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Transcript Exhibit(s)

Docket #(s): T-00000A-00-0194

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NextLink1, NextLink2, SI

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO] DOCKET NO. T-00000A-00-0194
U S WEST COMMUNICATIONS, INC.'S]
COMPLIANCE WITH CERTAIN WHOLESALE]
PRICING REQUIREMENTS FOR UNBUNDLED]
NETWORK ELEMENTS AND RESALE]
DISCOUNTS.]

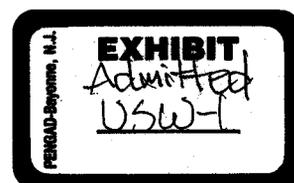
TESTIMONY OF

TERESA K. MILLION

ON BEHALF OF

U S WEST COMMUNICATIONS

APRIL 24, 2000



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1

I. IDENTIFICATION OF WITNESS

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

3 A. My name is Teresa K. (Terri) Million. My business address is 1801 California
4 Street, Room 4450, Denver, Colorado 80202.

5 **Q. PLEASE IDENTIFY YOUR EMPLOYER AND EXPLAIN YOUR POSITION AND**
6 **RESPONSIBILITIES.**

7 A. I am employed by U S WEST Communications, Inc. (U S WEST) as a Director,
8 Cost Advocacy in the Retail Markets Organization. In this position, I am
9 responsible for preparing testimony and testifying about U S WEST's cost studies
10 in a variety of regulatory proceedings.

11 **Q. WHAT IS YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL**
12 **EXPERIENCE?**

13 A. I received a Juris Doctor from the University of Denver, College of Law and am
14 licensed to practice law in the state of Colorado. I also have a Master of
15 Business Administration from Creighton University and a degree in Animal
16 Science from the University of Arizona.

17 I have more than 16 years experience in the telecommunications industry with an
18 emphasis in tax and regulatory compliance. I began my career with
19 Northwestern Bell Telephone Company, now U S WEST Communications, in

1 1983, where I administered Shared Network Facilities Agreements with AT&T
2 that emanated from divestiture. I held a variety of positions within the
3 U S WEST, Inc. Tax Department over a period of ten years, including tax
4 accounting, audit, and state and federal tax research and planning
5 responsibilities. In 1997, I assumed a position that had responsibility for affiliate
6 transactions compliance, specifically compliance with Section 272 of the
7 Telecommunications Act of 1996 (the "Act"). In September 1999, I began my
8 current assignment as a Cost Witness.

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN ARIZONA?**

10 A. Yes. I have provided testimony in Arizona regarding U S WEST's compliance
11 with Section 272 of the Telecommunications Act of 1996 in Docket No. T-
12 00000B-97-0238. I also provided Section 272 testimony in Colorado and
13 Nebraska. In addition, I have provided testimony in cost proceedings related to
14 operational support systems (OSS) in New Mexico and Washington, and
15 unbundled network element deaveraging in South Dakota.

16 **II. SUMMARY OF TESTIMONY**

17 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

18 A. My testimony proposes a method of deaveraging for unbundled network
19 elements (UNEs) that provides for the geographic deaveraging of wholesale

1 rates into three cost-related, distance-based geographic zones. This proposal is
2 designed to comply with the Federal Communications Commission's (FCC's)
3 interconnection rules, 47 CFR § 51.507(f). Because of the strong connection of
4 wholesale rates to retail rates, this geographic proposal deaverages the
5 unbundled loop UNE in a manner consistent with the way retail basic exchange
6 prices are currently structured in Arizona.¹ It can be implemented within existing
7 service provisioning, customer billing and network management systems in
8 Arizona. Since the FCC requires deaveraging only to the extent that such a
9 deaveraging reflects *geographic cost differences*, U S WEST is not proposing to
10 deaverage the prices for any other UNEs.

¹ I have assumed the base rate areas with the expanded boundaries as recommended by David Teitzel in Docket No. T-1051B-99-105, see Teitzel Direct Testimony, filed January 8, 1999, page 42.

1 **III. DEAVERAGING OF UNBUNDLED NETWORK ELEMENTS**

2 **Q. PLEASE SUMMARIZE U S WEST'S PROPOSAL IN THIS PROCEEDING.**

3 A. U S WEST proposes to deaverage the price of the unbundled loop UNE into
4 three geographic zones, as I will describe below. This proposal deaverages the
5 unbundled loop in a manner that is consistent with the three-zone structure of
6 retail basic exchange prices in Arizona. U S WEST is not proposing to
7 deaverage the price for any other UNEs.

