 YEARS UNTIL QWEST CAN DECIDE TO GO**  
22 **BACK TO RATE OF RETURN REGULATION. (SHOOSHAN SURREBUTTAL,**  
23 **P. 17)**

24 A. It appears Mr. Shooshan claims Qwest's motive in proposing a price regulation  
25 plan is to lock in 3 years of regulatory lag. As I stated in my rebuttal testimony,

---

<sup>10</sup> It is also significant that from 1996 to 1999, U S WEST was ROR regulated by the Oregon Commission. Again, there was no incompatibility between the operation of competitive zones and ROR regulation.

1 the Company's Arizona intrastate earnings have dipped significantly. (Inouye  
2 Rebuttal, p. 14-15) Qwest's proposal for a 3-year initial term, plus 3-year  
3 renewal, is an attempt to find reasonable conditions to undertake price  
4 regulation. It would be irresponsible for the Company to undertake a 5-year plan  
5 without more significant increased revenues than it might take in a 3-year plan.  
6 As I stated earlier in this testimony, a 3-year initial term with a 3-year renewal  
7 makes it more likely that Qwest would move forward on price regulation in  
8 Arizona.

9  
10 ***Exogenous Factors***  
11

12 **Q. DO YOU AGREE WITH MR. SHOOSHAN'S CONCERN ABOUT THE**  
13 **STANDARD FOR EXOGENOUS STANDARDS?**

14 A. To the extent that Mr. Shooshan believes that some sort of "de minimis"  
15 threshold should be met before an exogenous factor is applied, he should define  
16 such an amount. I would point out that no exogenous price increases or  
17 decreases would occur without the Commission's approval.

18  
19 **Q. SHOULD EXOGENOUS FACTORS BE LIMITED TO TAX LAW,**  
20 **ACCOUNTING, AND REGULATORY CHANGES?**

21 A. No. The key is cost changes that are beyond the control of Qwest. I see no  
22 reason to limit the universe at this time to tax laws, accounting, and regulatory  
23 changes. I would agree, however, that those are the usual suspects for  
24 exogenous changes.

25  
26 **Q. DOES THIS CONCLUDE YOUR TESTMONY?**

27 A. Yes.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION OF  
U S WEST COMMUNICATIONS, INC., A COLORADO  
COLORADO CORPORATION, FOR A HEARING  
TO DETERMINE THE EARNINGS OF THE COMPANY,  
THE FAIR VALUE OF THE COMPANY FOR  
RATEMAKING PURPOSES, TO FIX A JUST AND  
REASONABLE RATE OF RETURN THEREON AND  
TO APPROVE RATE SCHEDULES DESIGNED TO  
DEVELOP SUCH RETURN**

)  
)  
)  
)  
) **DOCKET NO.**  
) **T-01051B-99-0105**  
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)  
)

**REJOINDER EXHIBITS OF**

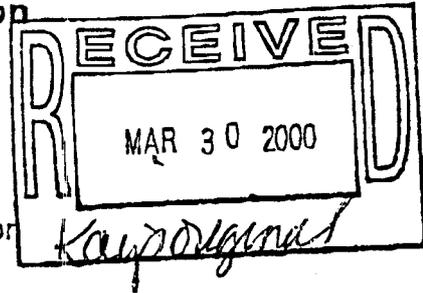
**CARL INOUYE**

**ON BEHALF OF**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**PUBLIC UTILITY COMMISSION**  
**Telecommunications Division**  
**Interoffice Correspondence**



**DATE:** March 28, 2000

**TO:** Commissioners Eachus, Smith, and Hamilton  
Through Dave Booth and Phil Nyegaard

**FROM:** Marlene Gorsuch *MEG*

**SUBJECT:** U S WEST Communications – Pricing Flexibility

The purpose of this report is to notify the Commission that the criteria have been met for U S WEST Communications to receive pricing flexibility, pursuant to ORS 759.050(5), in forty-nine additional telephone exchanges.

The Commission first set criteria for GTE Northwest (GTE) and U S WEST Communications (USWC) to receive pricing flexibility in Order No. 96-021, dockets CP 1, CP 14, and CP 15. The criteria have been repeated since January 1996 in orders by which the Commission granted authority to competitive providers to provide local exchange service in competition with the incumbents. USWC has met the criteria for pricing flexibility for switched service in several exchanges, as summarized here:

1. Many competitive local exchange carriers (CLEC's) have certificates of authority to provide service in all USWC exchanges.
2. USWC has filed a tariff for interim local number portability, and the Commission has approved the tariff.
3. Staff has notified the Commission that a mutual exchange of telephone traffic exists between USWC and a CLEC in each of several exchanges.

We use different criteria for dedicated transmission service, i.e. private line service. On several occasions, the Commission has granted to USWC, as well as GTE, Sprint/United, and CenturyTel, pricing flexibility for dedicated transmission throughout their service areas.

USWC advised the PUC staff by letter dated March 8, 2000, that a mutual exchange of traffic exists in forty-nine exchanges:

Albany	Grants Pass	Pendleton
Ashland	Hermiston	Phoenix/Talent
Astoria	Independence/Monmouth	Prineville
Athena/Weston	Jacksonville	Rainier
Baker	Jefferson	Redmond
Bend	Junction City	Rogue River
Blue River	Klamath Falls	Roseburg
Camp Sherman	Lapine	St. Helens
Central Point	Leaburg	Seaside
Corvallis	Lowell	Siletz
Cottage Grove	Madras	Sisters
Culver	Medford	Stanfield
Dallas	Milton-Freewater	Toledo
Falls City	Newport	Umatilla
Florence	Oakland/Sutherlin	Veneta
Gold Hill	Oakridge	Warrenton
		Woodburn/Hubbard

Staff contacted the competing CLECs: ATI, BG ENTERPRISES, FRONTIER (GLOBAL CROSSINGS), RIO COMMUNICATIONS, STERLING INTERNATIONAL (1-800-RECONEX), SUNRIVER TELCOM, TELNET, and UNITED COMMUNICATIONS. They confirmed USWC's information.

By this report staff notifies the Commission that a mutual exchange of traffic exists between USWC and an authorized CLEC in the above forty-nine exchanges. Therefore, USWC now gets pricing flexibility for switched service in those exchanges. No Commission action is required.

On the attached pages are shown the exchanges where USWC and GTE have pricing flexibility pursuant to ORS 759.050 and Order No. 96-021. There are now only seven exchanges where USWC does not have pricing flexibility: Cannon Beach, Harrisburg, Mapleton, Marcola, Sumpter, Walla Walla (Stateline), and Westport.

cc: Mike Weirich, Assistant Attorney General  
Don Mason, U S West Communications  
✓ Kay Barley, U S West Communications

## Pricing Flexibility

U S WEST Communications has pricing flexibility in the following exchanges pursuant to ORS 759.050 and Order No. 96-021, dockets CP 1, CP 14, and CP 15.

### U S WEST

Albany	Madras
Ashland	Medford
Astoria	Milton-Freewater
Athena/Weston	Newport
Baker	North Plains
Bend	Oak Grove/Milwaukie
Blue River	Oakland/Sutherlin
Burlington	Oakridge
Camp Sherman	Oregon City
Central Point	Pendleton
Corvallis	Phoenix/Talent
Cottage Grove	Portland
Culver	Prineville
Dallas	Rainier
Eugene/Springfield	Redmond
Falls City	Rogue River
Florence	Roseburg
Gold Hill	Salem
Grants Pass	St. Helens
Hermiston	Seaside
Independence/Monmouth	Siletz
Jacksonville	Sisters
Jefferson	Stanfield
Junction City	Toledo
Klamath Falls	Umatilla
Lake Oswego	Veneta
Lapine	Warrenton
Leaburg	Woodburn/Hubbard
Lowell	

March 28, 2000

## Pricing Flexibility

GTE Northwest has pricing flexibility in the following exchanges pursuant to ORS 759.050 and Order No. 96-021, dockets CP 1, CP 14, and CP 15.

### GTE Northwest

Bandon  
Beaverton  
Brookings  
Coos Bay  
Coquille  
Cove  
Elgin  
Enterprise  
Forest Grove  
Gold Beach  
Gresham  
Hillsboro  
Hoodland  
Imbler  
Joseph  
La Grande  
McMinnville  
Murphy/Provolt  
Newberg  
Scholls  
Sherwood  
Stafford (Wilsonville)  
Tigard  
Union  
Wallowa

March 28, 2000

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. ):

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
CARL INOUYE

ss

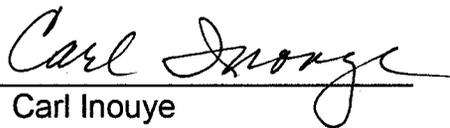
STATE OF WASHINGTON )  
)  
)

COUNTY OF KING )  
)

Carl Inouye, of lawful age being first duly sworn, depose and states:

1. My name is Carl Inouye. I am Lead Director – Financial Advocacy for Qwest Corporation in Seattle, Washington. I have caused to be filed written testimony and exhibit in support of Qwest in Docket No. T-01051B-99-105
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
\_\_\_\_\_  
Carl Inouye

SUBSCRIBED AND SWORN to before me this 14<sup>th</sup> day of September, 2000,  
2000.

  
\_\_\_\_\_  
Notary Public residing at  
Seattle, Washington.

My Commission Expires: 09/15/02

**ORIGINAL**

**RECEIVED**

**BEFORE THE**

**ARIZONA CORPORATION COMMISSION 2000 SEP 19 P 3:27**

**AZ CORP COMMISSION  
DOCUMENT CONTROL**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**DOCKET NO. T-01051B-99-0105**

**REJOINDER TESTIMONY OF**

**ANN KOEHLER-CHRISTENSEN**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF ANN KOEHLER-CHRISTENSEN**

**INDEX OF TESTIMONY**

**IDENTIFICATION OF WITNESS..... 1**

**PURPOSE OF TESTIMONY ..... 1**

**REJOINDER OF STAFF, RUCO AND THE DOD ..... 2**

**REJOINDER OF AT&T ..... 3**

**CONCLUSION..... 11**



1                   **REJOINDER OF STAFF, RUCO AND THE DOD**  
2

3   **Q.    WHAT IS THE AMOUNT OF IMPUTATION RECOMMENDED BY**  
4           **STAFF, RUCO AND THE DOD?**

5    A.    The imputation recommended is \$41.3 million. This imputation is based  
6           on the presumptive \$43 million less the fees paid to the Company by DEX  
7           for the listings and other services received.

8  
9   **Q.    HAS ANY EVIDENCE BEEN PROVIDED TO SHOW THAT \$41.3**  
10           **MILLION IS THE VALUE OF THE SERVICES RECEIVED BY THE**  
11           **COMPANY FROM DEX?**

12   A.    No. Mr. Larkin provides no evidence whatsoever. Mr. Brosch maintains  
13           that he has provided an analysis that demonstrates a value of greater than  
14           \$41.3 million that he claims is not based on DEX net income or any  
15           determination of rate of return. His "method" however has nothing to do  
16           with the value of services, it simply takes the presumptive \$43 million and  
17           increases it based on the growth of DEX's revenues and net income. Mr.  
18           Lee claims that "while the Commission must consider the fees and value  
19           of services received by Qwest from DEX, the basis for imputation is the  
20           value of the directory function transferred to DEX." He takes this position  
21           notwithstanding that it is directly contrary to the decision of the Arizona  
22           Appellate Court, which states:



1

2 **Q. IS THE TRANSFER OF THE YELLOW PAGES OPERATION AN ISSUE**  
3 **IN THIS STATE?**

4 A. No, it is not, although Dr. Selwyn has stated that no transfer of the Yellow  
5 Pages business has taken place. To support this claim he introduced a  
6 case from the state of Washington, which is irrelevant in Arizona. He  
7 relies on a Washington Commission Decision rather than on the 1996  
8 Arizona Court of Appeals Opinion. The Arizona Court of Appeals ruled:

9           The Commission unequivocally agreed in 1988 to accept  
10           the transfer of directory publication to an unregulated  
11           subsidiary. It is wholly inconsistent with this agreement to  
12           impute to U S West all of USWD's profits exceeding the  
13           rate of return USWD would have been permitted to receive  
14           had it remained regulated and to seek thereby for  
15           "ratepayers the same benefit from the directory publishing  
16           business as they had before the assets were transferred."  
17           By such a methodology the Commission in effect pretends  
18           that the transfer it previously accepted did not occur.  
19

20           Dr. Selwyn's testimony with respect to the transfer of the directory  
21           business and the profits of DEX should be disregarded because it  
22           altogether ignores the settlement agreement.

23

24 **Q. DOES DR. SELWYN PROVIDE ANY RATIONALE FOR CONTINUING**  
25 **TO RECOMMEND THAT ALL THE PROFITS OF DEX SHOULD BE**  
26 **USED AS THE IMPUTATION METHOD?**

1 A. Dr. Selwyn maintains that DEX is a monopoly and faces no competition.  
2 He disputes the competitive information I provided in my rebuttal  
3 testimony by addressing the number of directories distributed by the other  
4 publishers in Arizona. The existence or lack of competition is not part of  
5 the Settlement Agreement that controls the imputation level in Arizona.  
6 However, Dr. Selwyn has again incorrectly analyzed the level of  
7 competition based on his representation of distribution.

8

9 **Q. PLEASE EXPLAIN THE PROBLEM WITH DR. SELWYN'S**  
10 **REPRESENTATION OF THE NUMBER OF DIRECTORIES**  
11 **DISTRIBUTED.**

12 A. Dr. Selwyn fails to look at the individual directory markets. He claims the  
13 competitive impact of the other directory publishers is inconsequential  
14 without considering the impact of all the competitors or the impact on  
15 individual markets. In total DEX distributes approximately 60% of the  
16 directories distributed in Arizona. I have reviewed the Yellow Pages  
17 Publisher Association (YPPA) data provided by Dr. Selwyn as Attachment  
18 3 to his surrebuttal testimony by DEX directory and the circulation data  
19 tells a far different story.

20

1 In total DEX distributes approximately 60% of the directories distributed in  
2 Arizona. Of the 21 directories published by DEX in Arizona<sup>1</sup>, only three  
3 DEX directories have no direct competition. Based on distribution, these  
4 directories equate to approximately 4% of DEX's circulation. The data is  
5 as follows:

DEX Directory	DEX Dist.	Other Dist.	Competitive Directory	Publ.
1 Greater SW Valley	33,710	0	None	
2 Tucson Central	102,286	0	None	
3 Wickenburg	29,768	0	None	

7  
8 Seven of DEX's 21 Arizona directories compete with directories published  
9 by only one publisher, Phone Directories Company (PDC). DEX's  
10 circulation exceeds PDC's circulation in only two of these seven markets  
11 and on average DEX distributes about 47% of the directories in these  
12 markets. The data on these markets is as follows:

DEX Directory	DEX Dist.	Other Dist.	Competitive Directory	Publ.
1 Casa Grande	41,827	41,827	24,500 Casa Grande	PDC
			25,000 So Central Arizona	PDC
			<b>49,500</b>	
2 Clifton-Safford	17,436	33,000	Southeastern Arizona	PDC
3 Cochise County	75,526	75,526	33,000 Sierra Vista	PDC
			33,000 Southeastern Arizona	PDC
			<b>66,000</b>	
4 Globe	20,715	20,715	25,000 So Central Arizona	PDC
			25,000 Apache Junction	PDC
			<b>50,000</b>	
5 Payson	18,284	21,500	Payson	PDC
6 Winslow	13,591	38,000	NE Arizona-Holbrook	PDC
7 Yuma	102,999	65,000	Yuma Metro	PDC

<sup>1</sup> 14 of the 21 DEX directories in Arizona are published on behalf of Qwest. 7 of these cover

1 Four of DEX's directories each compete with directories published by two  
2 other publishers.<sup>2</sup> DEX distributes from 31% to 44% of the total directories  
3 in these markets.

4

DEX Directory	DEX Dist.	Other Dist.	Competitive Directory	Publ.
1 Nogales-Green Valley	37,031	21,500	Nogales-Santa Cruz	PDC
		25,415	Green Valley	SWG
	<b>37,031</b>	<b>46,915</b>		
2 Prescott	68,214	55,000	Prescott-Verde Valley	PDC
		52,000	Prescott & TriCity AW	JHZ
	<b>68,214</b>	<b>107,000</b>		
3 Tucson East	181,265	316,000	Tucson Regional	WPZ
		8,119	Sun City-Visto-Sdlbk	SWG
	<b>181,265</b>	<b>324,119</b>		
4 Tucson North-NW	153,639	316,000	Tucson Regional	WPZ
		25,000	So Central Arizona	PDC
	<b>153,639</b>	<b>341,000</b>		

5

6 Finally, the remaining seven directories published by DEX compete with  
7 multiple directories published by several different publishers.<sup>3</sup>

8

DEX Directory	DEX Dist.	Other Dist.	Competitive Directory	Publ.
1 East Valley	442,572	25,000	Apache Junction	PDC
		185,000	Mesa	NDC
		215,000	Tempe	NDC
		24,500	Casa Grande	PDC
		25,000	So Central Arizona	PDC
		37,370	Apache Junction	SD
		75,520	Chandler-Gilbert	SD
		115,000	Mesa	SD
		84,000	Tempe	SD
		34,736	Ahwatukee	SWG
	<b>442,572</b>	<b>796,126</b>		

areas to be sold in the rural exchange sales

<sup>2</sup> PDC is Phone Directories Company, SWG is Southwestern Bell Advertising Group, JHZ is J. H. Zerbey Newspapers, Inc., and WPZ is WorldPages.com

<sup>3</sup> SD is Southern Directory Co., WVA is West Vista Advertising Services of Texas, LMB is L. M. Berry & Co., and VZ is Verizon Information Services.

1

DEX Directory	DEX Dist.	Other Dist.	Competitive Directory	Publ.
<b>2 Flagstaff</b>	126,848		51,500 Flagstaff	PDC
			19,900 Page Lk Powell Kane	PDC
			38,000 NE Arizona-Holbrook	PDC
			36,300 Sedona Verde Valley	PDC
			80,000 Flagstaff-N Arizona	JHZ
			22,000 Page-Lake Powell	WVA
			<b>126,848</b>	<b>247,700</b>
<b>3 Greater NW Valley</b>	384,802		30,000 Carefree-Cave Creek	SD
			62,456 Sun City-Sun City West	SWG
			N/A CaveCreek-Crfree-Ant	NDC
			N/A Phoenix North	NDC
			N/A Bellaire-West Univ	SD
<b>384,802</b>	<b>92,456</b>			
<b>4 Mohave County</b>	105,516		142,697 Mohave County	LMB
			28,500 Kingman	PDC
			41,500 Lower Colorado River	PDC
			38,085 Parker	VZ
			<b>105,516</b>	<b>250,782</b>
<b>5 Phoenix</b>	1,336,405		25,000 Apache Junction	PDC
			185,000 Mesa	NDC
			215,000 Tempe	NDC
			165,000 Scottsdale C Phoenix	NDC
			60,000 Scottsdale North	NDC
			30,000 Carefree-Cave Creek	SD
			75,520 Chandler-Gilbert	SD
			12,000 Fountain Hills	SD
			115,000 Mesa	SD
			12,000 Paradise Valley	SD
			84,000 Tempe	SD
			34,736 Ahwatukee	SWG
			62,456 Sun City-Sun City West	SWG
			N/A CaveCreek-Crfree-Ant	NDC
			N/A Phoenix North	NDC
N/A Bellaire-West Univ	SD			
<b>1,336,405</b>	<b>1,050,712</b>			
<b>6 Scottsdale</b>	238,602		165,000 Scottsdale C Phoenix	NDC
			60,000 Scottsdale North	NDC
			30,000 Carefree-Cave Creek	SD
			12,000 Fountain Hills	SD
			12,000 Paradise Valley	SD
			N/A CaveCreek-Crfree-Ant	NDC
<b>238,602</b>	<b>279,000</b>			
<b>7 Tucson</b>	464,541		316,000 Tucson Regional	WPZ
			25,000 So Central Arizona	PDC
			8,119 Sun City-Visto-Sdlbk	SWG
<b>464,541</b>	<b>349,119</b>			

1

2 For the most part the competitive publishers publish directories that cover  
3 a smaller geographical area and distribute fewer copies, but this does not  
4 mean these directories present inconsequential competition, since the  
5 total market needs to be considered.

6

7 When viewed by directory market, DEX averages about 50% of the  
8 distribution in the Arizona markets in which DEX publishes directories.

9

DEX does not have a monopoly as Dr. Selwyn tries to portray.

10

11 **Q. WHAT ABOUT THE BENEFITS OF AFFILIATION DISCUSSED BY DR.**  
12 **SELWYN?**

13 A. As I explained previously, this is not relevant. In my rebuttal testimony I  
14 discussed the unfounded claims that DEX enjoys uncompensated benefits  
15 of affiliation. For the most part, these claims are based on a benefit  
16 gained from a common corporate name. It is not appropriate for the  
17 regulated company to be compensated by an affiliated company for this  
18 benefit, as the benefit is conferred by the parent company and not by the  
19 regulated company.

20

1 **Q. PLEASE EXPLAIN WHY AT&T WAS IN ERROR BY APPLYING THE**  
2 **REVENUE CONVERSION FACTOR TO DR. SELWYN'S PRE-TAX**  
3 **DIRECTORY PROFIT CALCULATION.**

4 A. A gross revenue conversion factor is designed to convert post-tax net  
5 income to pre-tax income or revenue. The Company provided the  
6 development of the factor in response to AT&T 11-094 Attachment A, file  
7 GAREX-MAY00.xls in tab GAR-S3. The factor is primarily developed to  
8 capture the taxes as well as the uncollectible portion of revenues<sup>4</sup> that  
9 represent the difference between net operating income and net revenues.

10

11 **Q. IS MS. GATELY CORRECT WHEN SHE SAYS IT IS NOT NECESSARY**  
12 **TO MAKE A DETERMINATION AS TO WHETHER THE REVENUE**  
13 **FACTOR APPLIES TO THIS OR NOT?**

14 A. I'm unclear of her intent at this part of her surrebuttal testimony.<sup>5</sup> I believe  
15 she is still addressing the Yellow Pages imputation issue, although at line  
16 21 she refers to it as the "imputed Directory Assistance revenues." The  
17 problem with this statement is that in order to include the directory  
18 imputation in such a composite calculation, it must be first be *reduced* to a  
19 net income number, if it is to be included in a composite gross up. It is  
20 incorrect to do it any other way.

---

<sup>4</sup> There are actually no uncollectibles associated with a revenue imputation such as the Yellow Pages imputation, however, this issue has never been challenged by the Company.

<sup>5</sup> Gately surrebuttal, page 14, line 20-26

1

2

## CONCLUSION

3

4 **Q. PLEASE SUMMARIZE YOUR REJOINDER TESTIMONY.**

5 A. Staff, RUCO and the DOD recommend an imputation of \$41.3 million  
6 based on the presumptive level of \$43 million less the \$1.7 million in fees  
7 received from DEX. Although they maintain that the value of the  
8 relationship is at least as great as this, they provide no evidence. My  
9 supplemental testimony is the only testimony in this case that provides  
10 evidence of the value of the fees and the services provided by DEX to  
11 Qwest as required by the Settlement Agreement and the Arizona Court of  
12 Appeals. AT&T, on the hand, advocates an inaccurate calculation of the  
13 profits of DEX, which has been clearly rejected by the Appellate Court,  
14 and further recommends adding in an additional 70% to cover taxes,  
15 although AT&T's witnesses acknowledge that their base number is a  
16 pretax amount. The Commission should reject AT&T's proposal outright as  
17 well as the adjustments set forth by the Staff, RUCO and DOD on this  
18 issue. DEX pays Qwest fees for the all the services it receives from  
19 Qwest and the Publishing Agreement between DEX and Qwest provides a  
20 large and appropriate value to the Arizona ratepayers. Arizona ratepayers  
21 benefit from the relationship between DEX and Qwest in the same way  
22 that ratepayers of other Local Exchange Carriers benefit from Publishing

1           Agreements between their LEC and the official publisher, whether that  
2           official publisher is DEX or some other publisher.

3

4   **Q.    DOES THIS CONCLUDE YOUR TESTIMONY?**

5   **A.    Yes, it does.**

6

7

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BEFORE THE

ARIZONA CORPORATION COMMISSION 2000 SEP 19 P 3 27

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )

DOCKET NO. T-01051B-99-0105

REJOINDER TESTIMONY OF

NANCY HELLER-HUGHES

QWEST CORPORATION

SEPTEMBER 19, 2000

**INDEX OF REJOINDER TESTIMONY OF**

**NANCY HELLER HUGHES**

**SUMMARY OF TESTIMONY** ..... i

**IDENTIFICATION OF WITNESS** ..... 1

**PURPOSE OF TESTIMONY** ..... 1

**RCNLD STUDY** ..... 2

## **SUMMARY OF TESTIMONY**

1. The Reproduction Cost New Less Depreciation (RCNLD) study filed by Qwest Corporation (Qwest) in this proceeding in Supplemental Exhibit NHH-1 was developed using the same methodology used in previous RCNLD studies which has been accepted with approval by the Arizona Corporation Commission.
2. The methodology used by Qwest to estimate the RCNLD value and the methodology proposed by Mr. Dunkel are both acceptable methodologies to use in calculating the RCNLD value of Qwest's Arizona plant in service.
3. Based on Mr. Dunkel's proposed methodology, with the corrections described in Ms. Hughes testimony, the total estimated RCNLD value of Qwest's Arizona plant in service as of December 31, 1999 is equal to \$2,723,688,605.