8 **Q. WHY IS U S WEST PROPOSING A PLAN FOR THE GEOGRAPHIC**
9 **DEAVERAGING OF THE UNBUNDLED LOOP AT THIS TIME?**

10 A. U S WEST is filing a plan for the geographic deaveraging of the unbundled loop
11 UNE in order to comply with the FCC's interconnection rules. This filing will also
12 meet the requirements outlined in the Arizona Corporation Commission's
13 procedural order in this docket dated March 30, 2000.

14 **Q. PLEASE BRIEFLY DESCRIBE THE FCC'S DEAVERAGING REQUIREMENT.**

15 A. In 1996, the FCC promulgated rules implementing and interpreting Section 251
16 of the Telecommunications Act of 1996. Rule 51.507(f) required each state
17 public utilities commission to establish different rates for unbundled network
18 elements in at least three geographic areas within the state to reflect geographic
19 cost differences. The Court of Appeals for the Eighth Circuit stayed and then

1 vacated the deaveraging rule. In January 1999, the United States Supreme
2 Court reversed that aspect of the Eighth Circuit's decision and reinstated Rule
3 51.507(f). On May 7, 1999, the FCC stayed the effectiveness of Rule 51.507(f)
4 in order to allow it to act on the issue of universal service. In its Universal
5 Service Order released November 2, 1999, the FCC lifted its stay of the rule and
6 stated that, by May 1, 2000, "states are required to establish different rates for
7 interconnection and UNEs in at least three geographic areas pursuant to section
8 51.507(f) of the Commission's rules."²

9 **Q. SHOULD THE COMMISSION CONSIDER THE GEOGRAPHIC**
10 **DEAVERAGING OF ANY OTHER UNES AT THIS TIME?**

11 A. No. Consistent with the FCC's rules, the Commission should consider
12 deaveraging of UNEs only to the extent that such deaveraging reflects
13 *geographic* cost differences. Therefore, the unbundled loop is the only UNE that
14 should be deaveraged because its costs vary between geographic areas based
15 on loop distances (i.e., between customer and central office) and the density of
16 the serving area. In contrast, the costs for many other unbundled network
17 elements, such as unbundled switching, do not vary significantly in a cost-
18 causative manner between geographical areas. If geography is not a cost driver,
19 there is no meaningful basis for geographic deaveraging. In addition, the costs
20 for other elements, such as unbundled transport, that vary due to distance are

² *In the Matter of the Federal-State Joint Board on Universal Service*, CC Docket 96-45, Ninth Report and Order and Eighteenth Order on Reconsideration, FCC 99-306, ¶ 120 (released Nov. 2, 1999).

1 already inherently geographically deaveraged with distance based rates. Thus, I
2 recommend that geographic deaveraging be limited to the unbundled loop UNE.

3 **IV. CONSISTENCY BETWEEN RETAIL AND WHOLESALE RATES**

4 **Q. DOES U S WEST BELIEVE THAT THE DEAVERAGING OF UNE RATES IS**
5 **INEXTRICABLY LINKED WITH THE DEAVERAGING OF RETAIL RATES?**

6 A. Yes. U S WEST believes that, ultimately, the deaveraging of wholesale rates
7 *drives* the deaveraging of retail rates. In a competitive environment retail rates
8 will necessarily be drawn toward the level of wholesale deaveraging. In other
9 words, where lower wholesale rates prevail, lower retail rates will prevail.
10 Conversely, where higher wholesale rates prevail, higher retail rates must follow.

11 Discrepancies between the retail and wholesale price structures undermine
12 competition and competitive neutrality. Otherwise, competitors could obtain
13 unbundled loops for low-cost urban business consumers at a deaveraged price,
14 and purchase high-cost longer loops at a non-deaveraged retail price less the
15 avoided cost discount. This presents an arbitrage opportunity for Competitive
16 Local Exchange Carriers (CLECs) that choose the economically more attractive
17 option of providing service to high-cost customers through resale. As the
18 Incumbent Local Exchange Carrier (ILEC), U S WEST would then be left with the
19 obligation of maintaining the more expensive loops without receiving offsetting
20 revenues of either higher averaged UNE loop prices or higher deaveraged retail

1 prices. Therefore, deaveraging of wholesale rates without the deaveraging of
2 retail rates is not consistent with the intent of Congress when it drafted the
3 Telecommunications Act. The intent of the Act is to encourage competition, and
4 the purpose of deaveraging is to facilitate retail competition that is based on the
5 underlying cost to provide service, *not* to encourage CLECs to engage in rate
6 arbitrage against ILECs.

7 **Q. IS IT NECESSARY TO DEAVERAGE RETAIL RATES ALONG WITH**
8 **WHOLESALE RATES IN ORDER TO MAINTAIN THE COMPETITIVE**
9 **NEUTRALITY OF UNE DEAVERAGING?**

10 A. Yes. Today, the majority of competition for basic exchange services in Arizona is
11 in the low-cost urban business areas, such as Phoenix and Tucson, not the high-
12 cost outlying areas of the state. This is not surprising because of the economic
13 opportunity that the current averaged rate retail structure provides. While retail
14 rates vary by exchange zones, U S WEST's retail rates are still averaged on a
15 statewide basis (e.g., the residence and business "base rate area" prices are the
16 same in Phoenix and Flagstaff). Despite the zone increment rate structure, high-
17 cost consumers still enjoy prices that are below the cost of providing service in
18 those areas. Thus, high-cost retail customers with longer loops receive a
19 subsidy from low-cost areas, and low-cost urban business customers in the base
20 rate area pay prices that are above their costs, helping to recover costs for high-
21 cost areas. This creates margin opportunities for the CLECs in low-cost urban
22 business areas because U S WEST's retail rates are higher than the costs to

1 provide the service. The result is that competitors flock to urban business areas,
2 where UNE rates are low and retail rates are high, while ignoring the remainder
3 of Arizona's consumers whose retail rates are low compared to their UNE rates.

4 For a deaveraging plan to work in a competitively neutral manner, competitors
5 would need to purchase unbundled network elements in all deaveraged areas.
6 That way, aggregate revenues derived from the sale of deaveraged UNEs would
7 be the same as the aggregate revenues derived based on the state-wide
8 average price. As noted above, if UNE rates increase in high-cost areas, but
9 U S WEST's retail rates remain the same, UNE based competition will be
10 discouraged in the high-cost areas of Arizona. This scenario is not deaveraging;
11 it is simply a UNE price decrease in low-cost urban business areas since only
12 deaveraged UNEs priced below U S WEST's retail rates are likely to be
13 purchased. When retail and wholesale prices are synchronized, UNE based
14 competition has a chance of happening because competitors will see opportunity
15 in urban business areas as well as higher-cost outlying areas. However, if retail
16 rates are not adjusted to reflect UNE rates U S WEST will, ultimately, be unable
17 to recover its costs as provided under the Telecommunications Act. In order to
18 avoid this competitively non-neutral outcome, retail and UNE rates must be
19 deaveraged on a consistent basis.

1 Q. HAS THIS COMMISSION PREVIOUSLY CONCLUDED THAT THE
2 DEAVERAGING OF UNE AND RETAIL RATES SHOULD BE CARRIED OUT
3 TOGETHER?

4 A. Yes. This Commission has previously recognized that UNE rates and retail
5 prices should be deaveraged in concert. Specifically, in Docket No. U-3021-96-
6 448 ET AL., at pp. 21-22 (January 30, 1998), the Commission concluded "we
7 share U S WEST's concerns that geographic deaveraging would need to occur
8 for U S WEST retail customers *at the same time* it occurs at the wholesale level."
9 (Emphasis added).

10 Q. IS U S WEST LIKELY TO SEEK DEAVERAGING OF ITS RETAIL RATES?

11 A. Yes. Because of the reasons explained above, U S WEST will be forced to seek
12 deaveraging of its retail rates in order to recover its cost of providing service in
13 high-cost areas. In addition, since those retail rates will necessarily reflect the
14 Commission's decision on UNE deaveraging, I would encourage the Commission
15 to consider the impact to consumers. This will avoid further compounding the
16 unequal balance of competitive choices for Arizona consumers and allow
17 deaveraging to be implemented on a competitively neutral basis.