1

## IDENTIFICATION OF WITNESS

2

3 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

4 A. My name is Nancy Heller Hughes. I am a Senior Director in the Seattle office of  
5 R. W. Beck, Inc. My business address is 1001 Fourth Avenue, Suite 2500,  
6 Seattle, Washington 98154-1004.

7

8 **Q. ARE YOU THE SAME NANCY HELLER HUGHES THAT FILED DIRECT AND  
9 SUPPLEMENTAL TESTIMONY IN THIS PROCEEDING?**

10 A. Yes, I am. I have filed direct and supplemental testimony on behalf of  
11 U S WEST Communications, Inc. (now Qwest Corporation) in this proceeding.

12

13

## PURPOSE OF TESTIMONY

14 **Q. WHAT IS THE PURPOSE OF YOUR REJOINDER TESTIMONY?**

15 A. The purpose of my rejoinder testimony is to comment on the direct testimony of  
16 William Dunkel filed on behalf of Staff regarding the Reproduction Cost New  
17 Less Depreciation (RCNLD) value of Qwest's plant in service in Arizona as of  
18 December 31, 1999.

**RCNLD STUDY**

1

2 **Q. DID YOU PREPARE THE RCNLD STUDIES PREVIOUSLY FILED BY QWEST**  
3 **IN THIS CASE?**

4 A. Yes. The RCNLD studies were prepared under my direction.

5

6 **Q. WHAT COMMENTS DOES MR. DUNKEL HAVE REGARDING THE RCNLD**  
7 **STUDY AS OF DECEMBER 31, 1999 THAT WAS FILED WITH YOUR**  
8 **SUPPLEMENTAL TESTIMONY?**

9 A. Mr. Dunkel proposes three revisions to the RCNLD study:

10 1. One-half year should be added to the age of all plant vintages to reflect  
11 use of the mid-year convention, i.e., plant added during the year is  
12 assumed to be added at the mid-year.

13 2. The remaining life years should be calculated using the equal life group  
14 (ELG) procedure, not the vintage group (VG) procedure which was used  
15 in the RCNLD study.

16 3. The unit summation procedure should be used to calculate the "percent  
17 condition", not the average life procedure which was used in the RCNLD  
18 study.

19

20 **Q. REGARDING THE FIRST REVISION, DO YOU AGREE THAT THE AGE OF**  
21 **ALL THE PLANT VINTAGES SHOULD BE INCREASED BY ONE-HALF**  
22 **YEAR?**

1 A. Yes. In updating the RCNLD study to reflect the test year ended December 31,  
2 1999 (Supplemental Exhibit NHH-1) from the earlier RCNLD study filed in this  
3 case which reflected a June 30, 1998 test year, I neglected to reflect the mid-  
4 year convention. Under the mid-year convention, plant installed during the year  
5 is assumed to be installed at July 1. For example, plant installed during 1999 is  
6 assumed to have an average age of 0.5 year as of December 31, 1999. The  
7 effect of making this change to my RCNLD study (Supplemental Exhibit NHH-1)  
8 is to decrease the RCNLD value as of December 31, 1999 from \$3,558,480,937  
9 to \$3,462,036,296. (Please note that this value is a correction to the value  
10 indicated in Qwest's response to Staff data request WDA 34-023.) This  
11 represents less than a 3 percent decrease in the RCNLD value from the figure  
12 filed in my Supplemental Testimony.

13  
14 **Q. PLEASE COMMENT ON MR. DUNKEL'S OTHER PROPOSED CHANGES TO**  
15 **THE RCNLD STUDY.**

16 A. Mr. Dunkel is proposing changes to the methodology that has been used and  
17 approved by the Arizona Corporation Commission in rate cases since the early  
18 1970's. The RCNLD study filed by Qwest in this case was performed in  
19 accordance with the methodology that has been accepted by the Commission.  
20 The changes that Mr. Dunkel proposes reflect the use of equal life group  
21 depreciation methods rather than corrections to so-called "errors" in my RCNLD  
22 study.

23

1 **Q. WHAT METHOD OF DEPRECIATION IS REFLECTED IN QWEST'S RCNLD**  
2 **STUDY?**

3 A. The RCNLD study filed by Qwest reflects the use of the vintage group (VG)  
4 depreciation methods.

5  
6 **Q. IS USE OF THE EQUAL LIFE GROUP PROCEDURE IN THE RCNLD STUDY**  
7 **APPROPRIATE?**

8 A. Yes. Since the Commission confirmed the use of ELG depreciation earlier this  
9 year in Docket No. T-01051B-97-0689, it may be appropriate to reflect the use of  
10 ELG depreciation methods in calculating the RCNLD value in this or future rate  
11 cases.

12  
13 **Q. HAVE YOU RECALCULATED THE RCNLD VALUE USING THE**  
14 **METHODOLOGY PROPOSED BY MR. DUNKEL?**

15 A. Yes, I have. The detailed calculations are provided in Exhibit NHH-1 to my  
16 rejoinder testimony.

17  
18 **Q. DO YOU AGREE WITH THE RESULTS OF MR. DUNKEL'S ANALYSIS?**

19 A. No, I do not. Mr. Dunkel made an error in the life expectancies he used in his  
20 analysis.

21  
22 **Q. WHAT LIFE EXPECTANCIES DID YOU USE IN YOUR ANALYSIS IN EXHIBIT**  
23 **NHH-1 TO YOUR REJOINDER TESTIMONY?**

1 A. I used the remaining life years shown in the generation arrangement tables  
2 prepared by Qwest for each plant account which reflect the survivor curves and  
3 average service lives approved by the Commission this year in Decision No.  
4 62507. A copy of the generation arrangement table for Account 2232 – Circuit  
5 Digital was provided on pages 3 and 4 of Schedule WDA-11 of Mr. Dunkel's  
6 direct testimony. As shown on the table, the years 1983 through 1999 are noted  
7 with an asterisk indicating vintage years that are depreciated using ELG  
8 depreciation. The years 1982 and earlier are depreciated using VG depreciation.  
9 This is consistent with the Commission's Procedural Order dated January 7,  
10 2000 in Docket No. T-01051B-97-0689 which states that Qwest's depreciation  
11 rates shall be calculated using the ELG approach following Federal  
12 Communications Commission (FCC) rules and guidelines. The FCC approved  
13 the use of ELG depreciation for new plant additions beginning in 1981 over a  
14 three-year phase-in period.

15  
16 **Q. WHAT ERROR DID MR. DUNKEL MAKE IN THE LIFE EXPECTANICES?**

17 A. Mr. Dunkel incorrectly used the ELG remaining life years as the life expectancies  
18 for all vintage years. This is demonstrated on Schedule WDA-13 of Mr. Dunkel's  
19 direct testimony. This schedule shows Mr. Dunkel's calculation of the RCNLD  
20 value for Account 2232 – Circuit Digital. The life expectancies are shown in  
21 column G of the schedule. As shown, the life expectancies Mr. Dunkel used in  
22 Schedule WDA-13 for the years 1983 through 1999 match the remaining life  
23 years shown in the generation arrangement table for this account (see Schedule  
24 WDA-11, page 3, column E). However, the life expectancies shown in Schedule

1 WDA-13 for the years 1982 and prior do not match the remaining life years  
2 shown in the generation arrangement table. The remaining life years shown in  
3 the generation arrangement table for the years 1982 and prior are based on the  
4 VG depreciation method. Mr. Dunkel incorrectly used the ELG remaining life  
5 years for all the vintage years when he should have applied the ELG remaining  
6 life years only to the years 1983 through 1999. The life expectancies for the  
7 years 1982 and period should be equal to the VG remaining life years.

8  
9 **Q. WHAT IS THE EFFECT OF MR. DUNKEL'S ERROR IN THE LIFE**  
10 **EXPECTANICES?**

11 A. The effect of incorrectly using the ELG remaining life years (instead of using the  
12 VG remaining life years) for the earlier vintages understates the life expectancy,  
13 understates the condition percent and understates the RCNLD value.

14  
15 **Q. PLEASE COMMENT ABOUT THE METHOD MR. DUNKEL USED TO**  
16 **CALCULATE THE "PERCENT CONDITION" IN SCHEDULE WDA-13?**

17 A. The method Mr. Dunkel used to calculate the "percent condition" is based on the  
18 unit summation procedure and is consistent with the use of ELG depreciation  
19 methods. The method I used to calculate the condition percent in the RCNLD  
20 study is based on the average life procedure.

21  
22 **Q. EARLIER YOU STATED THAT YOU HAVE RECALCULATED THE RCNLD**  
23 **VALUE USING THE METHODOLOGY PROPOSED BY MR. DUNKEL. WHAT**  
24 **ARE THE RESULTS OF YOUR ANALYSIS?**

1 A. Using the methodology proposed by Mr. Dunkel, including the correction to the  
2 life expectancies described above, the total estimated RCN and RCNLD values  
3 of the Arizona plant in service of Qwest as of December 31, 1999 are equal to:

4	Reproduction Cost New .....	\$6,361,585,948
5	Reproduction Cost New	
6	Less Depreciation .....	\$2,723,688,605
7	Condition Percent.....	43%

8 Detailed work papers showing the calculation of the RCNLD value based on Mr.  
9 Dunkel's proposed methodology are provided in Exhibit NHH-1 to this testimony

10

11 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

12 A. Yes, it does.

**BEFORE THE  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC. A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY FOR RATEMAKING )  
PURPOSES, TO FIX A JUST AND )  
REASONABLE RATE OF RETURN THEREON )  
AND TO APPROVE RATE SCHEDULES )**

**DOCKET NO. T-01051B-99-0105**

**EXHIBITS OF**

**NANCY HELLER-HUGHES**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

Table 1

*Based on Staff Witness Dunkel Methodology*

US WEST COMMUNICATIONS, INC.

REPRODUCTION COST NEW LESS DEPRECIATION  
TELEPHONE PLANT IN SERVICE

As of December 31, 1999

	Original Cost	Reproduction Cost New	Depreciation	Reproduction Cost New Less Depreciation
<b>Vintage Plant (1)</b>	\$4,890,129,675	\$6,257,477,341	\$3,604,587,672	\$2,652,889,669
Land	10,221,552	10,221,552	0	10,221,552
Artwork	207,237	207,237	0	207,237
<b>Embedded Plant (2)</b>				
COE Accounts	0	0	0	0
Other Plant Accounts	22,074,120	16,276,086	8,464,245	7,811,841
Subtotal Embedded Plant	22,074,120	16,276,086	8,464,245	7,811,841
<b>Unregulated and Other Plant (3)</b>	77,403,732	77,403,732	24,845,426	52,558,306
<b>Total Arizona Plant</b>	\$5,000,036,315	\$6,361,585,948	\$3,637,897,343	\$2,723,688,605

- 
- (1) See Table 2  
(2) See Table 3  
(3) See Table 4

Table 2

*Based on Staff Witness Dunkel Methodology*

US WEST COMMUNICATIONS, INC.

REPRODUCTION COST NEW LESS DEPRECIATION  
VINTAGE PLANT

As of December 31, 1999

Account	Description	Original Cost 12/31/99	Telephone Plant Translator	Reproduction Cost New	Condition Percent	Reproduction Cost New Less Depreciation
2112	Motor Vehicles	\$67,008,716	1.079	\$72,326,913	38.2%	\$27,624,257
2114	Special Purpose Vehicles	25,794	1.219	31,447	44.7%	14,058
2115	Garage Work Equip	1,356,323	1.239	1,680,681	53.3%	895,506
2116	Other Work Equip	22,416,411	1.168	26,177,888	45.0%	11,773,969
2121	Buildings	162,763,559	2.059	335,131,472	54.0%	181,105,878
2122	Furniture	1,703,616	1.122	1,910,709	57.3%	1,094,857
2123	Company Comm Equip	6,944,455	0.957	6,646,073	29.1%	1,933,570
2124	Gen Purpose Computer	112,016,697	0.469	52,564,359	45.7%	24,036,462
2211	Analog SW Equip	138,599,056	1.206	167,207,907	68.1%	113,797,777
2212	Digital SW Equip	819,225,291	0.987	808,935,651	53.2%	430,587,166
2220	Operator Systems	7,080,061	1.021	7,228,640	46.9%	3,387,738
2231	Radio Systems	35,323,150	1.016	35,891,456	34.3%	12,317,495
2232	Circuit Equip	1,185,447,017	0.993	1,177,608,648	51.2%	602,541,859
2362	Other Term Equip	48,461,067	1.061	51,412,073	56.3%	28,923,865
2411	Pole Lines	46,616,809	4.341	202,360,271	44.5%	89,984,269
2421	Aerial Cable	170,704,495	1.723	294,160,265	24.1%	70,909,699
2422	Underground Cable	435,295,207	1.218	530,303,739	26.0%	137,653,136
2423	Buried Cable	1,273,669,392	1.352	1,722,089,520	33.4%	574,602,845
2424	Sub Cable	2,572	1.256	3,232	2.6%	85
2426	Intra Bldg Cable	41,603,544	1.825	75,914,620	24.6%	18,681,703
2431	Aerial Wire	8,798,956	1.346	11,843,641	40.0%	4,735,781
2441	Conduit Systems	305,067,487	2.216	676,048,139	46.8%	316,287,695
	Total Vintage Plant	\$4,890,129,675		\$6,257,477,341		\$2,652,889,669

Table 3

*Based on Staff Witness Dunkel Methodology*

US WEST COMMUNICATIONS, INC.

REPRODUCTION COST NEW LESS DEPRECIATION  
EMBEDDED PLANT

As of December 31, 1999

Account	Sub Code	Description	Original Cost 12/31/99	Telephone Plant Translator	Reproduction Cost New	Condition Percent	Reproduction Cost New Less Depreciation
2115	1264c	Garage Work Equipment	37,512	1.257	47,151	100.00%	47,151
2116	1564c	Other Work Equipment	4,740,516	1.205	5,712,893	86.42%	4,937,094
2122	2161c	Furniture	467,604	1.210	565,895	70.89%	401,167
2123.1	2261c	Office Equipment	675,540	1.021	689,435	46.38%	319,753
2123.2	124c, 114c	Comp Comm Equip	9,419,400	0.723	6,806,585	22.25%	1,514,488
2124	1361c	General Purpose Computers	6,733,548	0.364	2,454,127	24.13%	592,188
		Total Embedded Plant	\$22,074,120	0.737	\$16,276,086	48.00%	\$7,811,841

Table 4

*Based on Staff Witness Dunkel Methodology*

US WEST COMMUNICATIONS, INC.

REPRODUCTION COST NEW LESS DEPRECIATION  
NONREGULATED AND OTHER ACCOUNTS

As of December 31, 1999

Account	Sub Codes	Description	Original Cost 12/31/99	Telephone Plant Translator	Reproduction Cost New	Condition Percent	Reproduction Cost New Less Depreciation
2112	9464c	Motor Vehicles	\$1,547,495	1.000	\$1,547,495	79.02%	\$1,222,885
2124	6361c	General Purpose Computers	6,821	1.000	6,821	90.75%	6,190
2212	5377c, 6377c, 9007c, 9277c, 9577c	Digital Electronic Switching	19,764,232	1.000	19,764,232	51.97%	10,270,807
2231	367c	Radio Systems	216,210	1.000	216,210	83.33%	180,175
2232	6257c, 9057c	Circuit Equipment	12,391,098	1.000	12,391,098	86.05%	10,662,581
2311	6048c, 9128c	Station Apparatus	25,501,769	1.000	25,501,769	89.96%	22,942,052
2351	9188c, 9288c, 9488c, 9688c, 9788c, 9988c	Public Tel. Term. Equip.	17,969,238	1.000	17,969,238	40.44%	7,266,747
2422	685c	Underground Cable	3,752	1.000	3,752	100.00%	3,752
2423	645c, 6845c	Buried Cable	3,117	1.000	3,117	100.00%	3,117
		Total Nonregulated Plant	\$77,403,732		\$77,403,732	67.90%	\$52,558,306

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Motor Vehicles  
Plant Sub-Account: Passenger Cars  
Index Number: 2112  
Field Code: MVA  
Survivor Curve: L3  
Average Service Life: 8.6

Year of Placing	Original Cost as of 12/31/99	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/99	Life Expectancy When New	Life Expectancy 12/31/99	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1984	34,255	92.0	1.268	43,449	15.50	8.60	1.03	6.23%	2,707
1985	9,585	94.0	1.241	11,894	14.50	8.60	1.22	7.76%	923
1986	72,649	96.5	1.210	87,879	13.50	8.60	1.43	9.58%	8,419
1987	243,615	98.8	1.182	287,862	12.50	8.60	1.64	11.60%	33,392
1988	689,909	100.0	1.167	805,124	11.50	8.60	1.85	13.86%	111,590
1989	682,880	102.7	1.136	775,661	10.50	8.60	2.04	16.27%	126,200
1990	334,394	104.5	1.117	373,400	9.50	8.60	2.18	18.66%	69,676
1991	229,918	108.0	1.081	248,537	8.50	8.60	2.28	21.15%	52,566
1992	17,077	110.4	1.057	18,046	7.50	8.60	2.40	24.24%	4,374
1993	0	113.2	1.031	0	6.50	8.60	0.00	0.00%	0
1994	0	116.2	1.004	0	5.50	8.60	0.00	0.00%	0
1995	0	117.6	0.992	0	4.50	8.60	0.00	0.00%	0
1996	0	118.6	0.984	0	3.50	8.60	0.00	0.00%	0
1997	0	117.3	0.995	0	2.50	8.60	0.00	0.00%	0
1998	0	116.2	1.004	0	1.50	8.60	0.00	0.00%	0
1999	0	116.7	1.000	0	0.50	8.60	0.00	0.00%	0
	2,314,282		1.146	2,651,851				15.46%	409,847

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Motor Vehicles  
Plant Sub-Account: Light Trucks  
Index Number: 2112  
Field Code: MVB  
Survivor Curve: L3  
Average Service Life: 8.6

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1980	10,441	73.4	1.590	16,600	19.50	8.60	0.50	2.50%	415
1981	0	83.6	1.396	0	18.50	8.60	0.00	0.00%	0
1982	20,244	88.4	1.320	26,725	17.50	8.60	0.70	3.85%	1,029
1983	148,606	90.4	1.291	191,840	16.50	8.60	0.85	4.90%	9,400
1984	1,787,285	92.0	1.268	2,267,132	15.50	8.60	1.03	6.23%	141,242
1985	49,118	94.0	1.241	60,979	14.50	8.60	1.22	7.76%	4,732
1986	97,499	96.5	1.209	117,908	13.50	8.60	1.43	9.58%	11,296
1987	649,079	98.8	1.181	766,675	12.50	8.60	1.64	11.60%	88,934
1988	4,122,139	100.0	1.167	4,810,536	11.50	8.60	1.85	13.86%	666,740
1989	6,012,363	102.7	1.136	6,831,965	10.50	8.60	2.04	16.27%	1,111,561
1990	4,585,754	104.5	1.117	5,121,124	9.50	8.60	2.18	18.66%	955,602
1991	5,781,578	108.0	1.081	6,247,316	8.50	8.60	2.28	21.15%	1,321,307
1992	4,383,380	110.4	1.057	4,633,519	7.50	8.60	2.40	24.24%	1,123,165
1993	4,462,088	113.2	1.031	4,600,050	6.50	8.60	2.62	28.73%	1,321,594
1994	2,281,980	116.2	1.004	2,291,799	5.50	8.60	3.03	35.52%	814,047
1995	281,045	117.6	0.992	278,894	4.50	8.60	3.63	44.65%	124,526
1996	5,438,004	118.6	0.984	5,350,886	3.50	8.60	4.38	55.58%	2,974,022
1997	3,289,100	117.3	0.995	3,272,276	2.50	8.60	5.20	67.53%	2,209,768
1998	4,283,235	116.2	1.004	4,301,665	1.50	8.60	6.10	80.26%	3,452,517
1999	10,820,302	116.7	1.000	10,820,302	0.50	8.60	7.08	93.40%	10,106,162
	<u>58,503,240</u>		<u>1.060</u>	<u>62,008,193</u>				<u>42.64%</u>	<u>26,438,060</u>

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Motor Vehicles  
Plant Sub-Account: Heavy Trucks  
Index Number: 2112  
Field Code: MVC  
Survivor Curve: L3  
Average Service Life: 8.6

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1980	167,307	73.4	1.590	266,004	19.50	8.60	0.50	2.50%	6,650
1981	768,571	83.6	1.396	1,072,874	18.50	8.60	0.57	2.99%	32,079
1982	710,235	88.4	1.320	937,607	17.50	8.60	0.70	3.85%	36,098
1983	1,275,965	90.4	1.291	1,647,180	16.50	8.60	0.85	4.90%	80,712
1984	1,054,158	92.0	1.268	1,337,177	15.50	8.60	1.03	6.23%	83,306
1985	211,991	94.0	1.241	263,185	14.50	8.60	1.22	7.76%	20,423
1986	0	96.5	1.209	0	13.50	8.60	0.00	0.00%	0
1987	125,275	98.8	1.181	147,972	12.50	8.60	1.64	11.60%	17,165
1988	115,878	100.0	1.167	135,230	11.50	8.60	1.85	13.86%	18,743
1989	39,621	102.7	1.136	45,022	10.50	8.60	2.04	16.27%	7,325
1990	350,956	104.5	1.117	391,929	9.50	8.60	2.18	18.66%	73,134
1991	157,139	108.0	1.081	169,797	8.50	8.60	2.28	21.15%	35,912
1992	186,537	110.4	1.057	197,182	7.50	8.60	2.40	24.24%	47,797
1993	894,132	113.2	1.031	921,777	6.50	8.60	2.62	28.73%	264,827
1994	118,627	116.2	1.004	119,137	5.50	8.60	3.03	35.52%	42,318
1995	5,702	117.6	0.992	5,658	4.50	8.60	3.63	44.65%	2,526
1996	0	118.6	0.984	0	3.50	8.60	0.00	0.00%	0
1997	0	117.3	0.995	0	2.50	8.60	0.00	0.00%	0
1998	9,100	116.2	1.004	9,139	1.50	8.60	6.10	80.26%	7,335
1999	0	116.7	1.000	0	0.50	8.60	0.00	0.00%	0
	6,191,194		1.238	7,666,870				10.13%	776,349

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Special Purpose Vehicles  
Plant Sub-Account: Special Purpose Vehicles  
Index Number: 2114  
Field Code: SPZ  
Survivor Curve: S6  
Average Service Life: 16.1

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1975	8	48.2	2.863	23	24.50	16.10	0.50	2.00%	0
1976	14	51.7	2.669	37	23.50	16.10	0.50	2.08%	1
1977	55	55.6	2.482	137	22.50	16.10	0.50	2.17%	3
1978	193	60.5	2.281	440	21.50	16.10	0.50	2.27%	10
1979	258	66.5	2.075	535	20.50	16.10	0.50	2.38%	13
1980	330	75.2	1.835	606	19.50	16.10	0.54	2.69%	16
1981	642	83.4	1.655	1,062	18.50	16.10	0.60	3.14%	33
1982	609	89.4	1.544	940	17.50	16.10	0.71	3.90%	37
1983	1,062	91.5	1.508	1,602	16.50	16.10	0.91	5.23%	84
1984	1,191	92.8	1.487	1,771	15.50	16.10	1.26	7.52%	133
1985	697	94.6	1.459	1,017	14.50	16.10	1.84	11.26%	114
1986	361	95.4	1.447	522	13.50	16.10	2.65	16.41%	86
1987	297	97.4	1.417	421	12.50	16.10	3.61	22.41%	94
1988	830	100.0	1.380	1,145	11.50	16.10	4.60	28.57%	327
1989	1,704	105.7	1.306	2,225	10.50	16.10	5.60	34.78%	774
1990	61	112.1	1.231	75	9.50	16.10	6.60	40.99%	31
1991	512	118.0	1.169	599	8.50	16.10	7.60	47.20%	283
1992	162	122.4	1.127	183	7.50	16.10	8.60	53.42%	98
1993	0	124.7	1.107	0	6.50	16.10	0.00	0.00%	0
1994	16,808	128.1	1.077	18,107	5.50	16.10	10.60	65.84%	11,922
1995	0	132.0	1.045	0	4.50	16.10	0.00	0.00%	0
1996	0	135.1	1.021	0	3.50	16.10	0.00	0.00%	0
1997	0	136.5	1.011	0	2.50	16.10	0.00	0.00%	0
1998	0	138.1	0.999	0	1.50	16.10	0.00	0.00%	0
1999	0	138.0	1.000	0	0.50	16.10	0.00	0.00%	0
	25,794		1,219	31,447				44.71%	14,058

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Garage Work Equipment  
Plant Sub-Account: Garage Work Equipment  
Index Number: 2115  
Field Code: GWZ  
Survivor Curve: L0  
Average Service Life: 13.7

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1975	213	48.2	2.863	610	24.50	13.70	5.20	17.51%	107
1976	455	51.7	2.669	1,215	23.50	13.70	5.41	18.71%	227
1977	1,991	55.6	2.482	4,942	22.50	13.70	5.63	20.01%	989
1978	8,274	60.5	2.281	18,873	21.50	13.70	5.85	21.39%	4,037
1979	12,554	66.5	2.075	26,052	20.50	13.70	6.08	22.87%	5,958
1980	17,913	75.2	1.835	32,872	19.50	13.70	6.32	24.48%	8,047
1981	38,218	83.4	1.655	63,238	18.50	13.70	6.57	26.21%	16,575
1982	39,105	89.4	1.544	60,363	17.50	13.70	6.82	28.04%	16,926
1983	72,807	91.5	1.508	109,807	16.50	13.70	7.09	30.06%	33,008
1984	86,174	92.8	1.487	128,147	15.50	13.70	7.36	32.20%	41,263
1985	52,754	94.6	1.459	76,956	14.50	13.70	7.64	34.51%	26,558
1986	28,365	95.4	1.447	41,031	13.50	13.70	7.94	37.03%	15,194
1987	24,091	97.4	1.417	34,133	12.50	13.70	8.24	39.73%	13,561
1988	69,246	100.0	1.380	95,559	11.50	13.70	8.55	42.64%	40,747
1989	145,582	105.7	1.306	190,069	10.50	13.70	8.88	45.82%	87,090
1990	5,278	112.1	1.231	6,497	9.50	13.70	9.22	49.25%	3,200
1991	45,296	118.0	1.169	52,973	8.50	13.70	9.57	52.96%	28,055
1992	11,612	122.4	1.127	13,092	7.50	13.70	9.93	56.97%	7,458
1993	46,705	124.7	1.107	51,686	6.50	13.70	10.31	61.33%	31,699
1994	166,895	128.1	1.077	179,793	5.50	13.70	10.70	66.05%	118,753
1995	127,154	132.0	1.045	132,934	4.50	13.70	11.12	71.19%	94,636
1996	127,561	135.1	1.021	130,299	3.50	13.70	11.58	76.79%	100,057
1997	134,101	136.5	1.011	135,575	2.50	13.70	12.08	82.85%	112,324
1998	21,800	138.1	0.999	21,784	1.50	13.70	12.64	89.39%	19,473
1999	72,179	138.0	1.000	72,179	0.50	13.70	13.30	96.38%	69,566
	<u>1,356,323</u>		<u>1.239</u>	<u>1,680,681</u>				<u>53.28%</u>	<u>895,506</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Other Work Equipment  
Plant Sub-Account: Other Work Equipment  
Index Number: 2116  
Field Code: OWZ  
Survivor Curve: L4  
Average Service Life: 11.5

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1963	10	23.1	5.662	57	36.50	11.50	0.50	1.35%	1
1964	52	23.7	5.519	287	35.50	11.50	0.50	1.39%	4
1965	155	24.3	5.383	834	34.50	11.50	0.50	1.43%	12
1966	245	25.1	5.211	1,277	33.50	11.50	0.50	1.47%	19
1967	1,060	26.0	5.031	5,333	32.50	11.50	0.50	1.52%	81
1968	1,160	27.5	4.756	5,517	31.50	11.50	0.50	1.56%	86
1969	4,262	28.7	4.557	19,424	30.50	11.50	0.50	1.61%	313
1970	11,085	30.0	4.360	48,331	29.50	11.50	0.50	1.67%	807
1971	7,388	31.6	4.139	30,581	28.50	11.50	0.50	1.72%	526
1972	13,753	32.7	4.000	55,012	27.50	11.50	0.50	1.79%	985
1973	14,919	34.0	3.847	57,394	26.50	11.50	0.50	1.85%	1,062
1974	25,885	39.6	3.303	85,499	25.50	11.50	0.50	1.92%	1,642
1975	18,224	48.2	2.714	49,454	24.50	11.50	0.50	2.00%	989
1976	18,069	51.7	2.530	45,714	23.50	11.50	0.50	2.08%	951
1977	37,807	55.6	2.353	88,942	22.50	11.50	0.62	2.68%	2,384
1978	94,521	60.5	2.162	204,353	21.50	11.50	0.69	3.11%	6,355
1979	96,869	66.5	1.967	190,533	20.50	11.50	0.78	3.67%	6,993
1980	115,658	75.2	1.739	201,171	19.50	11.50	0.90	4.41%	8,872
1981	220,977	83.4	1.568	346,568	18.50	11.50	1.04	5.32%	18,437
1982	231,732	89.4	1.463	339,044	17.50	11.50	1.20	6.42%	21,767
1983	460,273	91.5	1.430	657,964	16.50	11.50	1.38	7.72%	50,795
1984	597,312	92.8	1.409	841,901	15.50	11.50	1.57	9.20%	77,455
1985	402,706	94.6	1.383	556,807	14.50	11.50	1.79	10.99%	61,193
1986	236,602	95.4	1.371	324,398	13.50	11.50	1.99	12.85%	41,685
1987	684,041	97.4	1.343	918,609	12.50	11.50	2.16	14.73%	135,311
1988	1,350,624	100.0	1.308	1,766,616	11.50	11.50	2.29	16.61%	293,435
1989	1,218,993	104.8	1.248	1,521,415	10.50	11.50	2.52	19.35%	294,394
1990	863,283	108.8	1.202	1,037,844	9.50	11.50	2.93	23.57%	244,620
1991	1,324,054	112.0	1.168	1,546,306	8.50	11.50	3.56	29.52%	456,470
1992	3,017,109	115.1	1.136	3,428,652	7.50	11.50	4.32	36.55%	1,253,172
1993	1,107,763	118.1	1.108	1,226,887	6.50	11.50	5.15	44.21%	542,407
1994	1,617,552	119.6	1.094	1,769,028	5.50	11.50	6.05	52.38%	926,617
1995	553,437	122.3	1.070	591,902	4.50	11.50	7.01	60.90%	360,468
1996	1,707,641	125.0	1.046	1,786,876	3.50	11.50	8.00	69.57%	1,243,129
1997	2,273,826	127.2	1.028	2,338,180	2.50	11.50	9.00	78.26%	1,829,859
1998	235,521	129.8	1.008	237,335	1.50	11.50	10.00	86.96%	206,387
1999	3,851,843	130.8	1.000	3,851,843	0.50	11.50	11.00	95.65%	3,684,288
	22,416,411		1.168	26,177,888				44.98%	11,773,969

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buildings  
Plant Sub-Account: Large Buildings  
Index Number: 2121  
Field Code: BUA  
Survivor Curve: R1  
Average Service Life: 43

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	25,540	11.9	10.880	277,865	74.50	43.00	3.85	4.91%	13,643
1926	0	11.9	10.880	0	73.50	43.00	0.00	0.00%	0
1927	0	11.9	10.880	0	72.50	43.00	0.00	0.00%	0
1928	49,465	11.9	10.880	538,160	71.50	43.00	4.74	6.22%	33,474
1929	0	11.9	10.880	0	70.50	43.00	0.00	0.00%	0
1930	9,600	11.9	10.880	104,444	69.50	43.00	5.36	7.16%	7,478
1931	0	11.9	10.880	0	68.50	43.00	0.00	0.00%	0
1932	1,084	11.9	10.880	11,793	67.50	43.00	6.00	8.16%	962
1933	0	11.9	10.880	0	66.50	43.00	0.00	0.00%	0
1934	0	11.9	10.880	0	65.50	43.00	0.00	0.00%	0
1935	0	11.9	10.880	0	64.50	43.00	0.00	0.00%	0
1936	0	11.9	10.880	0	63.50	43.00	0.00	0.00%	0
1937	0	11.9	10.880	0	62.50	43.00	0.00	0.00%	0
1938	4,200	11.9	10.880	45,694	61.50	43.00	8.05	11.57%	5,287
1939	0	11.9	10.880	0	60.50	43.00	0.00	0.00%	0
1940	0	11.9	10.880	0	59.50	43.00	0.00	0.00%	0
1941	0	11.9	10.880	0	58.50	43.00	0.00	0.00%	0
1942	739	11.9	10.880	8,040	57.50	43.00	9.53	14.22%	1,143
1943	3,148	11.9	10.880	34,249	56.50	43.00	9.91	14.92%	5,110
1944	0	11.9	10.880	0	55.50	43.00	0.00	0.00%	0
1945	0	11.9	10.880	0	54.50	43.00	0.00	0.00%	0
1946	0	11.9	10.880	0	53.50	43.00	0.00	0.00%	0
1947	92,249	13.6	9.578	883,540	52.50	43.00	11.52	17.99%	158,949
1948	286,594	14.8	8.755	2,509,041	51.50	43.00	11.94	18.82%	472,201
1949	564,972	15.4	8.457	4,778,171	50.50	43.00	12.37	19.68%	940,344
1950	58,142	15.5	8.363	486,223	49.50	43.00	12.80	20.55%	99,919
1951	170,514	16.5	7.892	1,345,620	48.50	43.00	13.24	21.44%	288,501
1952	266,690	17.1	7.597	2,026,121	47.50	43.00	13.69	22.37%	453,243
1953	293,536	17.6	7.397	2,171,198	46.50	43.00	14.14	23.32%	506,323
1954	173,825	18.0	7.206	1,252,658	45.50	43.00	14.60	24.29%	304,271
1955	382,229	18.6	7.004	2,677,036	44.50	43.00	15.07	25.30%	677,290
1956	455,020	19.7	6.611	3,008,233	43.50	43.00	15.55	26.33%	792,068
1957	1,015,867	20.2	6.440	6,542,417	42.50	43.00	16.04	27.40%	1,792,622
1958	427,224	20.7	6.278	2,682,057	41.50	43.00	16.53	28.49%	764,118
1959	698,206	21.1	6.174	4,310,797	40.50	43.00	17.03	29.60%	1,275,996
1960	1,799,852	21.2	6.123	11,021,389	39.50	43.00	17.54	30.75%	3,389,077
1961	1,680,305	21.3	6.107	10,261,307	38.50	43.00	18.06	31.93%	3,276,435
1962	241,540	21.5	6.041	1,459,136	37.50	43.00	18.59	33.14%	483,558
1963	739,092	22.0	5.898	4,359,087	36.50	43.00	19.12	34.38%	1,498,654
1964	913,445	22.7	5.732	5,235,839	35.50	43.00	19.66	35.64%	1,866,053
1965	172,505	23.4	5.561	959,350	34.50	43.00	20.22	36.95%	354,480
1966	267,795	24.3	5.349	1,432,416	33.50	43.00	20.77	38.27%	548,185

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buildings  
Plant Sub-Account: Large Buildings  
Index Number: 2121  
Field Code: BUA  
Survivor Curve: R1  
Average Service Life: 43

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	409,895	25.5	5.105	2,092,612	32.50	43.00	21.34	39.64%	829,511
1968	764,279	26.8	4.851	3,707,580	31.50	43.00	21.91	41.02%	1,520,849
1969	772,512	28.5	4.555	3,519,012	30.50	43.00	22.50	42.45%	1,493,821
1970	1,827,916	31.1	4.181	7,643,144	29.50	43.00	23.09	43.91%	3,356,105
1971	2,850,678	33.8	3.844	10,958,730	28.50	43.00	23.69	45.39%	4,974,168
1972	4,400,876	36.7	3.541	15,581,743	27.50	43.00	24.29	46.90%	7,307,837
1973	5,358,582	39.4	3.296	17,661,256	26.50	43.00	24.90	48.44%	8,555,112
1974	1,432,712	45.1	2.881	4,127,242	25.50	43.00	25.52	50.02%	2,064,446
1975	1,731,721	50.9	2.553	4,420,425	24.50	43.00	26.15	51.63%	2,282,265
1976	265,869	54.2	2.397	637,289	23.50	43.00	26.78	53.26%	339,420
1977	1,601,227	58.0	2.241	3,588,670	22.50	43.00	27.42	54.93%	1,971,256
1978	1,175,586	62.8	2.071	2,435,049	21.50	43.00	28.07	56.63%	1,378,968
1979	2,877,870	67.7	1.919	5,522,159	20.50	43.00	28.72	58.35%	3,222,180
1980	2,053,406	74.3	1.750	3,592,579	19.50	43.00	29.37	60.10%	2,159,140
1981	3,955,108	81.3	1.600	6,327,044	18.50	43.00	30.03	61.88%	3,915,175
1982	5,472,397	87.3	1.489	8,149,326	17.50	43.00	30.70	63.69%	5,190,306
1983	1,685,106	90.1	1.443	2,431,848	16.50	43.00	24.91	60.15%	1,462,756
1984	3,590,741	91.2	1.426	5,119,319	15.50	43.00	25.24	61.95%	3,171,418
1985	11,751,297	92.6	1.405	16,506,079	14.50	43.00	25.56	63.80%	10,530,878
1986	4,559,977	96.1	1.353	6,171,389	13.50	43.00	25.86	65.70%	4,054,603
1987	2,691,571	97.4	1.335	3,592,822	12.50	43.00	26.13	67.64%	2,430,185
1988	6,165,657	100.0	1.300	8,015,354	11.50	43.00	26.38	69.64%	5,581,893
1989	5,181,373	100.5	1.294	6,704,673	10.50	43.00	26.59	71.69%	4,806,580
1990	4,108,193	102.9	1.263	5,190,125	9.50	43.00	26.75	73.79%	3,829,793
1991	3,782,035	105.6	1.231	4,654,748	8.50	43.00	26.88	75.98%	3,536,678
1992	5,221,571	108.9	1.194	6,233,280	7.50	43.00	26.95	78.23%	4,876,295
1993	1,967,751	116.8	1.113	2,190,134	6.50	43.00	26.94	80.56%	1,764,372
1994	2,288,433	117.8	1.104	2,525,435	5.50	43.00	26.85	83.00%	2,096,111
1995	6,093,261	123.2	1.055	6,429,577	4.50	43.00	26.63	85.54%	5,499,860
1996	4,272,639	127.0	1.024	4,373,567	3.50	43.00	26.24	88.23%	3,858,799
1997	2,809,931	127.7	1.018	2,860,541	2.50	43.00	25.57	91.09%	2,605,666
1998	1,610,162	128.4	1.012	1,630,226	1.50	43.00	24.41	94.21%	1,535,836
1999	4,667,411	130.0	1.000	4,667,411	0.50	43.00	21.95	97.77%	4,563,328
	120,191,121		2.161	259,682,271				52.67%	136,774,998

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buildings  
Plant Sub-Account: Other Buildings  
Index Number: 2121  
Field Code: BUB  
Survivor Curve: R1  
Average Service Life: 43

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1926	2,619	11.9	10.880	28,494	73.50	43.00	4.14	5.33%	1,519
1927	6,423	11.9	10.880	69,880	72.50	43.00	4.44	5.77%	4,032
1928	2,702	11.9	10.880	29,397	71.50	43.00	4.74	6.22%	1,828
1929	2,496	11.9	10.880	27,156	70.50	43.00	5.05	6.68%	1,814
1930	0	11.9	10.880	0	69.50	43.00	0.00	0.00%	0
1931	0	11.9	10.880	0	68.50	43.00	0.00	0.00%	0
1932	0	11.9	10.880	0	67.50	43.00	0.00	0.00%	0
1933	0	11.9	10.880	0	66.50	43.00	0.00	0.00%	0
1934	0	11.9	10.880	0	65.50	43.00	0.00	0.00%	0
1935	0	11.9	10.880	0	64.50	43.00	0.00	0.00%	0
1936	5,691	11.9	10.880	61,916	63.50	43.00	7.34	10.36%	6,414
1937	0	11.9	10.880	0	62.50	43.00	0.00	0.00%	0
1938	2,791	11.9	10.880	30,365	61.50	43.00	8.05	11.57%	3,513
1939	0	11.9	10.880	0	60.50	43.00	0.00	0.00%	0
1940	1,077	11.9	10.880	11,717	59.50	43.00	8.77	12.85%	1,506
1941	0	11.9	10.880	0	58.50	43.00	0.00	0.00%	0
1942	4,668	11.9	10.880	50,786	57.50	43.00	9.53	14.22%	7,222
1943	0	11.9	10.880	0	56.50	43.00	0.00	0.00%	0
1944	7,532	11.9	10.880	81,945	55.50	43.00	10.30	15.65%	12,824
1945	0	11.9	10.880	0	54.50	43.00	0.00	0.00%	0
1946	3,399	11.9	10.880	36,980	53.50	43.00	11.11	17.20%	6,361
1947	0	13.6	9.578	0	52.50	43.00	0.00	0.00%	0
1948	0	14.8	8.755	0	51.50	43.00	0.00	0.00%	0
1949	55,377	15.4	8.457	468,343	50.50	43.00	12.37	19.68%	92,170
1950	16,323	15.5	8.363	136,504	49.50	43.00	12.80	20.55%	28,052
1951	3,975	16.5	7.892	31,369	48.50	43.00	13.24	21.44%	6,725
1952	7,508	17.1	7.597	57,040	47.50	43.00	13.69	22.37%	12,760
1953	6,133	17.6	7.397	45,364	46.50	43.00	14.14	23.32%	10,579
1954	80,437	18.0	7.206	579,664	45.50	43.00	14.60	24.29%	140,800
1955	95,499	18.6	7.004	668,851	44.50	43.00	15.07	25.30%	169,219
1956	55,188	19.7	6.611	364,859	43.50	43.00	15.55	26.33%	96,067
1957	107,435	20.2	6.440	691,906	42.50	43.00	16.04	27.40%	189,582
1958	132,113	20.7	6.278	829,388	41.50	43.00	16.53	28.49%	236,293
1959	32,239	21.1	6.174	199,047	40.50	43.00	17.03	29.60%	58,918
1960	362,119	21.2	6.123	2,217,435	39.50	43.00	17.54	30.75%	681,861
1961	428,964	21.3	6.107	2,619,602	38.50	43.00	18.06	31.93%	836,439
1962	191,787	21.5	6.041	1,158,580	37.50	43.00	18.59	33.14%	383,953
1963	152,363	22.0	5.898	898,621	36.50	43.00	19.12	34.38%	308,946
1964	88,272	22.7	5.732	505,972	35.50	43.00	19.66	35.64%	180,329
1965	62,843	23.4	5.561	349,488	34.50	43.00	20.22	36.95%	129,136
1966	81,735	24.3	5.349	437,194	33.50	43.00	20.77	38.27%	167,314
1967	58,179	25.5	5.105	297,018	32.50	43.00	21.34	39.64%	117,738

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buildings  
Plant Sub-Account: Other Buildings  
Index Number: 2121  
Field Code: BUB  
Survivor Curve: R1  
Average Service Life: 43

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1968	146,007	26.8	4.851	708,292	31.50	43.00	21.91	41.02%	290,541
1969	178,069	28.5	4.555	811,155	30.50	43.00	22.50	42.45%	344,335
1970	370,876	31.1	4.181	1,550,760	29.50	43.00	23.09	43.91%	680,939
1971	338,118	33.8	3.844	1,299,811	28.50	43.00	23.69	45.39%	589,984
1972	565,710	36.7	3.541	2,002,953	27.50	43.00	24.29	46.90%	939,385
1973	871,098	39.4	3.296	2,871,037	26.50	43.00	24.90	48.44%	1,390,730
1974	624,065	45.1	2.881	1,797,756	25.50	43.00	25.52	50.02%	899,238
1975	1,167,463	50.9	2.553	2,980,089	24.50	43.00	26.15	51.63%	1,538,620
1976	335,886	54.2	2.397	805,121	23.50	43.00	26.78	53.26%	428,807
1977	336,288	58.0	2.241	753,689	22.50	43.00	27.42	54.93%	414,001
1978	554,991	62.8	2.071	1,149,580	21.50	43.00	28.07	56.63%	651,007
1979	771,625	67.7	1.919	1,480,622	20.50	43.00	28.72	58.35%	863,943
1980	372,571	74.3	1.750	651,839	19.50	43.00	29.37	60.10%	391,755
1981	927,481	81.3	1.600	1,483,705	18.50	43.00	30.03	61.88%	918,117
1982	1,141,924	87.3	1.489	1,700,518	17.50	43.00	30.70	63.69%	1,083,060
1983	2,013,400	90.1	1.443	2,905,623	16.50	43.00	24.91	60.15%	1,747,732
1984	868,827	91.2	1.426	1,238,686	15.50	43.00	25.24	61.95%	767,366
1985	3,875,584	92.6	1.405	5,443,714	14.50	43.00	25.56	63.80%	3,473,089
1986	3,637,460	96.1	1.353	4,922,872	13.50	43.00	25.86	65.70%	3,234,327
1987	3,510,579	97.4	1.335	4,686,069	12.50	43.00	26.13	67.64%	3,169,657
1988	3,967,836	100.0	1.300	5,158,187	11.50	43.00	26.38	69.64%	3,592,161
1989	2,972,140	100.5	1.294	3,845,935	10.50	43.00	26.59	71.69%	2,757,151
1990	2,302,354	102.9	1.263	2,908,701	9.50	43.00	26.75	73.79%	2,146,331
1991	935,053	105.6	1.231	1,150,819	8.50	43.00	26.88	75.98%	874,392
1992	839,463	108.9	1.194	1,002,114	7.50	43.00	26.95	78.23%	783,954
1993	975,577	116.8	1.113	1,085,831	6.50	43.00	26.94	80.56%	874,745
1994	831,037	117.8	1.104	917,104	5.50	43.00	26.85	83.00%	761,196
1995	329,873	123.2	1.055	348,080	4.50	43.00	26.63	85.54%	297,748
1996	215,986	127.0	1.024	221,088	3.50	43.00	26.24	88.23%	195,066
1997	728,357	127.7	1.018	741,475	2.50	43.00	25.57	91.09%	675,410
1998	2,587,453	128.4	1.012	2,619,695	1.50	43.00	24.41	94.21%	2,468,015
1999	1,221,400	130.0	1.000	1,221,400	0.50	43.00	21.95	97.77%	1,194,163
	<u>42,572,438</u>		<u>1.772</u>	<u>75,449,200</u>				<u>58.76%</u>	<u>44,330,881</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Furniture  
Plant Sub-Account: Furniture  
Index Number: 2122  
Field Code: FEZ  
Survivor Curve: O4  
Average Service Life: 9.5

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent*	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1971	802	34.5	3.635	2,915	28.50	9.50	6.44	18.43%	537
1972	1,947	35.1	3.573	6,956	27.50	9.50	6.91	20.08%	1,397
1973	0	37.8	3.317	0	26.50	9.50	0.00	0.00%	0
1974	8,900	44.5	2.818	25,080	25.50	9.50	7.84	23.52%	5,899
1975	4,531	48.7	2.575	11,667	24.50	9.50	8.30	25.30%	2,952
1976	945	50.6	2.478	2,342	23.50	9.50	8.74	27.11%	635
1977	7,070	54.3	2.309	16,327	22.50	9.50	9.18	28.98%	4,732
1978	3,490	58.8	2.133	7,443	21.50	9.50	9.61	30.89%	2,299
1979	450	64.7	1.938	872	20.50	9.50	10.02	32.83%	286
1980	7,881	68.9	1.820	14,344	19.50	9.50	10.42	34.83%	4,996
1981	24,923	75.2	1.668	41,560	18.50	9.50	10.80	36.86%	15,319
1982	22,817	80.4	1.560	35,588	17.50	9.50	11.16	38.94%	13,858
1983	15,580	83.7	1.498	23,342	16.50	9.50	9.54	36.64%	8,553
1984	20,115	86.8	1.445	29,060	15.50	9.50	9.63	38.32%	11,136
1985	26,114	90.1	1.392	36,345	14.50	9.50	9.66	39.98%	14,531
1986	15,207	92.9	1.350	20,527	13.50	9.50	9.63	41.63%	8,545
1987	4,607	95.5	1.313	6,049	12.50	9.50	9.54	43.28%	2,618
1988	20,160	100.0	1.254	25,281	11.50	9.50	9.36	44.87%	11,343
1989	299,670	103.9	1.207	361,681	10.50	9.50	9.10	46.43%	167,928
1990	0	107.4	1.168	0	9.50	9.50	0.00	0.00%	0
1991	0	109.7	1.143	0	8.50	9.50	0.00	0.00%	0
1992	81,008	111.2	1.128	91,353	7.50	9.50	7.75	50.82%	46,425
1993	8,526	113.1	1.109	9,453	6.50	9.50	7.12	52.28%	4,942
1994	31,279	116.5	1.076	33,669	5.50	9.50	6.44	53.94%	18,161
1995	9,792	119.3	1.051	10,293	4.50	9.50	5.73	56.01%	5,765
1996	285,895	122.1	1.027	293,622	3.50	9.50	5.03	58.97%	173,149
1997	72,399	124.2	1.010	73,099	2.50	9.50	4.38	63.66%	46,535
1998	729,508	125.0	1.003	731,842	1.50	9.50	3.74	71.37%	522,316
1999	0	125.4	1.000	0	0.50	9.50	0.00	0.00%	0
	1,703,616		1.122	1,910,709				57.30%	1,094,857