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V. DEAVERAGED COST INFORMATION

Q. WHAT TYPE OF GEOGRAPHIC DEAVERAGING PLAN SHOULD BE ADOPTED BY THE COMMISSION?

A. As discussed above, U S WEST recommends that the Commission maintain a consistent deaveraged rate structure for both wholesale and retail rates. In Arizona, such a structure would result in three distance-based cost-related zones as follows:

- Inside the Base Rate Area
- Outside the Base Rate Area – Zone 1
- Outside the Base Rate Area – Zone 2

This deaveraging structure – based on the base rate area and zone increments – is consistent with the way retail services are currently provided in Arizona, and includes the expanded base rate areas proposed by U S WEST in Docket No. T-1051B-99-105. This structure is also similar to the way retail service prices and unbundled loop UNE prices are deaveraged in other U S WEST states. For example, both Colorado and Wyoming have retail rate structures that are based on a base rate area and zone increments, although these states have three zone increments as opposed to Arizona's two. As the following table shows, the deaveraged UNE rates that have been approved in these states are similar to the proposal in Arizona:

	<u>Zone</u>	<u>Arizona</u>	<u>Colorado</u>	<u>Wyoming</u>
1				
2	Base Rate Area	\$ 20.12	\$ 19.65	\$ 19.05
3	Zone 1	\$ 40.65	\$ 26.65	\$ 31.83
4	Zone 2 & 3	\$ 63.70	\$ 38.65 – \$ 84.65	\$ 40.11 – \$ 58.43

5 Since the U S WEST deaveraging plan is based on the currently proposed retail
6 rate structure it would be relatively simple to administer and could be
7 accomplished fairly quickly in Arizona. A UNE rate structure that is consistent
8 with the retail rate structure is easy for consumers to understand and can be
9 effectively communicated. In addition, the three-zone structure is compatible
10 with the current systems that U S WEST uses to provision service, bill
11 customers, and manage the network.

12 **Q. HOW WOULD UNBUNDLED LOOPS BE ASSIGNED TO THE THREE ZONES**
13 **UNDER U S WEST'S PROPOSAL?**

14 **A.** Unbundled loops would be assigned to the base rate area and the incremental
15 zones based on information derived from actual customer locations. In other
16 words, retail customers are assigned to zones based on actual locations and
17 unbundled loop UNEs would be assigned consistent with retail.

18

19

1 Q. IS THE U S WEST DEAVERAGING PLAN COST-BASED?

2 A. Yes. The U S WEST plan establishes three distance-based cost-related zones
3 that are structured consistently with the manner in which the costs of providing
4 the loop are incurred. Costs in three geographically similar areas have been
5 grouped together, and an average cost for each area developed (i.e., loop rates
6 for shorter loops inside the base rate area are based on lower costs, and longer
7 loops outside the base rate area are based on higher costs). FCC Rule 51.507(f)
8 does not require UNE wholesale rates to be set at a level exactly equal to cost,
9 but requires "cost-related" zones. Rule 51.507 states:

10 (f) State commissions shall establish different rates for elements in at
11 least three defined geographic areas within the state to reflect
12 geographic cost differences.

13 (1) To establish geographically-deaveraged rates, state commissions
14 may use existing density-related zone pricing plans described in §
15 69.123 of this chapter, **or other such cost-related zone plans**
16 **established pursuant to state law.** (Emphasis added).

17 (2) In states not using such existing plans, state commissions must
18 create a minimum of three cost-related rate zones.

19 Since, it would be impossible to set the price for each loop at its "true" or exact
20 cost (i.e., on an individual customer basis) any deaveraging plan will include
21 some averaging of prices at some level. The U S WEST proposal offers
22 unbundled loops at lower prices in the low-cost base rate areas, and higher
23 prices in the higher-cost zone increments. Thus, U S WEST's deaveraging plan

1 contains cost-related zones, consistent with the requirements of FCC Rule
2 51.507(f).

3 **Q. HOW WERE THE COSTS FOR THE THREE ZONES DETERMINED?**

4 A. Three distance-based zones were established that correlate to the retail zones
5 currently proposed in the Arizona rate case. The statewide average data was
6 segregated into separate files according to the three zones. Three separate runs
7 of the loop model were made, one for each zone. I have attached summaries of
8 this cost information in a confidential exhibit to this testimony (Exhibit TKM-1).
9 The investment components for the unbundled loop were determined for each
10 zone separately by the loop model. The loop (feeder, distribution, and drop)
11 investment was summed to achieve three levels of total investment, one for each
12 zone. Each zone investment was then compared to the statewide investment
13 data. A percentage was determined by dividing each zone investment by the
14 statewide average investment. These percentages were multiplied by the
15 statewide average unbundled loop price of \$21.98, as established in Docket No.
16 U-3021-96-448, ET AL., to determine the deaveraged price for each zone.