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Office Equipment  
Plant Sub-Account: Office Equipment  
Index Number: 2123.1  
Field Code: OEZ  
Survivor Curve: L0.5  
Average Service Life: 7

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1974	4,794	93.5	1.119	5,363	25.50	7.00	0.50	1.92%	103
1975	0	93.9	1.114	0	24.50	7.00	0.00	0.00%	0
1976	1,667	94.4	1.108	1,847	23.50	7.00	0.92	3.77%	70
1977	4,349	94.8	1.103	4,799	22.50	7.00	1.05	4.46%	214
1978	1,675	95.3	1.098	1,838	21.50	7.00	1.20	5.29%	97
1979	3,990	95.8	1.092	4,357	20.50	7.00	1.32	6.05%	264
1980	10,963	96.2	1.087	11,920	19.50	7.00	1.44	6.88%	820
1981	17,262	96.7	1.082	18,672	18.50	7.00	1.54	7.68%	1,434
1982	21,352	97.2	1.076	22,978	17.50	7.00	1.64	8.57%	1,969
1983	0	97.6	1.072	0	16.50	7.00	0.00	0.00%	0
1984	188,754	98.1	1.066	201,261	15.50	7.00	1.74	10.09%	20,307
1985	3,678	98.6	1.061	3,902	14.50	7.00	1.85	11.31%	441
1986	78,773	99.0	1.057	83,229	13.50	7.00	1.98	12.79%	10,645
1987	73,456	99.5	1.051	77,221	12.50	7.00	2.12	14.50%	11,197
1988	168,236	100.0	1.046	175,975	11.50	7.00	2.27	16.49%	29,018
1989	1,668,506	102.3	1.022	1,706,019	10.50	7.00	2.43	18.79%	320,561
1990	1,322,201	102.3	1.022	1,351,928	9.50	7.00	2.60	21.49%	290,529
1991	114,269	102.6	1.019	116,496	8.50	7.00	2.77	24.58%	28,635
1992	227,485	103.7	1.009	229,459	7.50	7.00	2.94	28.16%	64,616
1993	22,445	103.7	1.009	22,640	6.50	7.00	3.11	32.36%	7,326
1994	58,226	104.0	1.006	58,562	5.50	7.00	3.28	37.36%	21,879
1995	655,465	104.2	1.004	657,981	4.50	7.00	3.44	43.32%	285,037
1996	100,004	104.7	0.999	99,908	3.50	7.00	3.57	50.50%	50,454
1997	457,409	105.0	0.996	455,666	2.50	7.00	3.71	59.74%	272,215
1998	14,226	105.0	0.996	14,172	1.50	7.00	3.87	72.07%	10,214
1999	258,340	104.6	1.000	258,340	0.50	7.00	3.95	88.76%	229,303
	5,477,525		1.020	5,584,533				29.68%	1,657,348

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Company Communications Equipment  
Plant Sub-Account: Stand Alone  
Index Number: 2123.2  
Field Code: OECA  
Survivor Curve: L0.5  
Average Service Life: 8.3

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1988	3,210	100.0	0.664	2,131	11.50	8.30	3.48	23.23%	495
1989	4,092	111.0	0.598	2,448	10.50	8.30	3.73	26.21%	642
1990	3,272	114.5	0.580	1,897	9.50	8.30	3.99	29.58%	561
1991	2,033	114.8	0.578	1,176	8.50	8.30	4.28	33.49%	394
1992	2,801	100.7	0.659	1,847	7.50	8.30	4.58	37.91%	700
1993	25,923	96.7	0.687	17,800	6.50	8.30	4.91	43.03%	7,659
1994	12,454	83.0	0.800	9,963	5.50	8.30	5.26	48.88%	4,870
1995	2,637	80.0	0.830	2,189	4.50	8.30	5.63	55.58%	1,216
1996	3,003	69.1	0.961	2,886	3.50	8.30	6.05	63.35%	1,828
1997	0	68.1	0.975	0	2.50	8.30	0.00	0.00%	0
1998	0	66.8	0.994	0	1.50	8.30	0.00	0.00%	0
1999	5,151	66.4	1.000	5,151	0.50	8.30	7.88	94.03%	4,843
	<u>64,576</u>		<u>0.735</u>	<u>47,488</u>				<u>48.87%</u>	<u>23,209</u>

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Company Communication Equipment  
Plant Sub-Account: PBX & Key Intrasystems  
Index Number: 2123.2  
Field Code: OECB  
Survivor Curve: L0.5  
Average Service Life: 8.3

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1978	38,639	74.7	0.889	34,346	21.50	8.30	1.85	7.92%	2,720
1979	873	78.3	0.848	740	20.50	8.30	1.96	8.73%	65
1980	1,724	81.1	0.819	1,412	19.50	8.30	2.07	9.60%	136
1981	3,260	88.4	0.751	2,449	18.50	8.30	2.19	10.58%	259
1982	21,419	98.0	0.678	14,512	17.50	8.30	2.33	11.75%	1,705
1983	157,399	102.7	0.647	101,765	16.50	8.30	2.48	13.07%	13,301
1984	33,322	94.4	0.703	23,438	15.50	8.30	2.65	14.60%	3,422
1985	28,603	85.3	0.778	22,265	14.50	8.30	2.83	16.33%	3,636
1986	567,820	86.8	0.765	434,369	13.50	8.30	3.03	18.33%	79,620
1987	3	86.7	0.766	2	12.50	8.30	3.25	20.63%	0
1988	72,682	100.0	0.664	48,261	11.50	8.30	3.48	23.23%	11,211
1989	55,921	111.0	0.598	33,452	10.50	8.30	3.73	26.21%	8,768
1990	51,101	114.5	0.580	29,634	9.50	8.30	3.99	29.58%	8,766
1991	23,524	114.8	0.578	13,606	8.50	8.30	4.28	33.49%	4,557
1992	134,813	100.7	0.659	88,894	7.50	8.30	4.58	37.91%	33,700
1993	69,199	96.7	0.687	47,516	6.50	8.30	4.91	43.03%	20,446
1994	118,364	83.0	0.800	94,691	5.50	8.30	5.26	48.88%	46,285
1995	581	80.0	0.830	482	4.50	8.30	5.63	55.58%	268
1996	22,790	69.1	0.961	21,900	3.50	8.30	6.05	63.35%	13,873
1997	0	68.1	0.975	0	2.50	8.30	0.00	0.00%	0
1998	191	66.8	0.994	190	1.50	8.30	7.16	82.68%	157
1999	126	66.4	1.000	126	0.50	8.30	7.88	94.03%	118
	<u>1,402,354</u>		<u>0.723</u>	<u>1,014,051</u>				<u>24.95%</u>	<u>253,012</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: General Purpose Computer  
Plant Sub-Account: General Purpose Computer  
Index Number: 2124  
Field Code: GCZ  
Survivor Curve: O1  
Average Service Life: 5

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1976	2,230	90.3	0.239	533	23.50	5.00	0.50	2.08%	11
1977	0	86.1	0.251	0	22.50	5.00	0.00	0.00%	0
1978	0	78.4	0.276	0	21.50	5.00	0.00	0.00%	0
1979	0	74.9	0.288	0	20.50	5.00	0.00	0.00%	0
1980	0	75.1	0.288	0	19.50	5.00	0.00	0.00%	0
1981	64,507	82.3	0.262	16,930	18.50	5.00	0.50	2.63%	445
1982	18,625	92.9	0.233	4,330	17.50	5.00	0.50	2.78%	120
1983	866,462	103.8	0.208	180,304	16.50	5.00	0.50	2.94%	5,301
1984	288,877	108.6	0.199	57,456	15.50	5.00	0.50	3.13%	1,798
1985	165,757	103.0	0.210	34,761	14.50	5.00	0.50	3.33%	1,158
1986	1,439,726	101.1	0.214	307,597	13.50	5.00	0.50	3.57%	10,981
1987	900,033	98.9	0.218	196,569	12.50	5.00	0.50	3.85%	7,568
1988	554,276	100.0	0.216	119,724	11.50	5.00	0.50	4.17%	4,992
1989	24,060,104	99.9	0.216	5,202,185	10.50	5.00	0.50	4.55%	236,699
1990	2,433,138	95.8	0.225	548,599	9.50	5.00	0.50	5.00%	27,430
1991	1,310,940	79.4	0.272	356,629	8.50	5.00	0.81	8.70%	31,027
1992	6,399,262	66.6	0.324	2,075,436	7.50	5.00	1.24	14.19%	294,504
1993	11,436,799	58.4	0.370	4,230,049	6.50	5.00	1.66	20.34%	860,392
1994	16,901,961	53.7	0.402	6,798,554	5.50	5.00	2.05	27.15%	1,845,807
1995	10,617,387	48.1	0.449	4,767,891	4.50	5.00	2.41	34.88%	1,663,040
1996	8,087,743	40.4	0.535	4,324,140	3.50	5.00	2.72	43.73%	1,890,946
1997	6,575,394	32.6	0.663	4,356,703	2.50	5.00	2.94	54.04%	2,354,362
1998	8,167,572	24.3	0.889	7,260,064	1.50	5.00	3.02	66.81%	4,850,449
1999	11,725,904	21.6	1.000	11,725,904	0.50	5.00	2.80	84.85%	9,949,430
	112,016,697		0.469	52,564,359				45.73%	24,036,462

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Analog Switching Equipment  
Plant Sub-Account: Analog Switching Equipment  
Index Number: 2211  
Field Code: AEZ  
Survivor Curve: C2  
Average Service Life: 33.34

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1955	30,903	60.6	2.053	63,438	44.50	33.34	11.09	19.95%	12,656
1956	0	62.1	2.003	0	43.50	33.34	0.00	0.00%	0
1957	0	65.0	1.914	0	42.50	33.34	0.00	0.00%	0
1958	0	66.4	1.873	0	41.50	33.34	0.00	0.00%	0
1959	2,486	65.6	1.896	4,714	40.50	33.34	13.09	24.43%	1,152
1960	0	64.8	1.920	0	39.50	33.34	0.00	0.00%	0
1961	0	64.1	1.941	0	38.50	33.34	0.00	0.00%	0
1962	4,830	63.7	1.953	9,433	37.50	33.34	14.59	28.01%	2,642
1963	0	64.6	1.926	0	36.50	33.34	0.00	0.00%	0
1964	362	65.1	1.911	692	35.50	33.34	15.59	30.51%	211
1965	668	64.3	1.935	1,292	34.50	33.34	16.09	31.80%	411
1966	415	65.0	1.914	794	33.50	33.34	16.59	33.12%	263
1967	0	67.4	1.846	0	32.50	33.34	0.00	0.00%	0
1968	616	70.9	1.755	1,081	31.50	33.34	17.59	35.83%	387
1969	1,350	74.0	1.681	2,269	30.50	33.34	18.09	37.23%	845
1970	181	76.3	1.630	295	29.50	33.34	18.59	38.66%	114
1971	947,818	79.3	1.569	1,486,867	28.50	33.34	19.09	40.11%	596,382
1972	1,720,491	81.2	1.532	2,635,826	27.50	33.34	19.59	41.60%	1,096,504
1973	2,943,958	81.1	1.534	4,515,763	26.50	33.34	20.09	43.12%	1,947,197
1974	121,219	85.1	1.462	177,199	25.50	33.34	20.59	44.67%	79,155
1975	1,926,418	91.4	1.361	2,621,952	24.50	33.34	21.08	46.25%	1,212,653
1976	177,638	94.7	1.314	233,349	23.50	33.34	21.58	47.87%	111,704
1977	104,583	92.4	1.346	140,802	22.50	33.34	22.08	49.53%	69,739
1978	610,818	87.4	1.423	869,402	21.50	33.34	22.58	51.23%	445,395
1979	1,871,890	86.2	1.443	2,701,428	20.50	33.34	23.08	52.96%	1,430,676
1980	6,316,234	87.8	1.417	8,949,197	19.50	33.34	23.58	54.74%	4,898,791
1981	5,899,834	95.4	1.304	7,693,285	18.50	33.34	24.08	56.55%	4,350,552
1982	22,593,223	106.9	1.164	26,291,833	17.50	33.34	24.58	58.41%	15,357,060
1983	7,686,580	118.3	1.052	8,082,929	16.50	33.34	25.08	60.32%	4,875,623
1984	11,215,307	129.8	0.958	10,748,723	15.50	33.34	25.58	62.27%	6,693,230
1985	4,553,326	118.1	1.053	4,796,221	14.50	33.34	26.08	64.27%	3,082,532
1986	7,140,581	109.6	1.135	8,104,820	13.50	33.34	26.58	66.32%	5,375,117
1987	4,948,775	105.9	1.175	5,813,292	12.50	33.34	27.08	68.42%	3,977,454
1988	6,805,031	100.0	1.244	8,465,459	11.50	33.34	27.58	70.57%	5,974,074
1989	6,300,094	98.9	1.258	7,924,486	10.50	33.34	28.08	72.78%	5,767,441
1990	3,712,433	95.4	1.304	4,840,950	9.50	33.34	28.58	75.05%	3,633,133
1991	8,151,767	92.3	1.348	10,986,780	8.50	33.34	29.08	77.38%	8,501,571
1992	4,777,889	92.0	1.352	6,460,537	7.50	33.34	29.58	79.77%	5,153,570
1993	5,406,583	96.0	1.296	7,006,030	6.50	33.34	30.08	82.23%	5,761,059
1994	3,699,142	93.5	1.330	4,921,639	5.50	33.34	30.58	84.76%	4,171,581
1995	3,106,302	102.7	1.211	3,762,648	4.50	33.34	31.08	87.35%	3,286,673
1996	4,273,004	105.3	1.181	5,048,069	3.50	33.34	31.58	90.02%	4,544,272

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Analog Switching Equipment  
Plant Sub-Account: Analog Switching Equipment  
Index Number: 2211  
Field Code: AEZ  
Survivor Curve: C2  
Average Service Life: 33.34

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1997	1,803,897	109.6	1.135	2,047,489	2.50	33.34	32.08	92.77%	1,899,455
1998	5,596,508	123.2	1.010	5,651,019	1.50	33.34	32.58	95.60%	5,402,375
1999	4,145,902	124.4	1.000	4,145,902	0.50	33.34	33.08	98.51%	4,084,128
	<u>138,599,056</u>		<u>1.206</u>	<u>167,207,907</u>				<u>68.06%</u>	<u>113,797,777</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Digital Switching Equipment  
Plant Sub-Account: Digital Switching Equipment  
Index Number: 2212  
Field Code: DEZ  
Survivor Curve: O1  
Average Service Life: 10

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1950	31,531	44.6	1.982	62,496	49.50	10.00	0.50	1.00%	625
1951	0	46.3	1.909	0	48.50	10.00	0.00	0.00%	0
1952	0	42.4	2.085	0	47.50	10.00	0.00	0.00%	0
1953	0	38.9	2.272	0	46.50	10.00	0.00	0.00%	0
1954	0	39.3	2.249	0	45.50	10.00	0.00	0.00%	0
1955	397,001	39.2	2.255	895,278	44.50	10.00	0.50	1.11%	9,938
1956	0	39.8	2.221	0	43.50	10.00	0.00	0.00%	0
1957	48,452	41.4	2.135	103,458	42.50	10.00	0.50	1.16%	1,200
1958	13,628	42.3	2.090	28,480	41.50	10.00	0.50	1.19%	339
1959	43,254	41.5	2.130	92,136	40.50	10.00	0.50	1.22%	1,124
1960	95,256	40.6	2.177	207,405	39.50	10.00	0.50	1.25%	2,593
1961	88,176	40.4	2.188	192,940	38.50	10.00	0.50	1.28%	2,470
1962	10,034	39.6	2.232	22,399	37.50	10.00	0.50	1.32%	296
1963	169	39.8	2.221	375	36.50	10.00	0.50	1.35%	5
1964	31,855	39.8	2.221	70,753	35.50	10.00	0.50	1.39%	983
1965	14,060	38.7	2.284	32,116	34.50	10.00	0.50	1.43%	459
1966	437,109	38.3	2.308	1,008,889	33.50	10.00	0.50	1.47%	14,831
1967	2,594	39.0	2.267	5,880	32.50	10.00	0.50	1.52%	89
1968	37,432	40.4	2.188	81,906	31.50	10.00	0.50	1.56%	1,278
1969	18,745	41.5	2.130	39,929	30.50	10.00	0.50	1.61%	643
1970	107,024	42.6	2.075	222,087	29.50	10.00	0.50	1.67%	3,709
1971	607,296	44.4	1.991	1,209,121	28.50	10.00	0.50	1.72%	20,797
1972	575,108	45.6	1.939	1,114,902	27.50	10.00	0.50	1.79%	19,957
1973	632,352	47.7	1.853	1,171,906	26.50	10.00	0.50	1.85%	21,680
1974	808,944	53.0	1.668	1,349,258	25.50	10.00	0.50	1.92%	25,906
1975	305,680	57.5	1.537	469,950	24.50	10.00	0.50	2.00%	9,399
1976	80,138	59.8	1.478	118,465	23.50	10.00	0.50	2.08%	2,464
1977	2,197,539	61.1	1.447	3,179,418	22.50	10.00	0.50	2.17%	68,993
1978	2,387,941	61.3	1.442	3,443,621	21.50	10.00	0.50	2.27%	78,170
1979	3,625,923	62.8	1.408	5,104,006	20.50	10.00	0.50	2.38%	121,475
1980	2,582,348	64.2	1.377	3,555,756	19.50	10.00	0.50	2.50%	88,894
1981	4,529,625	69.9	1.265	5,728,453	18.50	10.00	0.83	4.29%	245,751
1982	11,071,404	75.4	1.172	12,980,267	17.50	10.00	1.30	6.91%	896,936
1983	2,571,938	83.4	1.060	2,726,131	16.50	10.00	1.73	9.49%	258,710
1984	6,337,953	87.6	1.009	6,395,834	15.50	10.00	2.18	12.33%	788,606
1985	10,120,427	97.0	0.911	9,223,152	14.50	10.00	2.62	15.30%	1,411,142
1986	26,189,840	101.8	0.868	22,742,454	13.50	10.00	3.06	18.48%	4,202,806
1987	33,437,261	100.2	0.882	29,499,540	12.50	10.00	3.47	21.73%	6,410,250
1988	40,036,816	100.0	0.884	35,392,545	11.50	10.00	3.87	25.18%	8,911,843
1989	38,953,470	99.1	0.892	34,744,380	10.50	10.00	4.26	28.86%	10,027,228
1990	30,469,702	98.2	0.900	27,428,043	9.50	10.00	4.62	32.72%	8,974,456
1991	32,038,707	99.6	0.888	28,445,956	8.50	10.00	4.95	36.80%	10,468,112

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Digital Switching Equipment  
Plant Sub-Account: Digital Switching Equipment  
Index Number: 2212  
Field Code: DEZ  
Survivor Curve: O1  
Average Service Life: 10

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1992	47,446,729	94.7	0.933	44,282,866	7.50	10.00	5.26	41.22%	18,253,397
1993	47,220,109	91.2	0.969	45,769,412	6.50	10.00	5.52	45.92%	21,017,314
1994	59,784,926	88.8	0.996	59,517,153	5.50	10.00	5.75	51.11%	30,419,217
1995	92,935,566	86.2	1.026	95,336,156	4.50	10.00	5.91	56.77%	54,122,335
1996	65,965,159	86.9	1.017	67,103,798	3.50	10.00	5.99	63.12%	42,355,917
1997	55,987,858	84.5	1.046	58,571,913	2.50	10.00	5.94	70.38%	41,222,912
1998	92,932,319	88.1	1.003	93,248,774	1.50	10.00	5.69	79.14%	73,797,080
1999	106,015,893	88.4	1.000	106,015,893	0.50	10.00	4.96	90.84%	96,304,837
	819,225,291		0.987	808,935,651				53.23%	430,587,166

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Operator Systems  
Plant Sub-Account: Operator Systems  
Index Number: 2220  
Field Code: OSZ  
Survivor Curve: S2  
Average Service Life: 10.7

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1979	27,900	71.3	1.496	41,752	20.50	10.70	0.50	2.38%	994
1980	0	73.0	1.462	0	19.50	10.70	0.00	0.00%	0
1981	2,005	79.2	1.347	2,701	18.50	10.70	0.67	3.50%	95
1982	80,948	87.3	1.222	98,936	17.50	10.70	0.84	4.58%	4,531
1983	6,290	96.5	1.106	6,955	16.50	10.70	1.01	5.77%	401
1984	2,826	103.3	1.033	2,919	15.50	10.70	1.22	7.30%	213
1985	0	105.6	1.010	0	14.50	10.70	0.00	0.00%	0
1986	554	104.7	1.019	565	13.50	10.70	1.68	11.07%	62
1987	5,844	102.2	1.044	6,101	12.50	10.70	1.95	13.49%	823
1988	0	100.0	1.067	0	11.50	10.70	0.00	0.00%	0
1989	0	101.3	1.053	0	10.50	10.70	0.00	0.00%	0
1990	1,570,820	104.4	1.022	1,605,426	9.50	10.70	2.89	23.33%	374,546
1991	2,517,049	104.2	1.024	2,577,439	8.50	10.70	3.28	27.84%	717,559
1992	177,904	104.0	1.026	182,523	7.50	10.70	3.72	33.16%	60,525
1993	460,114	102.9	1.037	477,106	6.50	10.70	4.21	39.31%	187,550
1994	8,699	106.7	1.000	8,699	5.50	10.70	4.78	46.50%	4,045
1995	0	105.1	1.015	0	4.50	10.70	0.00	0.00%	0
1996	182,772	107.5	0.993	181,412	3.50	10.70	6.17	63.81%	115,759
1997	35,281	107.4	0.993	35,051	2.50	10.70	7.01	73.71%	25,836
1998	0	107.0	0.997	0	1.50	10.70	0.00	0.00%	0
1999	2,001,055	106.7	1.000	2,001,055	0.50	10.70	8.91	94.69%	1,894,799
	<u>7,080,061</u>		<u>1.021</u>	<u>7,228,640</u>				<u>46.87%</u>	<u>3,387,738</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Radio Systems  
Plant Sub-Account: Radio Systems  
Index Number: 2231  
Field Code: RDZ  
Survivor Curve: S1.5  
Average Service Life: 15.1

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1960	6,677	33.2	2.877	19,206	39.50	15.10	0.50	1.25%	240
1961	6,716	32.9	2.903	19,495	38.50	15.10	0.50	1.28%	250
1962	4,353	32.7	2.920	12,713	37.50	15.10	0.50	1.32%	168
1963	2,877	33.1	2.885	8,301	36.50	15.10	0.50	1.35%	112
1964	16,819	33.1	2.885	48,526	35.50	15.10	0.50	1.39%	675
1965	1,818	32.2	2.966	5,392	34.50	15.10	0.50	1.43%	77
1966	6,235	31.8	3.003	18,725	33.50	15.10	0.50	1.47%	275
1967	7,289	33.5	2.851	20,779	32.50	15.10	0.50	1.52%	316
1968	45,268	35.8	2.668	120,757	31.50	15.10	0.50	1.56%	1,884
1969	7,337	36.7	2.602	19,092	30.50	15.10	0.50	1.61%	307
1970	50,837	37.5	2.547	129,465	29.50	15.10	0.50	1.67%	2,162
1971	169,794	39.0	2.449	415,778	28.50	15.10	0.59	2.03%	8,440
1972	247,659	40.3	2.370	586,884	27.50	15.10	0.79	2.79%	16,374
1973	330,274	42.5	2.247	742,145	26.50	15.10	1.02	3.71%	27,534
1974	77,131	46.9	2.036	157,058	25.50	15.10	1.26	4.71%	7,397
1975	91,617	51.1	1.869	171,222	24.50	15.10	1.51	5.81%	9,948
1976	232,464	54.1	1.765	410,357	23.50	15.10	1.76	6.97%	28,602
1977	295,324	58.4	1.635	482,936	22.50	15.10	2.01	8.20%	39,601
1978	304,728	63.4	1.506	459,015	21.50	15.10	2.28	9.59%	44,019
1979	227,207	69.2	1.380	313,559	20.50	15.10	2.55	11.06%	34,680
1980	182,674	73.5	1.299	237,352	19.50	15.10	2.84	12.71%	30,167
1981	178,361	81.0	1.179	210,290	18.50	15.10	3.15	14.55%	30,597
1982	163,485	86.1	1.109	181,334	17.50	15.10	3.48	16.59%	30,083
1983	1,359,496	90.1	1.060	1,440,975	16.50	15.10	3.48	17.42%	251,018
1984	659,442	97.7	0.977	644,593	15.50	15.10	3.78	19.61%	126,405
1985	5,371,671	99.3	0.962	5,166,109	14.50	15.10	4.10	22.04%	1,138,610
1986	762,163	98.8	0.967	736,706	13.50	15.10	4.44	24.75%	182,335
1987	4,401,567	97.3	0.982	4,320,140	12.50	15.10	4.80	27.75%	1,198,839
1988	4,623,326	100.0	0.955	4,415,276	11.50	15.10	5.19	31.10%	1,373,151
1989	3,358,029	101.4	0.942	3,162,641	10.50	15.10	5.60	34.78%	1,099,966
1990	2,421,797	103.6	0.922	2,232,448	9.50	15.10	6.05	38.91%	868,646
1991	857,900	106.1	0.900	772,191	8.50	15.10	6.53	43.45%	335,517
1992	1,714,157	105.6	0.904	1,550,208	7.50	15.10	7.04	48.42%	750,611
1993	1,310,723	107.5	0.888	1,164,410	6.50	15.10	7.60	53.90%	627,617
1994	2,846,386	106.4	0.898	2,554,792	5.50	15.10	8.21	59.88%	1,529,809
1995	142,245	101.2	0.944	134,233	4.50	15.10	8.86	66.32%	89,023
1996	729,679	100.2	0.953	695,453	3.50	15.10	9.57	73.22%	509,210
1997	297,847	94.7	1.008	300,363	2.50	15.10	10.33	80.51%	241,822
1998	727,226	95.4	1.001	727,988	1.50	15.10	11.15	88.14%	641,649
1999	1,082,552	95.5	1.000	1,082,552	0.50	15.10	12.04	96.01%	1,039,358
	35,323,150		1.016	35,891,456				34.32%	12,317,495

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Circuit DDS  
Plant Sub-Account: Circuit DDS  
Index Number: 2232  
Field Code: CRDA  
Survivor Curve: L1  
Average Service Life: 8.1

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1976	13,302	59.8	1.452	19,308	23.50	8.10	0.59	2.45%	473
1977	66	61.1	1.421	94	22.50	8.10	0.72	3.10%	3
1978	4,321	61.3	1.416	6,118	21.50	8.10	0.85	3.80%	233
1979	31,919	62.8	1.382	44,117	20.50	8.10	1.00	4.65%	2,051
1980	4,896	64.2	1.352	6,620	19.50	8.10	1.16	5.61%	371
1981	10,435	69.9	1.242	12,958	18.50	8.10	1.34	6.75%	875
1982	138,493	75.4	1.151	159,432	17.50	8.10	1.52	7.99%	12,739
1983	173,111	83.4	1.041	180,168	16.50	8.10	1.62	8.94%	16,107
1984	121,222	87.6	0.991	120,115	15.50	8.10	1.80	10.40%	12,492
1985	341,551	97.0	0.895	305,635	14.50	8.10	1.98	12.01%	36,707
1986	100,982	101.8	0.853	86,103	13.50	8.10	2.16	13.79%	11,874
1987	260,934	100.2	0.866	226,039	12.50	8.10	2.35	15.82%	35,759
1988	430,092	100.0	0.868	373,320	11.50	8.10	2.54	18.09%	67,534
1989	291,734	98.8	0.879	256,301	10.50	8.10	2.74	20.69%	53,029
1990	282,109	99.0	0.877	247,344	9.50	8.10	2.93	23.57%	58,299
1991	309,050	100.3	0.865	267,453	8.50	8.10	3.13	26.91%	71,972
1992	670,464	92.2	0.941	631,196	7.50	8.10	3.33	30.75%	194,093
1993	731,765	90.6	0.958	701,073	6.50	8.10	3.52	35.13%	246,287
1994	896,309	89.4	0.971	870,242	5.50	8.10	3.70	40.22%	350,011
1995	1,008,687	86.9	0.999	1,007,526	4.50	8.10	3.87	46.24%	465,880
1996	837,484	87.2	0.995	833,642	3.50	8.10	4.05	53.64%	447,166
1997	734,459	87.1	0.997	731,929	2.50	8.10	4.30	63.24%	462,872
1998	731,215	86.8	1.000	731,215	1.50	8.10	4.64	75.57%	552,579
1999	368,025	86.8	1.000	368,025	0.50	8.10	5.03	90.96%	334,756
	8,492,625		0.964	8,185,973				41.95%	3,434,160

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account:           Circuit Digital  
Plant Sub-Account:    Circuit Digital  
Index Number:         2232  
Field Code:            CRD  
Survivor Curve:       O2  
Average Service Life:  10

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1950	151,692	44.6	1.982	300,663	49.50	10.00	0.50	1.00%	3,007
1951	0	46.3	1.909	0	48.50	10.00	0.00	0.00%	0
1952	3,609	42.4	2.085	7,524	47.50	10.00	0.50	1.04%	78
1953	0	38.9	2.272	0	46.50	10.00	0.00	0.00%	0
1954	749	39.3	2.249	1,685	45.50	10.00	0.50	1.09%	18
1955	737,034	39.2	2.255	1,662,087	44.50	10.00	0.50	1.11%	18,449
1956	394	39.8	2.221	875	43.50	10.00	0.50	1.14%	10
1957	1,641	41.4	2.135	3,504	42.50	10.00	0.50	1.16%	41
1958	544	42.3	2.090	1,137	41.50	10.00	0.50	1.19%	14
1959	666	41.5	2.130	1,419	40.50	10.00	0.50	1.22%	17
1960	1,262	40.6	2.177	2,748	39.50	10.00	0.50	1.25%	34
1961	22,563	40.4	2.188	49,371	38.50	10.00	0.50	1.28%	632
1962	1,336	39.6	2.232	2,982	37.50	10.00	0.50	1.32%	39
1963	6,884	39.8	2.221	15,290	36.50	10.00	0.50	1.35%	206
1964	43,099	39.8	2.221	95,727	35.50	10.00	0.50	1.39%	1,331
1965	20,933	38.7	2.284	47,816	34.50	10.00	0.50	1.43%	684
1966	59,510	38.3	2.308	137,355	33.50	10.00	0.50	1.47%	2,019
1967	77,917	39.0	2.267	176,612	32.50	10.00	0.50	1.52%	2,685
1968	9,779	40.4	2.188	21,398	31.50	10.00	0.50	1.56%	334
1969	327,820	41.5	2.130	698,296	30.50	10.00	0.50	1.61%	11,243
1970	208,647	42.6	2.075	432,967	29.50	10.00	0.83	2.74%	11,863
1971	466,490	44.4	1.991	928,777	28.50	10.00	1.28	4.30%	39,937
1972	495,276	45.6	1.939	960,140	27.50	10.00	1.75	5.98%	57,416
1973	951,699	47.7	1.853	1,763,736	26.50	10.00	2.21	7.70%	135,808
1974	1,196,551	53.0	1.668	1,995,757	25.50	10.00	2.66	9.45%	188,599
1975	834,144	57.5	1.537	1,282,406	24.50	10.00	3.10	11.23%	144,014
1976	1,085,942	59.8	1.478	1,605,306	23.50	10.00	3.53	13.06%	209,653
1977	712,952	61.1	1.447	1,031,505	22.50	10.00	3.93	14.87%	153,385
1978	1,038,904	61.3	1.442	1,498,191	21.50	10.00	4.31	16.70%	250,198
1979	2,002,245	62.8	1.408	2,818,447	20.50	10.00	4.65	18.49%	521,131
1980	3,727,123	64.2	1.377	5,132,051	19.50	10.00	4.96	20.28%	1,040,780
1981	6,515,999	69.9	1.265	8,240,548	18.50	10.00	5.23	22.04%	1,816,217
1982	12,388,237	75.4	1.172	14,524,140	17.50	10.00	5.46	23.78%	3,453,840
1983	21,143,649	83.4	1.060	22,411,254	16.50	10.00	4.90	22.90%	5,132,177
1984	29,096,112	87.6	1.009	29,361,830	15.50	10.00	4.92	24.09%	7,073,265
1985	49,313,875	97.0	0.911	44,941,717	14.50	10.00	4.90	25.26%	11,352,278
1986	51,645,717	101.8	0.868	44,847,558	13.50	10.00	4.86	26.47%	11,871,149
1987	41,471,890	100.2	0.882	36,587,975	12.50	10.00	4.84	27.91%	10,211,704
1988	46,458,503	100.0	0.884	41,069,317	11.50	10.00	4.84	29.62%	12,164,732
1989	41,665,493	99.1	0.892	37,163,358	10.50	10.00	4.89	31.77%	11,806,799
1990	53,834,118	98.2	0.900	48,460,089	9.50	10.00	4.98	34.39%	16,665,425
1991	54,557,795	99.6	0.888	48,439,803	8.50	10.00	5.10	37.50%	18,164,926

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Circuit Digital  
Plant Sub-Account: Circuit Digital  
Index Number: 2232  
Field Code: CRD  
Survivor Curve: O2  
Average Service Life: 10

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1992	51,192,730	94.7	0.933	47,779,075	7.50	10.00	5.24	41.13%	19,651,533
1993	44,952,094	91.2	0.969	43,571,075	6.50	10.00	5.38	45.29%	19,733,340
1994	62,727,461	88.8	0.996	62,446,508	5.50	10.00	5.51	50.05%	31,254,477
1995	80,249,683	86.2	1.026	82,322,587	4.50	10.00	5.60	55.45%	45,647,875
1996	121,882,842	86.9	1.017	123,986,689	3.50	10.00	5.63	61.66%	76,450,192
1997	81,098,786	84.5	1.046	84,841,807	2.50	10.00	5.56	68.98%	58,523,878
1998	123,445,446	88.1	1.003	123,865,805	1.50	10.00	5.30	77.94%	96,541,008
1999	140,227,026	88.4	1.000	140,227,026	0.50	10.00	4.59	90.18%	126,456,732
	<u>1,128,054,861</u>		<u>0.982</u>	<u>1,107,763,931</u>				<u>52.97%</u>	<u>586,765,172</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account:           Circuit Analog  
Plant Sub-Account:    Circuit Analog  
Index Number:         2232  
Field Code:            CRA  
Survivor Curve:        L0  
Average Service Life:   8

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1949	4,816	43.4	2.544	12,251	50.50	8.00	0.50	0.98%	120
1950	11,710	44.6	2.475	28,986	49.50	8.00	0.50	1.00%	290
1951	1,971	46.3	2.384	4,700	48.50	8.00	0.50	1.02%	48
1952	733	42.4	2.604	1,909	47.50	8.00	0.50	1.04%	20
1953	0	38.9	2.838	0	46.50	8.00	0.00	0.00%	0
1954	3,664	39.3	2.809	10,293	45.50	8.00	0.50	1.09%	112
1955	6,288	39.2	2.816	17,709	44.50	8.00	0.50	1.11%	197
1956	3,278	39.8	2.774	9,093	43.50	8.00	0.50	1.14%	104
1957	5,185	41.4	2.667	13,827	42.50	8.00	0.50	1.16%	160
1958	40,733	42.3	2.610	106,310	41.50	8.00	0.50	1.19%	1,265
1959	5,702	41.5	2.660	15,169	40.50	8.00	0.50	1.22%	185
1960	13,834	40.6	2.719	37,618	39.50	8.00	0.50	1.25%	470
1961	2,543	40.4	2.733	6,949	38.50	8.00	0.50	1.28%	89
1962	9,529	39.6	2.788	26,566	37.50	8.00	0.50	1.32%	351
1963	427,078	39.8	2.774	1,184,659	36.50	8.00	0.50	1.35%	15,993
1964	13,767	39.8	2.774	38,188	35.50	8.00	0.50	1.39%	531
1965	21,102	38.7	2.853	60,198	34.50	8.00	0.50	1.43%	861
1966	30,480	38.3	2.883	87,859	33.50	8.00	0.50	1.47%	1,292
1967	28,567	39.0	2.831	80,867	32.50	8.00	0.50	1.52%	1,229
1968	31,008	40.4	2.733	84,735	31.50	8.00	0.50	1.56%	1,322
1969	76,673	41.5	2.660	203,969	30.50	8.00	0.50	1.61%	3,284
1970	155,074	42.6	2.592	401,882	29.50	8.00	0.50	1.67%	6,711
1971	400,906	44.4	2.486	996,847	28.50	8.00	0.85	2.90%	28,909
1972	188,980	45.6	2.421	457,531	27.50	8.00	0.98	3.44%	15,739
1973	276,994	47.7	2.314	641,093	26.50	8.00	1.11	4.02%	25,772
1974	229,966	53.0	2.083	479,024	25.50	8.00	1.23	4.60%	22,035
1975	356,528	57.5	1.920	684,534	24.50	8.00	1.37	5.30%	36,280
1976	244,738	59.8	1.846	451,824	23.50	8.00	1.50	6.00%	27,109
1977	353,477	61.1	1.807	638,688	22.50	8.00	1.64	6.79%	43,367
1978	517,503	61.3	1.801	932,012	21.50	8.00	1.79	7.69%	71,672
1979	1,159,491	62.8	1.758	2,038,341	20.50	8.00	1.94	8.65%	176,316
1980	1,266,952	64.2	1.720	2,178,684	19.50	8.00	2.10	9.72%	211,768
1981	1,829,590	69.9	1.579	2,889,653	18.50	8.00	2.26	10.89%	314,683
1982	3,164,892	75.4	1.464	4,634,006	17.50	8.00	2.44	12.24%	567,202
1983	3,590,547	83.4	1.324	4,752,954	16.50	8.00	2.40	12.70%	603,625
1984	3,381,676	87.6	1.260	4,261,838	15.50	8.00	2.55	14.13%	602,198
1985	4,126,296	97.0	1.138	4,696,320	14.50	8.00	2.70	15.70%	737,322
1986	4,453,965	101.8	1.084	4,830,233	13.50	8.00	2.86	17.48%	844,325
1987	4,547,991	100.2	1.102	5,010,960	12.50	8.00	3.02	19.46%	975,133
1988	3,346,578	100.0	1.104	3,694,622	11.50	8.00	3.18	21.66%	800,255
1989	3,188,852	103.7	1.065	3,394,882	10.50	8.00	3.35	24.19%	821,222
1990	1,651,687	103.3	1.069	1,765,211	9.50	8.00	3.51	26.98%	476,254

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Circuit Analog  
Plant Sub-Account: Circuit Analog  
Index Number: 2232  
Field Code: CRA  
Survivor Curve: L0  
Average Service Life: 8

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1991	1,247,794	106.5	1.037	1,293,488	8.50	8.00	3.68	30.21%	390,763
1992	2,015,225	108.2	1.020	2,056,200	7.50	8.00	3.83	33.80%	694,996
1993	1,338,798	109.7	1.006	1,347,341	6.50	8.00	3.99	38.04%	512,528
1994	794,135	111.8	0.987	784,191	5.50	8.00	4.13	42.89%	336,339
1995	810,638	111.8	0.987	800,487	4.50	8.00	4.24	48.51%	388,316
1996	698,426	111.6	0.989	690,916	3.50	8.00	4.32	55.24%	381,662
1997	507,149	111.9	0.987	500,351	2.50	8.00	4.35	63.50%	317,723
1998	1,236,809	109.8	1.005	1,243,568	1.50	8.00	4.31	74.18%	922,478
1999	1,079,213	110.4	1.000	1,079,213	0.50	8.00	4.10	89.13%	961,903
	48,899,531		1.261	61,658,744				20.02%	12,342,528

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Other Term Equipment  
Plant Sub-Account: Other Term Equipment  
Index Number: 2362  
Field Code: OTO  
Survivor Curve: O3  
Average Service Life: 6.8

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1955	75,102	33.2	3.274	245,891	44.50	6.80	0.50	1.11%	2,729
1956	7,168	33.9	3.206	22,984	43.50	6.80	0.50	1.14%	262
1957	0	34.8	3.124	0	42.50	6.80	0.00	0.00%	0
1958	0	35.6	3.053	0	41.50	6.80	0.00	0.00%	0
1959	0	36.0	3.019	0	40.50	6.80	0.00	0.00%	0
1960	0	35.8	3.036	0	39.50	6.80	0.00	0.00%	0
1961	55,484	35.9	3.028	167,998	38.50	6.80	0.50	1.28%	2,150
1962	4,553	36.0	3.019	13,748	37.50	6.80	0.50	1.32%	181
1963	19,311	36.3	2.994	57,827	36.50	6.80	0.50	1.35%	781
1964	5,753	37.4	2.906	16,721	35.50	6.80	0.50	1.39%	232
1965	10,401	37.8	2.876	29,910	34.50	6.80	0.50	1.43%	428
1966	139,738	38.7	2.809	392,494	33.50	6.80	0.50	1.47%	5,770
1967	15,280	40.0	2.718	41,523	32.50	6.80	0.50	1.52%	631
1968	30,133	41.6	2.613	78,737	31.50	6.80	0.50	1.56%	1,228
1969	14,444	44.5	2.443	35,282	30.50	6.80	0.50	1.61%	568
1970	54,634	46.4	2.343	127,990	29.50	6.80	0.50	1.67%	2,137
1971	125,671	49.2	2.209	277,651	28.50	6.80	0.50	1.72%	4,776
1972	12,292	52.4	2.074	25,499	27.50	6.80	0.50	1.79%	456
1973	63,021	53.8	2.020	127,331	26.50	6.80	0.50	1.85%	2,356
1974	93,982	57.6	1.887	177,358	25.50	6.80	0.60	2.30%	4,079
1975	84,953	63.2	1.720	146,114	24.50	6.80	1.07	4.18%	6,108
1976	155,084	67.6	1.608	249,373	23.50	6.80	1.55	6.19%	15,436
1977	166,804	71.4	1.522	253,944	22.50	6.80	2.02	8.24%	20,925
1978	269,061	74.1	1.467	394,695	21.50	6.80	2.49	10.38%	40,969
1979	287,844	77.7	1.399	402,685	20.50	6.80	2.95	12.58%	50,658
1980	231,224	83.2	1.306	302,092	19.50	6.80	3.40	14.85%	44,861
1981	143,278	89.8	1.210	173,433	18.50	6.80	3.83	17.15%	29,744
1982	123,260	97.7	1.113	137,138	17.50	6.80	4.25	19.54%	26,797
1983	304,472	99.7	1.090	331,957	16.50	6.80	4.65	21.99%	72,997
1984	275,403	96.5	1.126	310,221	15.50	6.80	5.03	24.50%	76,004
1985	16,026	91.9	1.183	18,956	14.50	6.80	5.38	27.06%	5,129
1986	3,683,331	95.5	1.138	4,192,441	13.50	6.80	5.70	29.69%	1,244,736
1987	2,174,799	96.6	1.125	2,447,212	12.50	6.80	5.98	32.36%	791,918
1988	1,382,671	100.0	1.087	1,502,963	11.50	6.80	6.23	35.14%	528,141
1989	960,522	98.7	1.101	1,057,839	10.50	6.80	6.43	37.98%	401,767
1990	1,408,555	99.0	1.098	1,546,565	9.50	6.80	6.58	40.92%	632,854
1991	1,361,110	99.8	1.089	1,482,492	8.50	6.80	6.68	44.01%	652,445
1992	1,636,571	102.4	1.062	1,737,258	7.50	6.80	6.73	47.29%	821,550
1993	2,579,268	106.7	1.019	2,627,614	6.50	6.80	6.73	50.87%	1,336,667
1994	3,433,359	110.3	0.985	3,383,555	5.50	6.80	6.69	54.88%	1,856,895
1995	4,905,879	111.0	0.979	4,804,226	4.50	6.80	6.63	59.57%	2,861,877
1996	5,230,536	110.4	0.985	5,149,993	3.50	6.80	6.58	65.28%	3,361,916

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Other Term Equipment  
Plant Sub-Account: Other Term Equipment  
Index Number: 2362  
Field Code: OTO  
Survivor Curve: O3  
Average Service Life: 6.8

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1997	5,395,928	109.3	0.995	5,366,307	2.50	6.80	6.57	72.44%	3,887,353
1998	5,386,025	108.1	1.006	5,415,920	1.50	6.80	6.61	81.50%	4,413,975
1999	6,138,137	108.7	1.000	6,138,137	0.50	6.80	6.73	93.08%	5,713,378
	<u>48,461,067</u>		<u>1.061</u>	<u>51,412,073</u>				<u>56.26%</u>	<u>28,923,865</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Pole Lines  
Plant Sub-Account: Pole Lines  
Index Number: 2411  
Field Code: PLZA  
Survivor Curve: O1  
Average Service Life: 46.4

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	64,891	12.1	13.802	895,603	74.50	46.40	9.16	10.95%	98,069
1926	28,839	12.1	13.802	398,026	73.50	46.40	9.66	11.62%	46,251
1927	72,160	12.1	13.802	995,927	72.50	46.40	10.16	12.29%	122,399
1928	55,479	12.1	13.802	765,702	71.50	46.40	10.65	12.96%	99,235
1929	84,819	12.1	13.802	1,170,642	70.50	46.40	11.15	13.66%	159,910
1930	92,458	12.1	13.802	1,276,073	69.50	46.40	11.65	14.36%	183,244
1931	20,894	12.1	13.802	288,372	68.50	46.40	12.15	15.07%	43,458
1932	26,477	12.1	13.802	365,426	67.50	46.40	12.65	15.78%	57,664
1933	27,175	12.1	13.802	375,060	66.50	46.40	13.15	16.51%	61,922
1934	21,849	12.1	13.802	301,552	65.50	46.40	13.65	17.25%	52,018
1935	57,910	12.1	13.802	799,254	64.50	46.40	14.15	17.99%	143,786
1936	42,578	12.1	13.802	587,647	63.50	46.40	14.65	18.75%	110,184
1937	63,972	12.1	13.802	882,919	62.50	46.40	15.15	19.51%	172,258
1938	43,267	12.1	13.802	597,156	61.50	46.40	15.65	20.29%	121,163
1939	50,425	12.1	13.802	695,948	60.50	46.40	16.15	21.07%	146,636
1940	126,592	12.1	13.802	1,747,179	59.50	46.40	16.65	21.86%	381,933
1941	137,285	12.1	13.802	1,894,760	58.50	46.40	17.15	22.67%	429,542
1942	80,067	12.1	13.802	1,105,057	57.50	46.40	17.65	23.49%	259,578
1943	41,120	12.1	13.802	567,524	56.50	46.40	18.15	24.31%	137,965
1944	52,554	12.1	13.802	725,332	55.50	46.40	18.65	25.15%	182,421
1945	136,072	12.1	13.802	1,878,019	54.50	46.40	19.15	26.00%	488,285
1946	179,258	12.1	13.802	2,474,057	53.50	46.40	19.65	26.86%	664,532
1947	234,395	14.3	11.678	2,737,340	52.50	46.40	20.15	27.74%	759,338
1948	242,125	14.7	11.361	2,750,672	51.50	46.40	20.65	28.62%	787,242
1949	253,642	14.5	11.517	2,921,256	50.50	46.40	21.15	29.52%	862,355
1950	346,045	14.7	11.361	3,931,260	49.50	46.40	21.65	30.43%	1,196,282
1951	380,035	15.7	10.637	4,042,411	48.50	46.40	22.15	31.35%	1,267,296
1952	442,253	16.6	10.060	4,449,172	47.50	46.40	22.65	32.29%	1,436,638
1953	583,746	17.2	9.709	5,667,766	46.50	46.40	23.15	33.24%	1,883,966
1954	835,921	17.0	9.824	8,211,695	45.50	46.40	23.65	34.20%	2,808,400
1955	673,735	16.8	9.940	6,697,247	44.50	46.40	24.15	35.18%	2,356,091
1956	721,790	17.9	9.330	6,734,018	43.50	46.40	24.65	36.17%	2,435,694
1957	944,636	19.1	8.743	8,259,383	42.50	46.40	25.15	37.18%	3,070,839
1958	1,223,987	19.3	8.653	10,590,976	41.50	46.40	25.65	38.20%	4,045,753
1959	1,655,248	19.8	8.434	13,960,930	40.50	46.40	26.15	39.23%	5,476,873
1960	1,574,146	20.2	8.267	13,013,979	39.50	46.40	26.65	40.29%	5,243,332
1961	883,961	20.3	8.227	7,271,994	38.50	46.40	27.15	41.36%	3,007,697
1962	652,870	20.4	8.186	5,344,573	37.50	46.40	27.65	42.44%	2,268,237
1963	776,309	20.8	8.029	6,232,866	36.50	46.40	28.15	43.54%	2,713,790
1964	661,435	21.5	7.767	5,137,658	35.50	46.40	28.65	44.66%	2,294,478
1965	531,007	22.2	7.523	3,994,512	34.50	46.40	29.15	45.80%	1,829,487
1966	350,965	23.4	7.137	2,504,750	33.50	46.40	29.65	46.95%	1,175,980

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Pole Lines  
Plant Sub-Account: Pole Lines  
Index Number: 2411  
Field Code: PLZA  
Survivor Curve: O1  
Average Service Life: 46.4