1 Q. WHAT WERE THE RESULTS OF THESE CALCULATIONS?

2 A. The investments and percentages of the statewide average for the three zones
3 are:

4	Base Rate Area	\$ 890.01	91.5%
5			
6	Zone 1	\$1,798.48	185.0%
7			
8	Zone 2	\$2,818.05	289.8%
9			
10	Statewide Average	\$972.34	
11			

12 Q. WHAT ARE THE RATES DETERMINED BY THIS INFORMATION?

13 A. The deaveraged unbundled loop cost/rates are:

14	Base Rate Area	\$20.12
15	Zone 1	\$40.65
16	Zone 2	\$63.70
17	Statewide Average	\$21.98

18

19 Q. DOES THIS CALCULATION OF THE UNBUNDLED LOOP UNE RATE
20 INCLUDE WIRE CENTERS THAT U S WEST IS PROPOSING TO SELL IN
21 ARIZONA?

22 A. Yes. I have included in the cost calculation of the unbundled loop UNE the wire
23 centers that U S WEST is proposing to sell in Arizona. The reason for this is that
24 the original calculation of the statewide average rate (i.e., \$21.98), that is the

1 basis for the proposed deaveraged rates, included those wire centers. In
2 addition, it is difficult to exclude wire centers from the calculation with certainty
3 until the sales of those wire centers have closed. As the Commission knows,
4 from a legal and regulatory perspective, U S WEST continues its responsibility
5 for those wire centers up until the time that legal ownership transfers to the
6 purchasing entity. Therefore, I believe that it is appropriate to include the wire
7 centers that are "for sale" in the calculation of the UNE loop rates.

8 Nevertheless, recognizing that under a TELRIC methodology one could argue
9 that wire centers that have been contracted for sale should be excluded from
10 forward-looking costs, I have also calculated the unbundled loop UNE with the
11 wire centers that are identified in the contract excluded. The impact on the UNE
12 loop rates was a slight increase in the base rate area, a slight decrease in Zone 1
13 and about a 5% decrease in Zone 2.

14 **Q. GIVEN THE EARLIER DISCUSSION REGARDING THE INEVITABLE**
15 **CONVERGENCE OF RETAIL AND WHOLESALE RATES, DOES U S WEST**
16 **HAVE ANY CONCERNS ABOUT ITS PROPOSED DEAVERAGED RATES?**

17 **A.** Yes. U S WEST has two related concerns that arise in the context of UNE
18 deaveraging. The first concern has to do with the erosion of implicit subsidies.
19 The second, related concern, has to do with the retail customer "rate shock" that
20 could result from the shift in the UNE loop rates from a statewide average to
21 deaveraged zones.

1 As implicit subsidies erode due to competition, they are replaced by rate
2 increases in high-cost areas and explicit subsidies such as universal service.
3 This is inevitable, and a result that was intended by the Telecom Act. Basic
4 exchange retail rates in Arizona currently range from \$32.78 in the base rate
5 area to \$35.78 in Zone 2 for business customers, and from \$13.18 to \$16.18 for
6 residential customers in those zones. In order for U S WEST to cover costs in a
7 competitive environment it is clear that, with the exception of the business rate in
8 the base rate area, retail prices are likely to increase for customers in the other
9 zones. This is especially true if, through convergence, the retail rates for
10 business customers inside the base rate area decrease.

11 U S WEST is currently involved in a rate case in Arizona and, as a result, has an
12 opportunity to seek increased retail rates that would reflect the deaveraged UNE
13 rates established in this proceeding. However, as stated above, U S WEST is
14 concerned with the "rate shock" to Arizona consumers that could result from
15 seeking significant rate increases in a short period of time in the high-cost zones.
16 Therefore, in order to avoid an outcome that would be unpleasant for consumers,
17 U S WEST will likely propose to increase retail basic exchange rates in steps or
18 phases over time. Fortunately, under the retail structure in Arizona, a little more
19 than 5% of consumers fall into Zones 1 and 2, while almost 95% of consumers
20 are located inside the base rate area. This is due primarily to the fact that the
21 vast majority of lines in Arizona are concentrated in dense metropolitan areas.

1 Therefore, only the small percentage of truly high-cost consumers with longer
2 loops could possibly, ultimately, be subject to higher retail rates under the
3 U S WEST proposal, depending on future universal service funding.