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	251,215	24.6	6.789	1,705,403	32.50	46.40	30.15	48.12%	820,640
1968	312,055	25.9	6.448	2,012,092	31.50	46.40	30.65	49.32%	992,364
1969	343,521	27.4	6.095	2,093,723	30.50	46.40	31.15	50.53%	1,057,958
1970	356,318	29.4	5.680	2,023,983	29.50	46.40	31.65	51.76%	1,047,614
1971	273,963	32.9	5.076	1,390,633	28.50	46.40	32.15	53.01%	737,174
1972	222,085	34.9	4.785	1,062,699	27.50	46.40	32.65	54.28%	576,833
1973	387,735	37.9	4.406	1,708,489	26.50	46.40	33.15	55.57%	949,408
1974	280,517	48.9	3.415	958,003	25.50	46.40	33.65	56.89%	545,008
1975	175,148	52.4	3.187	558,201	24.50	46.40	34.15	58.23%	325,040
1976	1,252,040	55.7	2.998	3,753,872	23.50	46.40	34.65	59.59%	2,236,932
1977	337,702	59.2	2.821	952,639	22.50	46.40	35.15	60.97%	580,824
1978	373,626	62.7	2.663	995,144	21.50	46.40	35.65	62.38%	620,771
1979	189,895	69.8	2.393	454,333	20.50	46.40	36.15	63.81%	289,910
1980	200,326	78.3	2.133	427,260	19.50	46.40	36.65	65.27%	278,872
1981	226,019	85.6	1.951	440,948	18.50	46.40	37.15	66.76%	294,377
1982	1,060,268	91.3	1.829	1,939,373	17.50	46.40	27.64	61.23%	1,187,478
1983	1,152,088	95.3	1.752	2,018,874	16.50	46.40	27.68	62.65%	1,264,825
1984	892,370	100.0	1.670	1,490,258	15.50	46.40	27.70	64.12%	955,553
1985	1,197,865	99.7	1.675	2,006,454	14.50	46.40	27.69	65.63%	1,316,836
1986	1,614,928	99.8	1.673	2,702,334	13.50	46.40	27.64	67.19%	1,815,699
1987	973,767	98.4	1.697	1,652,633	12.50	46.40	27.56	68.80%	1,137,012
1988	1,308,264	100.0	1.670	2,184,801	11.50	46.40	27.44	70.47%	1,539,629
1989	2,351,991	103.5	1.614	3,795,000	10.50	46.40	27.28	72.21%	2,740,369
1990	1,696,634	110.5	1.511	2,564,144	9.50	46.40	27.06	74.02%	1,897,979
1991	1,649,511	116.3	1.436	2,368,601	8.50	46.40	26.77	75.90%	1,797,768
1992	1,387,089	121.7	1.372	1,903,401	7.50	46.40	26.42	77.89%	1,482,559
1993	1,725,717	128.5	1.300	2,242,761	6.50	46.40	25.97	79.98%	1,793,760
1994	1,824,713	139.2	1.200	2,189,131	5.50	46.40	25.41	82.21%	1,799,685
1995	1,459,452	146.0	1.144	1,669,373	4.50	46.40	24.70	84.59%	1,412,123
1996	747,156	151.2	1.104	825,232	3.50	46.40	23.77	87.17%	719,355
1997	1,851,677	158.8	1.052	1,947,293	2.50	46.40	22.53	90.01%	1,752,758
1998	1,522,899	165.4	1.010	1,537,631	1.50	46.40	20.73	93.25%	1,433,841
1999	1,543,863	167.0	1.000	1,543,863	0.50	46.40	17.57	97.23%	1,501,098
	46,616,809		4.341	202,360,271				44.47%	89,984,269

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Aerial Cable Metal  
Plant Sub-Account: Aerial Cable Metal  
Index Number: 2421  
Field Code: ACM  
Survivor Curve: R1  
Average Service Life: 12

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1926	5,596	20.6	6.345	35,505	73.50	12.00	0.50	0.68%	241
1927	5,767	20.6	6.345	36,590	72.50	12.00	0.50	0.68%	249
1928	10,188	20.6	6.345	64,639	71.50	12.00	0.50	0.69%	446
1929	14,345	20.6	6.345	91,014	70.50	12.00	0.50	0.70%	637
1930	2,582	20.6	6.345	16,382	69.50	12.00	0.50	0.71%	116
1931	1,707	20.6	6.345	10,830	68.50	12.00	0.50	0.72%	78
1932	1,180	20.6	6.345	7,487	67.50	12.00	0.50	0.74%	55
1933	1,575	20.6	6.345	9,993	66.50	12.00	0.50	0.75%	75
1934	2,069	20.6	6.345	13,127	65.50	12.00	0.50	0.76%	100
1935	5,522	20.6	6.345	35,035	64.50	12.00	0.50	0.77%	270
1936	4,983	20.6	6.345	31,615	63.50	12.00	0.50	0.78%	247
1937	2,605	20.6	6.345	16,528	62.50	12.00	0.50	0.79%	131
1938	3,470	20.6	6.345	22,016	61.50	12.00	0.50	0.81%	178
1939	6,897	20.6	6.345	43,759	60.50	12.00	0.50	0.82%	359
1940	7,412	20.6	6.345	47,027	59.50	12.00	0.50	0.83%	390
1941	16,748	20.6	6.345	106,260	58.50	12.00	0.50	0.85%	903
1942	16,376	20.6	6.345	103,900	57.50	12.00	0.50	0.86%	894
1943	1,922	20.6	6.345	12,194	56.50	12.00	0.50	0.88%	107
1944	1,858	20.6	6.345	11,788	55.50	12.00	0.50	0.89%	105
1945	568	20.6	6.345	3,604	54.50	12.00	0.50	0.91%	33
1946	7,333	20.6	6.345	46,525	53.50	12.00	0.50	0.93%	433
1947	8,726	22.1	5.914	51,606	52.50	12.00	0.50	0.94%	485
1948	22,216	23.7	5.515	122,516	51.50	12.00	0.50	0.96%	1,176
1949	46,079	25.2	5.187	238,989	50.50	12.00	0.50	0.98%	2,342
1950	59,299	24.6	5.313	315,056	49.50	12.00	0.50	1.00%	3,151
1951	94,915	25.8	5.066	480,829	48.50	12.00	0.50	1.02%	4,904
1952	180,205	26.1	5.008	902,406	47.50	12.00	0.50	1.04%	9,385
1953	330,081	26.1	5.008	1,652,934	46.50	12.00	0.50	1.06%	17,521
1954	542,122	26.4	4.951	2,683,915	45.50	12.00	0.50	1.09%	29,255
1955	642,523	26.1	5.008	3,217,539	44.50	12.00	0.50	1.11%	35,715
1956	512,245	27.5	4.753	2,434,561	43.50	12.00	0.50	1.14%	27,754
1957	665,039	27.3	4.788	3,183,905	42.50	12.00	0.50	1.16%	36,933
1958	1,151,086	27.4	4.770	5,490,764	41.50	12.00	0.50	1.19%	65,340
1959	1,782,112	28.1	4.651	8,289,041	40.50	12.00	0.50	1.22%	101,126
1960	3,163,262	27.9	4.685	14,818,579	39.50	12.00	0.50	1.25%	185,232
1961	1,486,124	27.7	4.718	7,012,145	38.50	12.00	0.50	1.28%	89,755
1962	1,587,969	27.8	4.701	7,465,739	37.50	12.00	0.50	1.32%	98,548
1963	1,773,157	28.0	4.668	8,276,844	36.50	12.00	0.50	1.35%	111,737
1964	1,473,513	28.3	4.618	6,805,235	35.50	12.00	0.50	1.39%	94,593
1965	1,391,124	28.6	4.570	6,357,339	34.50	12.00	0.50	1.43%	90,910
1966	1,238,887	30.3	4.314	5,343,978	33.50	12.00	0.50	1.47%	78,556
1967	1,163,772	31.2	4.189	4,875,160	32.50	12.00	0.50	1.52%	74,102

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Aerial Cable Metal  
Plant Sub-Account: Aerial Cable Metal  
Index Number: 2421  
Field Code: ACM  
Survivor Curve: R1  
Average Service Life: 12

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1968	1,178,373	32.8	3.985	4,695,529	31.50	12.00	0.50	1.56%	73,250
1969	1,565,655	34.4	3.799	5,948,579	30.50	12.00	0.50	1.61%	95,772
1970	1,988,092	38.2	3.421	6,802,189	29.50	12.00	0.50	1.67%	113,597
1971	1,270,818	40.3	3.243	4,121,487	28.50	12.00	0.50	1.72%	70,890
1972	1,563,656	43.2	3.025	4,730,783	27.50	12.00	0.50	1.79%	84,681
1973	1,518,428	45.0	2.904	4,410,190	26.50	12.00	0.50	1.85%	81,589
1974	1,449,535	50.9	2.568	3,722,087	25.50	12.00	0.50	1.92%	71,464
1975	996,266	54.7	2.389	2,380,475	24.50	12.00	0.50	2.00%	47,609
1976	975,646	58.6	2.230	2,176,057	23.50	12.00	0.50	2.08%	45,262
1977	1,372,889	62.2	2.101	2,884,833	22.50	12.00	0.65	2.81%	81,064
1978	1,339,964	64.8	2.017	2,702,674	21.50	12.00	0.93	4.15%	112,161
1979	1,521,517	72.7	1.798	2,735,382	20.50	12.00	1.21	5.57%	152,361
1980	1,786,019	81.1	1.612	2,878,331	19.50	12.00	1.50	7.14%	205,513
1981	1,850,493	86.8	1.506	2,786,399	18.50	12.00	1.81	8.91%	248,268
1982	5,239,628	91.7	1.425	7,468,041	17.50	12.00	2.04	10.44%	779,664
1983	3,808,911	95.8	1.364	5,196,500	16.50	12.00	2.36	12.51%	650,082
1984	4,274,768	97.9	1.335	5,706,968	15.50	12.00	2.69	14.79%	844,061
1985	4,831,397	96.2	1.359	6,564,071	14.50	12.00	3.03	17.28%	1,134,271
1986	5,016,687	97.3	1.343	6,738,756	13.50	12.00	3.39	20.07%	1,352,468
1987	6,286,802	97.9	1.335	8,393,105	12.50	12.00	3.76	23.12%	1,940,486
1988	7,308,853	100.0	1.307	9,552,671	11.50	12.00	4.15	26.52%	2,533,368
1989	6,854,258	106.5	1.227	8,411,751	10.50	12.00	4.55	30.23%	2,542,872
1990	7,669,578	109.4	1.195	9,162,832	9.50	12.00	4.96	34.30%	3,142,851
1991	7,232,374	111.2	1.175	8,500,641	8.50	12.00	5.38	38.76%	3,294,848
1992	6,373,845	113.6	1.151	7,333,288	7.50	12.00	5.81	43.65%	3,200,980
1993	6,477,742	114.9	1.138	7,368,502	6.50	12.00	6.22	48.90%	3,603,197
1994	6,558,420	117.9	1.109	7,270,445	5.50	12.00	6.63	54.66%	3,974,025
1995	8,596,955	127.3	1.027	8,826,567	4.50	12.00	6.99	60.84%	5,370,084
1996	10,995,199	127.2	1.028	11,297,740	3.50	12.00	7.30	67.59%	7,636,142
1997	9,892,832	129.5	1.009	9,984,503	2.50	12.00	7.50	75.00%	7,488,377
1998	8,640,054	130.1	1.005	8,679,901	1.50	12.00	7.52	83.37%	7,236,433
1999	7,438,539	130.7	1.000	7,438,539	0.50	12.00	7.05	93.38%	6,946,108
	164,522,015		1.761	287,654,714				23.05%	66,318,369

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Aerial Cable Non Metal  
Plant Sub-Account: Aerial Cable Non Metal  
Index Number: 2421  
Field Code: ACN  
Survivor Curve: SQ  
Average Service Life: 14.5

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1991	155,980	111.2	1.175	183,333	8.50	14.50	6.50	43.33%	79,438
1992	140,282	113.6	1.151	161,398	7.50	14.50	7.50	50.00%	80,699
1993	273,612	114.9	1.138	311,237	6.50	14.50	8.50	56.67%	176,378
1994	1,220,475	117.9	1.109	1,352,978	5.50	14.50	9.50	63.33%	856,841
1995	1,882,152	127.3	1.027	1,932,422	4.50	14.50	10.50	70.00%	1,352,695
1996	1,822,299	127.2	1.028	1,872,441	3.50	14.50	11.50	76.67%	1,435,600
1997	249,916	129.5	1.009	252,232	2.50	14.50	12.50	83.33%	210,185
1998	378,780	130.1	1.005	380,527	1.50	14.50	13.50	90.00%	342,474
1999	58,984	130.7	1.000	58,984	0.50	14.50	14.50	96.67%	57,020
	6,182,480		1.052	6,505,551				70.58%	4,591,330

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Underground Cable Metal  
Plant Sub-Account: Underground Cable Metal  
Index Number: 2422  
Field Code: UGM  
Survivor Curve: R1.5  
Average Service Life: 15

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	10,103,864	19.5	4.867	49,172,138	74.50	15.00	0.50	0.67%	329,453
1926	28,503	19.5	4.867	138,715	73.50	15.00	0.50	0.68%	943
1927	22,833	19.5	4.867	111,121	72.50	15.00	0.50	0.68%	756
1928	74,154	19.5	4.867	360,883	71.50	15.00	0.50	0.69%	2,490
1929	177,061	19.5	4.867	861,697	70.50	15.00	0.50	0.70%	6,032
1930	30,722	19.5	4.867	149,514	69.50	15.00	0.50	0.71%	1,062
1931	347	19.5	4.867	1,689	68.50	15.00	0.50	0.72%	12
1932	700	19.5	4.867	3,407	67.50	15.00	0.50	0.74%	25
1933	12,406	19.5	4.867	60,376	66.50	15.00	0.50	0.75%	453
1934	34,034	19.5	4.867	165,632	65.50	15.00	0.50	0.76%	1,259
1935	10	19.5	4.867	49	64.50	15.00	0.50	0.77%	0
1936	7,585	19.5	4.867	36,914	63.50	15.00	0.50	0.78%	288
1937	59,532	19.5	4.867	289,722	62.50	15.00	0.50	0.79%	2,289
1938	13,749	19.5	4.867	66,912	61.50	15.00	0.50	0.81%	542
1939	18,544	19.5	4.867	90,247	60.50	15.00	0.50	0.82%	740
1940	69,954	19.5	4.867	340,443	59.50	15.00	0.50	0.83%	2,826
1941	113,280	19.5	4.867	551,296	58.50	15.00	0.50	0.85%	4,686
1942	27,054	19.5	4.867	131,663	57.50	15.00	0.50	0.86%	1,132
1943	56,594	19.5	4.867	275,424	56.50	15.00	0.50	0.88%	2,424
1944	0	19.5	4.867	0	55.50	15.00	0.00	0.00%	0
1945	3,742	19.5	4.867	18,211	54.50	15.00	0.50	0.91%	166
1946	10,785	19.5	4.867	52,487	53.50	15.00	0.50	0.93%	488
1947	289,931	25.8	3.678	1,066,452	52.50	15.00	0.50	0.94%	10,025
1948	82,986	27.3	3.476	288,475	51.50	15.00	0.50	0.96%	2,769
1949	45,482	27.8	3.414	155,260	50.50	15.00	0.50	0.98%	1,522
1950	41,680	26.2	3.622	150,971	49.50	15.00	0.50	1.00%	1,510
1951	189,856	29.9	3.174	602,586	48.50	15.00	0.50	1.02%	6,146
1952	280,364	30.2	3.142	881,011	47.50	15.00	0.50	1.04%	9,163
1953	499,955	30.1	3.153	1,576,270	46.50	15.00	0.50	1.06%	16,708
1954	662,931	30.3	3.132	2,076,309	45.50	15.00	0.50	1.09%	22,632
1955	1,269,698	33.3	2.850	3,618,449	44.50	15.00	0.50	1.11%	40,165
1956	1,361,537	36.0	2.636	3,589,163	43.50	15.00	0.50	1.14%	40,916
1957	1,887,240	34.7	2.735	5,161,357	42.50	15.00	0.50	1.16%	59,872
1958	1,556,081	32.8	2.893	4,502,198	41.50	15.00	0.50	1.19%	53,576
1959	1,518,548	33.6	2.824	4,288,994	40.50	15.00	0.50	1.22%	52,326
1960	2,977,477	35.0	2.711	8,073,216	39.50	15.00	0.50	1.25%	100,915
1961	1,741,187	33.7	2.816	4,903,224	38.50	15.00	0.50	1.28%	62,761
1962	1,535,930	33.5	2.833	4,351,038	37.50	15.00	0.50	1.32%	57,434
1963	1,494,917	34.3	2.767	4,136,082	36.50	15.00	0.50	1.35%	55,837
1964	1,955,126	35.8	2.651	5,182,722	35.50	15.00	0.50	1.39%	72,040
1965	2,328,906	38.7	2.452	5,710,935	34.50	15.00	0.50	1.43%	81,666
1966	1,980,655	41.3	2.298	4,551,190	33.50	15.00	0.50	1.47%	66,902

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Underground Cable Metal  
Plant Sub-Account: Underground Cable Metal  
Index Number: 2422  
Field Code: UGM  
Survivor Curve: R1.5  
Average Service Life: 15

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	2,417,886	43.0	2.207	5,336,218	32.50	15.00	0.50	1.52%	81,111
1968	2,233,417	46.0	2.063	4,607,636	31.50	15.00	0.50	1.56%	71,879
1969	4,500,038	49.1	1.933	8,697,629	30.50	15.00	0.50	1.61%	140,032
1970	7,106,321	56.0	1.695	12,042,676	29.50	15.00	0.50	1.67%	201,113
1971	7,764,213	56.1	1.692	13,134,114	28.50	15.00	0.66	2.26%	296,831
1972	8,495,809	59.6	1.592	13,527,723	27.50	15.00	0.95	3.34%	451,826
1973	11,640,664	64.1	1.480	17,233,994	26.50	15.00	1.20	4.33%	746,232
1974	8,799,143	74.2	1.279	11,253,890	25.50	15.00	1.41	5.24%	589,704
1975	3,966,792	74.8	1.269	5,032,735	24.50	15.00	1.64	6.27%	315,552
1976	2,278,622	81.6	1.163	2,650,015	23.50	15.00	1.89	7.44%	197,161
1977	5,006,405	81.3	1.167	5,843,885	22.50	15.00	2.16	8.76%	511,924
1978	7,728,040	81.8	1.160	8,965,660	21.50	15.00	2.44	10.19%	913,601
1979	9,258,535	90.4	1.050	9,719,413	20.50	15.00	2.74	11.79%	1,145,919
1980	9,491,636	103.0	0.921	8,745,206	19.50	15.00	3.06	13.56%	1,185,850
1981	6,954,971	109.0	0.871	6,055,291	18.50	15.00	3.40	15.53%	940,387
1982	18,818,812	111.7	0.850	15,988,409	17.50	15.00	3.46	16.51%	2,639,686
1983	14,409,653	111.9	0.848	12,220,519	16.50	15.00	3.79	18.68%	2,282,793
1984	16,500,978	110.5	0.859	14,171,428	15.50	15.00	4.15	21.12%	2,993,006
1985	19,227,669	106.4	0.892	17,149,490	14.50	15.00	4.54	23.84%	4,088,439
1986	13,647,292	105.0	0.904	12,334,552	13.50	15.00	4.95	26.83%	3,309,360
1987	11,693,724	101.1	0.939	10,976,601	12.50	15.00	5.38	30.09%	3,302,859
1988	10,980,446	100.0	0.949	10,420,443	11.50	15.00	5.83	33.64%	3,505,437
1989	10,264,371	108.5	0.875	8,977,777	10.50	15.00	6.29	37.46%	3,363,075
1990	13,221,174	107.6	0.882	11,660,682	9.50	15.00	6.77	41.61%	4,852,010
1991	7,837,762	107.4	0.884	6,925,546	8.50	15.00	7.26	46.07%	3,190,599
1992	3,374,455	107.0	0.887	2,992,858	7.50	15.00	7.74	50.79%	1,520,072
1993	9,744,913	96.9	0.979	9,543,780	6.50	15.00	8.22	55.84%	5,329,247
1994	10,834,070	93.0	1.020	11,055,411	5.50	15.00	8.69	61.24%	6,770,334
1995	8,612,259	100.7	0.942	8,116,220	4.50	15.00	9.12	66.96%	5,434,621
1996	12,148,281	99.5	0.954	11,586,652	3.50	15.00	9.50	73.08%	8,467,525
1997	10,596,614	99.0	0.959	10,157,764	2.50	15.00	9.79	79.66%	8,091,675
1998	12,083,407	95.9	0.990	11,957,407	1.50	15.00	9.89	86.83%	10,382,616
1999	12,107,013	94.9	1.000	12,107,013	0.50	15.00	9.51	95.00%	11,501,662
	348,311,325		1.289	448,933,081				22.27%	99,987,089

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Underground Cable Non Metal  
Plant Sub-Account: Underground Cable Non Metal  
Index Number: 2422  
Field Code: UGN  
Survivor Curve: SQ  
Average Service Life: 13.1

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1984	288,498	110.5	0.859	247,769	15.50	13.10	0.50	3.13%	7,755
1985	6,049,156	106.4	0.892	5,395,347	14.50	13.10	0.50	3.33%	179,665
1986	5,318,470	105.0	0.904	4,806,884	13.50	13.10	0.50	3.57%	171,606
1987	2,610,677	101.1	0.939	2,450,576	12.50	13.10	0.50	3.85%	94,347
1988	3,986,987	100.0	0.949	3,783,651	11.50	13.10	1.50	11.54%	436,633
1989	5,868,439	108.5	0.875	5,132,856	10.50	13.10	2.50	19.23%	987,048
1990	4,228,942	107.6	0.882	3,729,801	9.50	13.10	3.50	26.92%	1,004,062
1991	9,292,290	107.4	0.884	8,210,785	8.50	13.10	4.50	34.62%	2,842,574
1992	5,209,729	107.0	0.887	4,620,591	7.50	13.10	5.50	42.31%	1,954,972
1993	7,494,771	96.9	0.979	7,340,080	6.50	13.10	6.50	50.00%	3,670,040
1994	6,567,885	93.0	1.020	6,702,068	5.50	13.10	7.50	57.69%	3,866,423
1995	7,574,220	100.7	0.942	7,137,969	4.50	13.10	8.50	65.38%	4,666,804
1996	9,478,340	99.5	0.954	9,040,145	3.50	13.10	9.50	73.08%	6,606,538
1997	4,347,677	99.0	0.959	4,167,622	2.50	13.10	10.50	80.77%	3,366,188
1998	6,069,150	95.9	0.990	6,005,864	1.50	13.10	11.50	88.46%	5,312,787
1999	2,598,651	94.9	1.000	2,598,651	0.50	13.10	12.50	96.15%	2,498,603
	86,983,882		0.935	81,370,658				46.29%	37,666,046

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buried Cable Metal  
Plant Sub-Account: Buried Cable Metal  
Index Number: 2423  
Field Code: BCM  
Survivor Curve: L1.5  
Average Service Life: 12

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	16,781,018	26.2	4.721	79,229,463	74.50	12.00	0.50	0.67%	530,837
1926	0	26.2	4.721	0	73.50	12.00	0.00	0.00%	0
1927	0	26.2	4.721	0	72.50	12.00	0.00	0.00%	0
1928	0	26.2	4.721	0	71.50	12.00	0.00	0.00%	0
1929	0	26.2	4.721	0	70.50	12.00	0.00	0.00%	0
1930	0	26.2	4.721	0	69.50	12.00	0.00	0.00%	0
1931	0	26.2	4.721	0	68.50	12.00	0.00	0.00%	0
1932	0	26.2	4.721	0	67.50	12.00	0.00	0.00%	0
1933	0	26.2	4.721	0	66.50	12.00	0.00	0.00%	0
1934	0	26.2	4.721	0	65.50	12.00	0.00	0.00%	0
1935	0	26.2	4.721	0	64.50	12.00	0.00	0.00%	0
1936	7,347	26.2	4.721	34,688	63.50	12.00	0.50	0.78%	271
1937	227	26.2	4.721	1,072	62.50	12.00	0.50	0.75%	8
1938	1,621	26.2	4.721	7,653	61.50	12.00	0.50	0.81%	62
1939	0	26.2	4.721	0	60.50	12.00	0.00	0.00%	0
1940	917	26.2	4.721	4,330	59.50	12.00	0.50	0.83%	36
1941	77,853	26.2	4.721	367,573	58.50	12.00	0.50	0.85%	3,124
1942	360	26.2	4.721	1,700	57.50	12.00	0.50	0.86%	15
1943	0	26.2	4.721	0	56.50	12.00	0.00	0.00%	0
1944	0	26.2	4.721	0	55.50	12.00	0.00	0.00%	0
1945	1,304	26.2	4.721	6,157	54.50	12.00	0.50	0.91%	56
1946	1,438	26.2	4.721	6,789	53.50	12.00	0.50	0.93%	63
1947	422	28.0	4.418	1,864	52.50	12.00	0.50	0.94%	18
1948	3,157	29.8	4.151	13,105	51.50	12.00	0.50	0.96%	126
1949	13,274	31.8	3.890	51,635	50.50	12.00	0.50	0.98%	506
1950	3,053	31.0	3.990	12,182	49.50	12.00	0.50	1.00%	122
1951	4,491	32.4	3.818	17,146	48.50	12.00	0.50	1.02%	175
1952	90,573	32.9	3.760	340,543	47.50	12.00	0.50	1.04%	3,542
1953	61,457	33.2	3.726	228,983	46.50	12.00	0.50	1.06%	2,427
1954	289,617	33.7	3.671	1,063,075	45.50	12.00	0.50	1.09%	11,588
1955	183,970	33.3	3.715	683,396	44.50	12.00	0.50	1.11%	7,586
1956	467,951	35.2	3.514	1,644,476	43.50	12.00	0.50	1.14%	18,747
1957	235,224	34.6	3.575	840,960	42.50	12.00	0.50	1.16%	9,755
1958	203,113	34.7	3.565	724,066	41.50	12.00	0.50	1.19%	8,616
1959	303,936	35.7	3.465	1,053,134	40.50	12.00	0.50	1.22%	12,848
1960	864,521	34.6	3.575	3,090,788	39.50	12.00	0.50	1.25%	38,635
1961	1,506,464	33.7	3.671	5,529,662	38.50	12.00	0.50	1.28%	70,780
1962	1,582,619	33.5	3.693	5,843,880	37.50	12.00	0.50	1.32%	77,139
1963	2,797,817	33.4	3.704	10,361,975	36.50	12.00	0.50	1.35%	139,887
1964	2,876,176	33.1	3.737	10,748,730	35.50	12.00	0.50	1.39%	149,407
1965	2,500,066	33.3	3.715	9,287,032	34.50	12.00	0.75	2.13%	197,814
1966	3,449,044	35.5	3.485	12,018,218	33.50	12.00	0.89	2.59%	311,272

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buried Cable Metal  
Plant Sub-Account: Buried Cable Metal  
Index Number: 2423  
Field Code: BCM  
Survivor Curve: L1.5  
Average Service Life: 12

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	3,423,961	36.7	3.371	11,540,708	32.50	12.00	1.08	3.22%	371,611
1968	4,237,437	38.7	3.196	13,544,469	31.50	12.00	1.21	3.70%	501,145
1969	8,621,190	40.3	3.069	26,462,561	30.50	12.00	1.35	4.24%	1,122,013
1970	12,589,243	45.5	2.719	34,226,140	29.50	12.00	1.49	4.81%	1,646,277
1971	13,167,320	46.8	2.643	34,803,365	28.50	12.00	1.64	5.44%	1,893,303
1972	14,394,976	49.9	2.479	35,684,540	27.50	12.00	1.79	6.11%	2,180,325
1973	23,839,108	52.0	2.379	56,709,570	26.50	12.00	1.94	6.82%	3,867,593
1974	13,708,583	60.0	2.062	28,262,529	25.50	12.00	2.11	7.64%	2,159,257
1975	8,081,522	62.8	1.970	15,918,539	24.50	12.00	2.28	8.51%	1,354,668
1976	8,725,061	67.7	1.827	15,942,246	23.50	12.00	2.47	9.51%	1,516,108
1977	12,205,282	69.5	1.780	21,723,646	22.50	12.00	2.66	10.57%	2,296,189
1978	17,926,079	70.4	1.757	31,497,954	21.50	12.00	2.86	11.74%	3,697,860
1979	19,841,627	78.6	1.574	31,226,581	20.50	12.00	3.07	13.03%	4,068,823
1980	20,308,573	88.2	1.402	28,482,659	19.50	12.00	3.28	14.40%	4,101,503
1981	21,514,590	95.1	1.301	27,984,803	18.50	12.00	3.51	15.95%	4,463,576
1982	51,271,767	98.6	1.255	64,323,708	17.50	12.00	3.38	16.19%	10,414,008
1983	39,276,005	100.0	1.237	48,584,418	16.50	12.00	3.57	17.79%	8,643,168
1984	54,795,139	100.9	1.226	67,176,994	15.50	12.00	3.75	19.48%	13,086,078
1985	61,048,223	99.0	1.249	76,279,446	14.50	12.00	3.94	21.37%	16,300,918
1986	52,561,210	100.6	1.230	64,630,434	13.50	12.00	4.11	23.34%	15,084,743
1987	59,235,149	98.8	1.252	74,163,845	12.50	12.00	4.28	25.51%	18,919,197
1988	47,995,660	100.0	1.237	59,370,631	11.50	12.00	4.44	27.85%	16,534,721
1989	41,562,213	105.2	1.176	48,871,157	10.50	12.00	4.60	30.46%	14,886,155
1990	34,783,244	105.2	1.176	40,900,069	9.50	12.00	4.76	33.38%	13,652,443
1991	35,150,580	106.8	1.158	40,712,797	8.50	12.00	4.94	36.76%	14,966,024
1992	36,373,359	109.4	1.131	41,127,829	7.50	12.00	5.15	40.71%	16,743,139
1993	33,832,425	107.4	1.152	38,967,141	6.50	12.00	5.40	45.38%	17,683,289
1994	44,771,976	110.0	1.125	50,348,122	5.50	12.00	5.72	50.98%	25,667,473
1995	70,643,417	122.1	1.013	71,569,129	4.50	12.00	6.12	57.63%	41,245,289
1996	91,871,543	121.3	1.020	93,689,282	3.50	12.00	6.58	65.28%	61,160,363
1997	93,237,720	123.6	1.001	93,313,155	2.50	12.00	7.08	73.90%	68,958,422
1998	79,163,363	123.5	1.002	79,291,563	1.50	12.00	7.63	83.57%	66,263,959
1999	91,958,160	123.7	1.000	91,958,160	0.50	12.00	8.19	94.25%	86,670,566
	1,256,424,735		1.355	1,702,502,465				33.11%	563,715,667

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Buried Cable Non Metal  
Plant Sub-Account: Buried Cable Non Metal  
Index Number: 2423  
Field Code: BCN  
Survivor Curve: SQ  
Average Service Life: 17.6

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1985	572,771	99.0	1.249	715,674	14.50	17.60	3.50	19.44%	139,127
1986	144,757	100.6	1.230	177,996	13.50	17.60	4.50	25.00%	44,499
1987	1,201,640	98.8	1.252	1,504,482	12.50	17.60	5.50	30.56%	459,770
1988	1,509,741	100.0	1.237	1,867,550	11.50	17.60	6.50	36.11%	674,372
1989	240,697	105.2	1.176	283,025	10.50	17.60	7.50	41.67%	117,936
1990	1,871,908	105.2	1.176	2,201,093	9.50	17.60	8.50	47.22%	1,039,356
1991	3,910,865	106.8	1.158	4,529,719	8.50	17.60	9.50	52.78%	2,390,786
1992	963,481	109.4	1.131	1,089,420	7.50	17.60	10.50	58.33%	635,459
1993	1,176,352	107.4	1.152	1,354,886	6.50	17.60	11.50	63.89%	865,637
1994	1,228,278	110.0	1.125	1,381,254	5.50	17.60	12.50	69.44%	959,143
1995	2,358,672	122.1	1.013	2,389,580	4.50	17.60	13.50	75.00%	1,792,185
1996	1,332,090	121.3	1.020	1,358,446	3.50	17.60	14.50	80.56%	1,094,364
1997	252,319	123.6	1.001	252,523	2.50	17.60	15.50	86.11%	217,448
1998	196,529	123.5	1.002	196,847	1.50	17.60	16.50	91.67%	180,450
1999	284,557	123.7	1.000	284,557	0.50	17.60	17.50	97.22%	276,646
	17,244,657		1.136	19,587,055				55.58%	10,887,179

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Submarine Cable Metal  
Plant Sub-Account: Submarine Cable Metal  
Index Number: 2424  
Field Code: SBM  
Survivor Curve: SQ  
Average Service Life: 15

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1981	2,572	101.5	1.256	3,232	18.50	15.00	0.50	2.63%	85
1982	0	104.6	1.219	0	17.50	15.00	0.00	0.00%	0
1983	0	104.6	1.219	0	16.50	15.00	0.00	0.00%	0
1984	0	105.2	1.212	0	15.50	15.00	0.00	0.00%	0
1985	0	103.2	1.236	0	14.50	15.00	0.00	0.00%	0
1986	0	101.9	1.252	0	13.50	15.00	0.00	0.00%	0
1987	0	99.3	1.284	0	12.50	15.00	0.00	0.00%	0
1988	0	100.0	1.275	0	11.50	15.00	0.00	0.00%	0
1989	0	106.2	1.201	0	10.50	15.00	0.00	0.00%	0
1990	0	106.5	1.197	0	9.50	15.00	0.00	0.00%	0
1991	0	109.3	1.167	0	8.50	15.00	0.00	0.00%	0
1992	0	112.4	1.135	0	7.50	15.00	0.00	0.00%	0
1993	0	117.0	1.090	0	6.50	15.00	0.00	0.00%	0
1994	0	122.2	1.044	0	5.50	15.00	0.00	0.00%	0
1995	0	127.1	1.003	0	4.50	15.00	0.00	0.00%	0
1996	0	126.2	1.010	0	3.50	15.00	0.00	0.00%	0
1997	0	128.2	0.995	0	2.50	15.00	0.00	0.00%	0
1998	0	127.5	1.000	0	1.50	15.00	0.00	0.00%	0
1999	0	127.5	1.000	0	0.50	15.00	0.00	0.00%	0
	2,572		1.256	3,232				2.63%	85

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Intra Building Cable Non Metal  
Plant Sub-Account: Intra Building Cable Non Metal  
Index Number: 2426  
Field Code: IBN  
Survivor Curve: O1  
Average Service Life: 11.5

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1985	16,089	99.9	1.222	19,664	14.50	11.50	3.94	21.37%	4,202
1986	14,640	100.8	1.211	17,734	13.50	11.50	4.34	24.33%	4,315
1987	4,417	99.1	1.232	5,442	12.50	11.50	4.73	27.45%	1,494
1988	21,088	100.0	1.221	25,748	11.50	11.50	5.10	30.72%	7,910
1989	6,347	105.4	1.158	7,353	10.50	11.50	5.45	34.17%	2,512
1990	14,010	106.9	1.142	16,002	9.50	11.50	5.78	37.83%	6,054
1991	19,609	108.1	1.130	22,149	8.50	11.50	6.08	41.70%	9,236
1992	17,812	110.3	1.107	19,718	7.50	11.50	6.34	45.81%	9,033
1993	30,377	108.8	1.122	34,090	6.50	11.50	6.57	50.27%	17,137
1994	39,320	111.7	1.093	42,981	5.50	11.50	6.74	55.07%	23,670
1995	70,539	118.4	1.031	72,743	4.50	11.50	6.86	60.39%	43,930
1996	90,088	119.0	1.026	92,435	3.50	11.50	6.88	66.28%	61,266
1997	52,137	122.1	1.000	52,137	2.50	11.50	6.77	73.03%	38,076
1998	56,841	121.2	1.007	57,263	1.50	11.50	6.43	81.08%	46,429
1999	127,533	122.1	1.000	127,533	0.50	11.50	5.56	91.75%	117,012
	580,847		1.055	612,992				63.99%	392,274

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Intra Building Cable Metal  
Plant Sub-Account: Intra Building Cable Metal  
Index Number: 2426  
Field Code: IBM  
Survivor Curve: L2  
Average Service Life: 19

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	3,210,926	22.2	5.500	17,660,093	74.50	19.00	0.50	0.67%	118,323
1926	179	22.2	5.500	985	73.50	19.00	0.50	0.68%	7
1927	0	22.2	5.500	0	72.50	19.00	0.00	0.00%	0
1928	2,010	22.2	5.500	11,055	71.50	19.00	0.50	0.69%	76
1929	2,658	22.2	5.500	14,619	70.50	19.00	0.50	0.70%	102
1930	2,658	22.2	5.500	14,619	69.50	19.00	0.50	0.71%	104
1931	1,184	22.2	5.500	6,512	68.50	19.00	0.50	0.72%	47
1932	577	22.2	5.500	3,174	67.50	19.00	0.50	0.74%	23
1933	550	22.2	5.500	3,025	66.50	19.00	0.50	0.75%	23
1934	447	22.2	5.500	2,459	65.50	19.00	0.50	0.76%	19
1935	301	22.2	5.500	1,656	64.50	19.00	0.50	0.77%	13
1936	4,325	22.2	5.500	23,788	63.50	19.00	0.50	0.78%	186
1937	1,004	22.2	5.500	5,522	62.50	19.00	0.50	0.79%	44
1938	1,296	22.2	5.500	7,128	61.50	19.00	0.50	0.81%	58
1939	1,292	22.2	5.500	7,106	60.50	19.00	0.50	0.82%	58
1940	1,526	22.2	5.500	8,393	59.50	19.00	0.50	0.83%	70
1941	505	22.2	5.500	2,778	58.50	19.00	0.50	0.85%	24
1942	2,657	22.2	5.500	14,614	57.50	19.00	0.50	0.86%	126
1943	1,930	22.2	5.500	10,615	56.50	19.00	0.50	0.88%	93
1944	1,391	22.2	5.500	7,651	55.50	19.00	0.50	0.89%	68
1945	1,531	22.2	5.500	8,421	54.50	19.00	0.50	0.91%	77
1946	3,497	22.2	5.500	19,234	53.50	19.00	0.50	0.93%	179
1947	937	25.1	4.865	4,558	52.50	19.00	0.50	0.94%	43
1948	8,187	26.8	4.556	37,300	51.50	19.00	0.50	0.96%	358
1949	4,257	28.2	4.330	18,432	50.50	19.00	0.93	1.81%	334
1950	3,468	27.2	4.489	15,568	49.50	19.00	0.99	1.96%	305
1951	14,286	29.3	4.167	59,533	48.50	19.00	1.08	2.18%	1,298
1952	17,921	29.6	4.125	73,924	47.50	19.00	1.25	2.56%	1,892
1953	14,047	29.6	4.125	57,944	46.50	19.00	1.41	2.94%	1,704
1954	36,547	29.9	4.084	149,244	45.50	19.00	1.57	3.34%	4,985
1955	47,238	30.5	4.003	189,107	44.50	19.00	1.75	3.78%	7,148
1956	49,594	32.4	3.769	186,896	43.50	19.00	1.93	4.25%	7,943
1957	81,145	31.8	3.840	311,566	42.50	19.00	2.11	4.73%	14,737
1958	58,022	31.4	3.889	225,621	41.50	19.00	2.29	5.23%	11,800
1959	85,842	32.2	3.792	325,506	40.50	19.00	2.48	5.77%	18,782
1960	103,270	32.3	3.780	390,380	39.50	19.00	2.67	6.33%	24,711
1961	188,006	31.7	3.852	724,149	38.50	19.00	2.87	6.94%	50,256
1962	157,582	31.6	3.864	608,885	37.50	19.00	3.07	7.57%	46,093
1963	200,814	31.8	3.840	771,050	36.50	19.00	3.27	8.22%	63,380
1964	276,275	32.2	3.792	1,047,614	35.50	19.00	3.48	8.93%	93,552
1965	191,604	33.1	3.689	706,793	34.50	19.00	3.69	9.66%	68,276
1966	224,625	35.2	3.469	779,168	33.50	19.00	3.90	10.43%	81,267

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Intra Building Cable Metal  
Plant Sub-Account: Intra Building Cable Metal  
Index Number: 2426  
Field Code: IBM  
Survivor Curve: L2  
Average Service Life: 19

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	276,534	36.4	3.354	927,604	32.50	19.00	4.12	11.25%	104,355
1968	251,647	38.5	3.171	798,080	31.50	19.00	4.35	12.13%	96,807
1969	338,233	40.5	3.015	1,019,710	30.50	19.00	4.58	13.06%	133,174
1970	581,035	45.6	2.678	1,555,798	29.50	19.00	4.82	14.04%	218,434
1971	632,592	46.9	2.603	1,646,897	28.50	19.00	5.06	15.08%	248,352
1972	694,148	50.1	2.437	1,691,726	27.50	19.00	5.31	16.18%	273,721
1973	953,851	52.6	2.321	2,214,167	26.50	19.00	5.56	17.34%	383,937
1974	1,020,386	60.4	2.022	2,062,734	25.50	19.00	5.81	18.56%	382,843
1975	789,036	63.0	1.938	1,529,227	24.50	19.00	6.06	19.83%	303,246
1976	760,195	68.1	1.793	1,362,993	23.50	19.00	6.31	21.17%	288,546
1977	666,764	69.9	1.747	1,164,691	22.50	19.00	6.56	22.57%	262,871
1978	844,517	71.3	1.712	1,446,221	21.50	19.00	6.80	24.03%	347,527
1979	1,217,841	79.5	1.536	1,870,420	20.50	19.00	7.04	25.56%	478,079
1980	1,086,741	89.4	1.366	1,484,240	19.50	19.00	7.28	27.18%	403,416
1981	1,263,681	95.7	1.276	1,612,283	18.50	19.00	7.52	28.90%	465,950
1982	2,204,156	99.5	1.227	2,704,798	17.50	19.00	6.50	27.08%	732,459
1983	1,968,564	101.5	1.203	2,368,095	16.50	19.00	6.64	28.69%	679,407
1984	2,095,785	102.1	1.196	2,506,321	15.50	19.00	6.79	30.46%	763,425
1985	1,907,930	99.9	1.222	2,331,914	14.50	19.00	6.96	32.43%	756,240
1986	2,579,266	100.8	1.211	3,124,289	13.50	19.00	7.15	34.62%	1,081,629
1987	2,107,502	99.1	1.232	2,596,630	12.50	19.00	7.38	37.12%	963,869
1988	1,405,370	100.0	1.221	1,715,957	11.50	19.00	7.66	39.98%	686,040
1989	1,202,638	105.4	1.158	1,393,189	10.50	19.00	7.99	43.21%	601,997
1990	1,040,743	106.9	1.142	1,188,725	9.50	19.00	8.40	46.93%	557,869
1991	836,003	108.1	1.130	944,274	8.50	19.00	8.87	51.07%	482,240
1992	624,207	110.3	1.107	690,985	7.50	19.00	9.43	55.70%	384,879
1993	479,939	108.8	1.122	538,608	6.50	19.00	10.04	60.70%	326,935
1994	508,226	111.7	1.093	555,545	5.50	19.00	10.69	66.03%	366,826
1995	797,377	118.4	1.031	822,295	4.50	19.00	11.37	71.64%	589,092
1996	999,356	119.0	1.026	1,025,390	3.50	19.00	12.07	77.52%	794,882
1997	1,316,707	122.1	1.000	1,316,707	2.50	19.00	12.82	83.68%	1,101,820
1998	1,187,630	121.2	1.007	1,196,449	1.50	19.00	13.63	90.09%	1,077,881
1999	1,377,986	122.1	1.000	1,377,986	0.50	19.00	14.52	96.67%	1,332,099
	<u>41,022,697</u>		<u>1.836</u>	<u>75,301,628</u>				<u>24.29%</u>	<u>18,289,429</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Aerial Wire  
Plant Sub-Account: Aerial Wire  
Index Number: 2431  
Field Code: AWZ  
Survivor Curve: L0  
Average Service Life: 8.9

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1952	2	24.1	5.502	11	47.50	8.90	0.50	1.04%	0
1953	9	25.6	5.180	47	46.50	8.90	0.50	1.06%	0
1954	143	26.4	5.023	718	45.50	8.90	0.50	1.09%	8
1955	741	26.8	4.948	3,666	44.50	8.90	0.50	1.11%	41
1956	1,358	27.9	4.753	6,454	43.50	8.90	0.50	1.14%	74
1957	2,816	27.5	4.822	13,578	42.50	8.90	0.50	1.16%	158
1958	4,306	28.1	4.719	20,319	41.50	8.90	0.50	1.19%	242
1959	7,198	28.5	4.653	33,490	40.50	8.90	0.50	1.22%	409
1960	10,634	29.0	4.572	48,623	39.50	8.90	0.50	1.25%	608
1961	15,063	29.1	4.557	68,638	38.50	8.90	0.50	1.28%	879
1962	22,914	27.9	4.753	108,903	37.50	8.90	0.50	1.32%	1,438
1963	8,958	27.4	4.839	43,351	36.50	8.90	0.50	1.35%	585
1964	10,465	27.7	4.787	50,096	35.50	8.90	0.50	1.39%	696
1965	11,897	28.0	4.736	56,341	34.50	8.90	0.50	1.43%	806
1966	17,683	29.2	4.541	80,300	33.50	8.90	0.50	1.47%	1,180
1967	17,113	30.7	4.319	73,915	32.50	8.90	0.85	2.55%	1,885
1968	14,513	32.9	4.030	58,493	31.50	8.90	1.04	3.20%	1,872
1969	15,499	35.8	3.704	57,407	30.50	8.90	1.13	3.57%	2,049
1970	25,847	39.0	3.400	87,880	29.50	8.90	1.23	4.00%	3,515
1971	52,648	40.4	3.282	172,800	28.50	8.90	1.35	4.52%	7,811
1972	61,680	42.1	3.150	194,270	27.50	8.90	1.48	5.11%	9,927
1973	76,698	43.5	3.048	233,797	26.50	8.90	1.61	5.73%	13,397
1974	104,357	52.6	2.521	263,075	25.50	8.90	1.75	6.42%	16,889
1975	84,346	56.2	2.359	199,009	24.50	8.90	1.89	7.16%	14,249
1976	66,339	59.4	2.232	148,090	23.50	8.90	2.04	7.99%	11,832
1977	69,286	63.6	2.085	144,455	22.50	8.90	2.20	8.91%	12,871
1978	84,235	66.0	2.009	169,236	21.50	8.90	2.36	9.89%	16,737
1979	146,536	70.7	1.876	274,833	20.50	8.90	2.53	10.99%	30,204
1980	290,279	80.1	1.655	480,537	19.50	8.90	2.70	12.16%	58,433
1981	185,916	84.1	1.577	293,133	18.50	8.90	2.88	13.47%	39,485
1982	143,795	89.0	1.490	214,238	17.50	8.90	3.07	14.92%	31,964
1983	224,529	92.1	1.440	323,263	16.50	8.90	3.27	16.54%	53,468
1984	129,208	96.1	1.380	178,283	15.50	8.90	3.47	18.29%	32,608
1985	189,299	95.2	1.393	263,666	14.50	8.90	3.69	20.29%	53,498
1986	230,446	92.8	1.429	329,280	13.50	8.90	3.92	22.50%	74,088
1987	279,286	95.9	1.383	386,166	12.50	8.90	4.16	24.97%	96,426
1988	262,649	100.0	1.326	348,273	11.50	8.90	4.41	27.72%	96,541
1989	242,953	107.0	1.239	301,080	10.50	8.90	4.67	30.78%	92,672
1990	321,305	109.8	1.208	388,024	9.50	8.90	4.95	34.26%	132,937
1991	428,579	109.4	1.212	519,466	8.50	8.90	5.24	38.14%	198,124
1992	300,726	111.5	1.189	357,635	7.50	8.90	5.55	42.53%	152,102
1993	464,730	114.0	1.163	540,554	6.50	8.90	5.88	47.50%	256,763

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Aerial Wire  
Plant Sub-Account: Aerial Wire  
Index Number: 2431  
Field Code: AWZ  
Survivor Curve: L0  
Average Service Life: 8.9

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1994	489,839	117.5	1.129	552,789	5.50	8.90	6.23	53.11%	293,586
1995	467,106	126.5	1.048	489,630	4.50	8.90	6.59	59.42%	290,938
1996	592,855	127.2	1.042	618,023	3.50	8.90	6.99	66.63%	411,789
1997	993,241	130.1	1.019	1,012,327	2.50	8.90	7.42	74.80%	757,221
1998	782,855	131.5	1.008	789,404	1.50	8.90	7.91	84.06%	663,573
1999	846,076	132.6	1.000	846,076	0.50	8.90	8.52	94.46%	799,203
	<u>8,798,956</u>		<u>1.346</u>	<u>11,843,641</u>				<u>39.99%</u>	<u>4,735,781</u>

**Based on Staff Witness Dunkel Methodology**

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Conduit Systems  
Plant Sub-Account: Conduit Systems  
Index Number: 2441  
Field Code: UCZ  
Survivor Curve: SQ  
Average Service Life: 56.6

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1925	13,801,685	10.4	10.615	146,510,195	74.50	56.60	0.50	0.67%	981,618
1926	191,186	10.4	10.615	2,029,513	73.50	56.60	0.50	0.68%	13,801
1927	81,099	10.4	10.615	860,897	72.50	56.60	0.50	0.68%	5,854
1928	293,773	10.4	10.615	3,118,513	71.50	56.60	0.50	0.69%	21,518
1929	304,723	10.4	10.615	3,234,752	70.50	56.60	0.50	0.70%	22,643
1930	166,778	10.4	10.615	1,770,413	69.50	56.60	0.50	0.71%	12,570
1931	3,265	10.4	10.615	34,659	68.50	56.60	0.50	0.72%	250
1932	6,869	10.4	10.615	72,917	67.50	56.60	0.50	0.74%	540
1933	103,398	10.4	10.615	1,097,610	66.50	56.60	0.50	0.75%	8,232
1934	794	10.4	10.615	8,429	65.50	56.60	0.50	0.76%	64
1935	3,241	10.4	10.615	34,404	64.50	56.60	0.50	0.77%	265
1936	83,574	10.4	10.615	887,170	63.50	56.60	0.50	0.78%	6,920
1937	8,254	10.4	10.615	87,619	62.50	56.60	0.50	0.79%	692
1938	0	10.4	10.615	0	61.50	56.60	0.00	0.00%	0
1939	11,619	10.4	10.615	123,340	60.50	56.60	0.50	0.82%	1,011
1940	4,056	10.4	10.615	43,056	59.50	56.60	0.50	0.83%	357
1941	57,168	10.4	10.615	606,860	58.50	56.60	0.50	0.85%	5,158
1942	271	10.4	10.615	2,877	57.50	56.60	0.50	0.86%	25
1943	43,114	10.4	10.615	457,672	56.50	56.60	0.50	0.88%	4,028
1944	61	10.4	10.615	648	55.50	56.60	1.50	2.63%	17
1945	33,299	10.4	10.615	353,482	54.50	56.60	2.50	4.39%	15,518
1946	51,477	10.4	10.615	546,448	53.50	56.60	3.50	6.14%	33,552
1947	824,542	11.8	9.356	7,714,359	52.50	56.60	4.50	7.89%	608,663
1948	448,638	12.7	8.693	3,899,971	51.50	56.60	5.50	9.65%	376,347
1949	128,422	13.3	8.301	1,065,999	50.50	56.60	6.50	11.40%	121,524
1950	132,321	13.6	8.118	1,074,135	49.50	56.60	7.50	13.16%	141,356
1951	205,453	14.3	7.720	1,586,155	48.50	56.60	8.50	14.91%	236,496
1952	1,471,458	15.0	7.360	10,829,931	47.50	56.60	9.50	16.67%	1,805,349
1953	484,165	15.7	7.032	3,404,574	46.50	56.60	10.50	18.42%	627,123
1954	325,476	16.2	6.815	2,218,059	45.50	56.60	11.50	20.18%	447,604
1955	1,487,507	16.5	6.691	9,952,774	44.50	56.60	12.50	21.93%	2,182,643
1956	1,103,111	17.5	6.309	6,959,055	43.50	56.60	13.50	23.68%	1,647,904
1957	1,167,969	18.1	6.099	7,123,966	42.50	56.60	14.50	25.44%	1,812,337
1958	1,150,898	18.8	5.872	6,758,465	41.50	56.60	15.50	27.19%	1,837,627
1959	1,385,419	19.1	5.780	8,007,867	40.50	56.60	16.50	28.95%	2,318,277
1960	5,177,676	19.3	5.720	29,617,380	39.50	56.60	17.50	30.70%	9,092,536
1961	876,340	19.5	5.662	4,961,433	38.50	56.60	18.50	32.46%	1,610,481
1962	1,141,055	19.9	5.548	6,330,275	37.50	56.60	19.50	34.21%	2,165,587
1963	1,030,861	20.1	5.493	5,662,043	36.50	56.60	20.50	35.96%	2,036,070
1964	1,607,653	20.7	5.333	8,574,149	35.50	56.60	21.50	37.72%	3,234,169
1965	1,343,925	21.2	5.208	6,998,553	34.50	56.60	22.50	39.47%	2,762,329
1966	1,393,341	21.9	5.041	7,023,966	33.50	56.60	23.50	41.23%	2,895,981

*Based on Staff Witness Dunkel Methodology*

U S West Communications - Arizona  
Reproduction Cost New Less Depreciation  
Telephone Plant in Service as of December 31, 1999

Plant Account: Conduit Systems  
Plant Sub-Account: Conduit Systems  
Index Number: 2441  
Field Code: UCZ  
Survivor Curve: SQ  
Average Service Life: 56.6

Year of Placing	Original Cost as of 12/31/1999	Telephone Plant Index	Telephone Plant Translator	Reproduction Cost New	Age as of 12/31/1999	Life Expectancy When New	Life Expectancy 12/31/1999	Condition Percent	Reproduction Cost New Less Depreciation
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1967	979,999	23.5	4.698	4,603,910	32.50	56.60	24.50	42.98%	1,978,761
1968	1,266,694	24.8	4.452	5,638,831	31.50	56.60	25.50	44.74%	2,522,813
1969	2,221,055	26.5	4.166	9,252,999	30.50	56.60	26.50	46.49%	4,301,719
1970	5,529,001	28.3	3.901	21,568,965	29.50	56.60	27.50	48.25%	10,407,026
1971	4,298,951	31.1	3.550	15,260,585	28.50	56.60	28.50	50.00%	7,630,292
1972	2,010,842	33.5	3.296	6,626,775	27.50	56.60	29.50	51.75%	3,429,356
1973	5,706,420	36.0	3.067	17,499,688	26.50	56.60	30.50	53.51%	9,364,083
1974	5,478,486	41.0	2.693	14,751,826	25.50	56.60	31.50	55.26%	8,151,859
1975	1,788,606	45.9	2.405	4,302,007	24.50	56.60	32.50	57.02%	2,453,004
1976	955,288	50.0	2.208	2,109,276	23.50	56.60	33.50	58.77%	1,239,621
1977	1,307,219	53.0	2.083	2,722,962	22.50	56.60	34.50	60.53%	1,648,209
1978	2,324,227	56.6	1.951	4,533,475	21.50	56.60	35.50	62.28%	2,823,448
1979	3,812,204	63.6	1.736	6,617,411	20.50	56.60	36.50	64.04%	4,237,790
1980	2,370,954	69.3	1.593	3,777,104	19.50	56.60	37.50	65.79%	2,484,957
1981	1,289,144	74.6	1.480	1,907,795	18.50	56.60	38.50	67.54%	1,288,525
1982	10,721,108	79.3	1.392	14,925,729	17.50	56.60	39.50	69.30%	10,343,530
1983	7,567,337	81.3	1.358	10,275,941	16.50	56.60	40.50	71.05%	7,301,056
1984	7,318,527	83.8	1.317	9,641,592	15.50	56.60	41.50	72.81%	7,020,043
1985	9,719,510	84.9	1.300	12,638,797	14.50	56.60	42.50	74.56%	9,423,487
1986	10,029,070	94.9	1.163	11,667,116	13.50	56.60	43.50	76.32%	8,904,343
1987	10,390,992	95.3	1.158	12,037,414	12.50	56.60	44.50	78.07%	9,397,609
1988	14,944,764	100.0	1.104	16,499,019	11.50	56.60	45.50	79.82%	13,169,517
1989	18,480,841	102.4	1.078	19,924,657	10.50	56.60	46.50	81.58%	16,254,535
1990	24,324,507	97.9	1.128	27,430,292	9.50	56.60	47.50	83.33%	22,857,662
1991	14,723,785	98.9	1.116	16,435,853	8.50	56.60	48.50	85.09%	13,985,267
1992	8,213,696	99.5	1.110	9,113,488	7.50	56.60	49.50	86.84%	7,914,153
1993	12,523,401	100.1	1.103	13,812,023	6.50	56.60	50.50	88.60%	12,237,452
1994	10,642,242	100.5	1.099	11,690,582	5.50	56.60	51.50	90.35%	10,562,441
1995	13,555,914	108.6	1.017	13,780,598	4.50	56.60	52.50	92.11%	12,693,309
1996	19,218,864	106.0	1.042	20,016,628	3.50	56.60	53.50	93.86%	18,787,607
1997	12,009,826	109.4	1.009	12,119,605	2.50	56.60	54.50	95.61%	11,587,554
1998	13,830,109	110.3	1.001	13,842,648	1.50	56.60	55.50	97.37%	13,478,586
1999	7,377,970	110.4	1.000	7,377,970	0.50	56.60	56.50	99.12%	7,313,044
	<u>305,067,487</u>		<u>2.216</u>	<u>676,048,139</u>				<u>46.78%</u>	<u>316,287,695</u>

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN )

DOCKET NO. T-1051B-99-105  
AFFIDAVIT OF  
NANCY HELLER HUGHES

STATE OF WASHINGTON )

COUNTY OF KING )

SS

Nancy Heller Hughes, of lawful age being first duly sworn, deposes and states:

1. My name is Nancy Heller Hughes. I am Senior Director of R. W. Beck, Inc., in Seattle, Washington.
2. Attached hereto and made a part hereof for all purposes is my rejoinder testimony consisting of pages 1 through 7, and one exhibit numbered NHH-1.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

*Nancy Heller Hughes*  
Nancy Heller Hughes

SUBSCRIBED AND SWORN to before me this 15<sup>th</sup> day of September 2000.

My Commission Expires:

4-5-02

*Linda L. Ross*  
Notary Public

LINDA L. ROSS  
STATE OF WASHINGTON  
NOTARY --- PUBLIC  
MY COMMISSION EXPIRES 4-05-02

**ORIGINAL**

**BEFORE THE**

**ARIZONA CORPORATION COMMISSION**

**RECEIVED**

2000 SEP 19 P 3:27

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC., )  
A COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE )  
EARNINGS OF THE COMPANY FOR )  
RATEMAKING PURPOSES, TO FIX A )  
JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE )  
RATE SCHEDULES DESIGNED TO )  
DEVELOP SUCH RETURN )**

AZ CORP COMMISSION  
DOCUMENT CONTROL

**DOCKET NO. T-01051B-99-105**

**REJOINDER TESTIMONY OF**

**KERRY DENNIS WU**

**ON BEHALF OF**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

**REJOINDER TESTIMONY OF KERRY DENNIS WU  
INDEX OF TESTIMONY**

**EXECUTIVE OVERVIEW .....i**

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## EXECUTIVE OVERVIEW

In Decision 62507, the Commission issued its final Decision on depreciation matters in Docket No. T-01051B-97-0689. In that Decision, the Company was directed to file depreciation rates consistent with the Decision. The Company complied and the rates were accepted. Decision 62507 concluded, “Advancements in technology, coupled with a desire to create robust competition in Arizona’s telecommunications industry, warrant’s setting U S WEST’s depreciation lives with the range of competitors.”

Various parties to this proceeding have attempted to revisit the Commission’s depreciation decision. Mr. Dunkel, on behalf of Staff, argues that Qwest should grant refunds to customers if Qwest does not retire its assets according to a schedule linked to Qwest’s depreciation rates. He claims his proposal is justified by the need to ensure that Qwest modernizes its network. His proposal should be rejected because it confuses retirements with modernization. Modernization is best evidenced by investment and, on that score, it is absolutely clear that Qwest is modernizing its network. Qwest has invested substantially more in Arizona over the last ten years than it has recovered through depreciation.

Mr. Brosch recommends reducing depreciation expense based on an assumption that certain vintage investment represents unrecorded retirements. This assumption does not justify a reduction in depreciation expense, however.

Had the retirements been made, the result would have been higher depreciation rates in the recently concluded depreciation docket.

Mr. Lee recommends making the depreciation rates decided in May 2000, effective 1/1/97. His proposal is in substance a request for a write-off of plant assets. His proposal is inconsistent with the Commission's intent to grant Qwest more rapid capital recovery going forward. The effect of his proposal is to actually reduce Qwest's capital recovery.

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**IDENTIFICATION OF WITNESS**

**Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

A. My name is Kerry Dennis Wu. My title is Director - Capital Recovery for Qwest Corporation (Qwest). My business address is 1600 7<sup>th</sup> Avenue, Room 3006, Seattle, Washington 98191.

**Q. ARE YOU THE SAME DENNIS WU THAT FILED DIRECT AND REBUTTAL TESTIMONY IN THIS CASE?**

A. Yes I am.

**PURPOSE OF TESTIMONY**

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. In my testimony, I am responding to the statements made by Department of Defense witness Richard Lee and Staff witnesses William Dunkel and Michael Brosch relating to their statements regarding certain depreciation issues.

**DEPARTMENT OF DEFENSE TESTIMONY**

1   **Q.    CAN YOU SUMMARIZE MR. LEE'S DEPRECIATION REBUTTAL**  
2   **TESTIMONY?**

3   A.    Yes. Mr. Lee's rebuttal restates his earlier position that since the Arizona  
4   Commission's May 2000 order was based on a study as of 1/1/97,  
5   depreciation rates should also be effective as of that date. He effectively  
6   contends that: (1) either Qwest write down its Arizona investment before  
7   implementing its recently approved Arizona depreciation rates; or, (2) that  
8   Qwest use a 1/1/97 implementation date for the revised depreciation  
9   rates. Mr. Lee further states that as an additional alternative he reviewed  
10   and also supports Staff's position.

11

12   **Q.    WHAT IS WRONG WITH MR. LEE'S POSITION?**

13   A.    The depreciation study was as of 1/1/97. Decision No. 62507 prescribing  
14   revised depreciation rates was not issued until May, 2000, nearly three  
15   and a half years after the study date. If his proposal is adopted, Qwest  
16   will be denied capital recovery for that entire period. Indeed, the upshot of  
17   his proposal is that the Commission's order which was predicated on  
18   improving Qwest's capital recovery, should be interpreted in such a way  
19   as to deny Qwest capital recovery. His proposal violates the letter and  
20   spirit of Decision No. 62507.

21

1 **Q. WHAT ELSE IS UNUSUAL ABOUT MR. LEE'S PREMISE TO MAKE**  
2 **ARIZONA DEPRECIATION RATES EFFECTIVE 1/1/97?**

3 A. In the depreciation Docket T-01015B-97-0689, Mr. Lee vigorously  
4 supported a position to lower depreciation rates, which absent any other  
5 changes, would have reduced revenue requirement. In Decision No.  
6 62507, Mr. Lee's recommended lives were not accepted and Qwest's  
7 depreciation rates were increased in order to improve Qwest's rate of  
8 capital recovery. Now Mr. Lee contrarily argues that the Commission's  
9 decision increasing Qwest's depreciation rates should result in reduced  
10 revenue requirement. His proposal is ad hoc in the sense that he believes  
11 that any outcome of the depreciation docket should result in reduced  
12 capital recovery.

13

14 **STAFF TESTIMONY – WILLIAM DUNKEL**

15

16 **Q. WHY IS MR. DUNKEL'S UPDATE RECOMMENDATION IN CONFLICT**  
17 **WITH ARIZONA'S FINAL DEPRECIATION ORDER?**

18 A. Decision 62507 states, "It is ordered that U S WEST Communications,  
19 Inc. shall no later than ten days from the effective date of this Order file  
20 updated depreciation rates consistent with the Discussion herein." The  
21 Company filed a 1/1/97 depreciation study, which was litigated by all  
22 parties including Staff. The final Order was based upon that study.

1 Depreciation rates were filed and accepted in May, 2000. Now Mr. Dunkel  
2 seeks to substitute another study date in direct conflict with Decision  
3 62507.

4

5 **Q. MR. DUNKEL RECOMMENDS QWEST'S ASSET RETIREMENTS BE**  
6 **MONITORED TO ENSURE MODERNIZATION OF QWEST'S NETWORK**  
7 **AND HE PROPOSES THAT CUSTOMERS RECEIVE RATE**  
8 **REDUCTIONS IF QWEST'S RETIREMENT LEVEL DOES NOT EQUAL**  
9 **THE LEVEL HE HAS IMPLIED FROM DECISION NO. 62507. WOULD**  
10 **YOU COMMENT?**

11 A. It makes no sense to focus on retirements. Modernization should be  
12 evaluated based on Qwest's investment in Arizona. Qwest's past and  
13 anticipated track record with respect to investment is outstanding. The  
14 intent of depreciation is to allocate costs of capital investments in a  
15 systematic and rational matter. The Commission's depreciation order  
16 gives Qwest ample incentive to continue to invest in the state.

17

18 **Q. DOES MR. DUNKEL'S PROPOSAL TO LINK CUSTOMER CREDITS**  
19 **WITH RETIREMENT OF ASSETS MAKE ANY SENSE?**

20 A. No. Shown below is a table of historical depreciation expense, gross  
21 additions and retirements:

	<u>Tot Depreciation</u>	<u>Gross Adds*</u>	<u>Retirements</u>
22 1991	\$211.0 million	\$257.6 million	\$100.1 million

23

1	1992	\$232.5	\$247.1	\$118.0
2	1993	\$243.4	\$237.7	\$ 82.8
3	1994	\$262.0	\$271.9	\$ 66.0
4	1995	\$278.1	\$312.5	\$100.0
5	1996	\$295.7	\$395.5	\$ 97.3
6	1997	\$308.5	\$291.5	\$146.1
7	1998	\$302.9	\$294.3	\$ 71.6
8	1999	\$307.0	\$406.0	\$134.1

9  
10  
11

\*Includes other debits and credits.

12  
13  
14  
15

As indicated, the level of depreciation expense has no direct correlation with retirements. Nor does the level of investment relate systematically with retirements.

16

**Q. WHY IS MR. DUNKEL'S EMPHASIS ON RETIREMENTS MISPLACED?**

17

A. FCC practices for developing depreciation rates utilize a two-step process;

18

companies select survivor curves based on historical retirement **patterns**,

19

and then subsequently rescale those curves based on future life

20

expectations. It is the combination of the two concepts by which final

21

depreciation rates are developed. The manner in which depreciation

22

rates are calculated, however, has never been intended to drive actual

23

retirements, but that is exactly how Mr. Dunkel is twisting the procedure..

24

25

**Q. MR. DUNKEL STATED ON PAGE 9, LINES 3 AND 4 OF HIS**

26

**SURREBUTTAL, "IN HIS REBUTTAL, MR. WU ACKNOWLEDGES**

1           **THAT THE COMPANY MUST INVEST IN NEW EQUIPMENT IN ORDER**  
2           **TO RETIRE THE EXISTING EQUIPMENT.” WOULD YOU COMMENT?**

3    A.    Mr. Dunkel mischaracterized my statement. What I stated was,

4

5                   In his testimony, Mr. Dunkel has erroneously equated  
6                   modernization and retirement. These are really different concepts.  
7                   Modernization refers to investment in new plant and equipment and  
8                   new technologies. Retirement is the process by which assets are  
9                   removed from service. While retirement may occur simultaneously  
10                  with modernization, it need not. For example, when Qwest invests  
11                  in a new switch, it may intend that the switch will one day replace  
12                  another switch that continues to be used. Investment in the new  
13                  switch may very well precede retirement of the older switch.

14

15                   Wu Rebuttal Testimony, p. 7, Ins. 6 – 14.

16

17    **Q.    IN HIS DISCUSSION OF COPPER PAIR USAGE, ON PAGES 9 AND 10**  
18           **OF MR. DUNKEL’S REBUTTAL TESTIMONY, HE STATES AS**  
19           **SUPPORT FOR HIS PREMISE THAT USAGE IS GROWING “THE**  
20           **NUMBER OF METALLIC PAIRS WORKING IN 1999 WAS THE**  
21           **HIGHEST OF ANY YEAR IN HISTORY.” WOULD YOU COMMENT?**

22    A.    Mr. Dunkel confuses the issue of “working” versus “usage.” Mr. Dunkel  
23           cites his source as ARMIS data, but ARMIS data does not show usage. It  
24           reports copper cable pairs as “working” even if only a small percentage of  
25           a cable is actually being utilized. Because of transition and migration to  
26           new technologies, a better indicator of usage is the increase in fiber  
27           percentage of total working channels over the last ten years. Over that  
28           period of time, fiber has increased over 400%. This is clear evidence that

1 usage of copper is actually decreasing. Mr. Dunkel's proposal to monitor  
2 retirements ignores defacto retirement that occurs as actual usage of the  
3 copper in the ground declines.

4

5 **Q. WHY ARE MR. DUNKEL'S RECOMMENDATIONS REGARDING YOUR**  
6 **REBUTTAL TESTIMONY EXHIBIT MISGUIDED?**

7 A. In Decision 62507, the Commission issued its final Decision on  
8 depreciation matters in Docket No. T-01051B-97-0689. In that Decision  
9 the Company was directed to file depreciation rates consistent with the  
10 Decision. The Company complied and the rates accepted. According to  
11 Decision No. 60928, those rates were to be used in the subsequent rate  
12 review. Now in an attempt to rehear depreciation, Mr. Dunkel  
13 recommends recalculating depreciation rates as of 1/1/2000.

14

15 **STAFF TESTIMONY – MICHAEL BROSCHE**

16

17 **Q. WHAT DID MR. BROSCHE PROPOSE REGARDING DEPRECIATION?**

18 A. Mr. Brosch proposed a \$55.3 million reduction in investment which results  
19 in a \$2.9 million reduction in depreciation expense related to this  
20 investment. The reason for his proposed adjustment is that in his opinion,  
21 the amount represents unrecorded retirements.

22

1 **Q. WHAT IS YOUR RESPONSE?**

2 A. Mr. Brosch's recommendation does not follow from the facts he bases it  
3 on.

4  
5 **Q. WHY IS THAT?**

6 A. On page 15 and 16 of my rebuttal testimony, I clearly demonstrated if  
7 certain investment represented unrecorded retirements as Mr. Brosch  
8 alleged, and that if those amounts were actually retired, it would have  
9 resulted in higher depreciation rates in the recently concluded  
10 depreciation docket. I have enclosed the example as Exhibit KDW-1.

11

12 **Q. IN HIS REBUTTAL TESTIMONY, HOW DID MR. BROSCH ADDRESS**  
13 **THIS POINT?**

14 A. Mr. Brosch did not comment and stated that Mr. Dunkel would respond to  
15 my example in his surrebuttal testimony. However, Mr. Dunkel did not  
16 respond to the example I used to illustrate my point.

17

18 **Q. SHOULD MR. BROSCH'S PROPOSED INVESTMENT AND**  
19 **DEPRECIATION EXPENSE REDUCTION BE ACCEPTED?**

20 A. No. The proposed adjustment is not appropriate and should be rejected.

21

22 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

1 A. Yes.

2

**BEFORE THE  
ARIZONA CORPORATION COMMISSION**

**IN THE MATTER OF THE APPLICATION )  
OF U S WEST COMMUNICATIONS, INC., )  
A COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE )  
EARNINGS OF THE COMPANY FOR ) DOCKET NO. T-01051B-99-105  
RATEMAKING PURPOSES, TO FIX A )  
JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE )  
RATE SCHEDULES DESIGNED TO )  
DEVELOP SUCH RETURN )**

**EXHIBITS OF**

**KERRY DENNIS WU**

**ON BEHALF OF**

**QWEST CORPORATION**

**SEPTEMBER 19, 2000**

Assume the following:

Gross Investment	\$100		
Depreciation Reserve	\$ 50	or	50% Reserved
Remaining Life	5 years		

Under the remaining life formula, assuming no future net salvage, the depreciation rate calculation would be

$$\frac{100\% \text{ less } 50\%}{5 \text{ years}} \quad \text{equals} \quad 10\%$$

Let's assume a \$10 retirement, the depreciation calculation would be as follows:

Gross Investment	\$90		
Depreciation Reserve	\$40	or	44.4% Reserved
Remaining Life	5.1 years		

The new depreciation rate calculation would be:

$$\frac{100\% \text{ less } 44.4\%}{5.1 \text{ years}} \quad \text{equals} \quad 10.9\%$$

As demonstrated above, one cannot arbitrarily remove vintage information without considering the effects of what would have happened had its retirement been part of Arizona's recently completed depreciation study.

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF )  
U S WEST COMMUNICATIONS, INC., A )  
COLORADO CORPORATION, FOR A )  
HEARING TO DETERMINE THE EARNINGS )  
OF THE COMPANY, THE FAIR VALUE OF THE )  
COMPANY FOR RATEMAKING PURPOSES, )  
TO FIX A JUST AND REASONABLE RATE OF )  
RETURN THEREON, AND TO APPROVE RATE )  
SCHEDULES DESIGNED TO DEVELOP SUCH )  
RETURN. ):

DOCKET NO. T-1051B-99-105

AFFIDAVIT OF  
KERRY DENNIS WU

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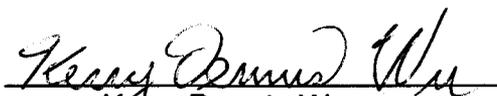
STATE OF WASHINGTON )  
)

COUNTY OF KING )  
)

Kerry Dennis Wu, of lawful age being first duly sworn, depose and states:

1. My name is Kerry Dennis Wu. I am Director – Capital Recovery of Qwest Corporation in Seattle, Washington. I have caused to be filed written testimony and exhibits in support of Qwest in Docket No. T-01051B-99-0105.
2. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.

Further affiant sayeth not.

  
Kerry Dennis Wu

SUBSCRIBED AND SWORN to before me this 17<sup>th</sup> day of September, 2000,  
2000.

  
Notary Public residing at  
Seattle, Washington.

My Commission Expires: 09/15/02