4 **Q. WHY IS U S WEST CONCERNED WITH THE EROSION OF IMPLICIT**
5 **SUBSIDIES?**

6 **A. As described earlier in my testimony, UNE deaveraging that does not also take**
7 into effect deaveraging of retail rates will necessarily result in a competitively
8 non-neutral outcome. Assuming wholesale rates are set at cost, any discrepancy
9 between wholesale rates and their retail counterparts represents an arbitrage
10 opportunity that undermines the current subsidy flow to high-cost areas. This is
11 because customers paying rates that are higher than the cost to serve them,
12 especially businesses, provide implicit subsidies that support services in high-
13 cost areas. (U S WEST currently charges only a maximum of \$16.18 per month
14 for residential service in areas where its deaveraged UNE rate would be \$63.70
15 based on cost to provide service). The revenue shortfalls that would result from
16 this upside-down rate structure are made up through implicit subsidies contained
17 in other rates, including the 1FB in the base rate area.

18 Competitors taking advantage of deaveraged unbundled network loop rates
19 could quite easily undercut U S WEST's basic business rate of \$32.78 in the
20 base rate area. U S WEST is then left with two choices: (1) reduce its retail rates
21 in order to provide a viable economic alternative to business customers, and thus

1 lose the implicit subsidy, or (2) do nothing and lose the customers providing the
2 implicit support through the business rate. In either case, the source of the
3 implicit subsidy disappears. Remember, competitors will not likely be serving
4 customers in high-cost areas, unless they do so at significantly below-cost rates
5 through a resale discount.

6 Implicit subsidies will erode away over time due to competition. Thus, as the
7 current implicit subsidies disappear, they must be replaced with rate increases or
8 explicit subsidies in high-cost areas. In order to remain financially viable in the
9 long run, a company must be able to cover its cost of providing service.

10 Therefore, any attempt to deaverage wholesale rates should contemplate similar
11 long-term revisions to the retail rate structure (i.e., increases in rates in higher
12 cost areas) in order to replace the implicit subsidies that will be lost.

13 **Q. ARE THERE OTHER METHODS OF UNE DEAVERAGING THAT COULD BE**
14 **SELECTED IN ARIZONA?**

15 **A. Yes. Although, there are several alternative methods of deaveraging, none of**
16 **those methods fit the unique circumstances in Arizona as well as the zone**
17 **increments I am proposing here. For example, U S WEST has proposed a**
18 **different base rate area and zone increment approach in Montana and Nebraska.**
19 **That approach recommends deaveraging of the UNE loop in the same**
20 **increments as exist in the retail rates. However, by virtue of the rate case,**

1 U S WEST's retail rates are unsettled in Arizona. Therefore, that option was
2 foreclosed.

3 In addition, there are methods of deaveraging UNE loops by the aggregation of
4 wire centers. Under those methods, U S WEST typically proposes a
5 Metropolitan Statistical Area (MSA) approach. This method groups wire center
6 costs based on "communities-of-interest." It has been proposed to establish
7 cost-related UNE rates in states such as North Dakota and South Dakota. This
8 method is consistent with the way retail rates are structured in these states and
9 makes sense in states whose retail rates are consistent with a wire center
10 approach.

11 Alternatively, wire centers can be aggregated strictly on the basis of relative
12 costs. This is the least practical method of determining rates, particularly in
13 Arizona. It is a method that results in a hodge-podge of wire centers being
14 grouped together with no relationship between wholesale rates and the retail
15 consumers being served. Remember, there is a potential for arbitrage and a
16 competitively non-neutral outcome where discrepancies exist between wholesale
17 and retail rates. Further, if averaged wire center costs are used to determine
18 deaveraged zones many consumers who reside in the base rate area under
19 Arizona's retail structure will find themselves in a high-cost zone from a
20 wholesale perspective. When retail and wholesale rates converge, this will result
21 in far more than 5% of consumers being impacted by significantly higher rates.

1

VI. CONCLUSION

2 **Q. WHAT IS YOUR RECOMMENDATION?**

3 A. I recommend that the unbundled loop UNE be deaveraged using U S WEST's
4 proposal. The deaveraging proposal I have submitted is consistent with the
5 manner in which retail rates are structured and can be easily implemented. The
6 structure of the deaveraged rates is similar to permanent decisions made by two
7 other states in U S WEST's territory, Colorado and Wyoming. It meets the FCC's
8 requirement of three cost-related geographic areas and is based on the
9 statewide average loop rate determined by the Commission. I urge the
10 Commission to adopt this proposal.

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

12 A. Yes, it does.

USW-2
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BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO] DOCKET NO. T-00000A-00-0194
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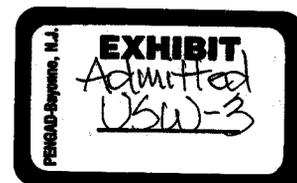
RESPONSIVE TESTIMONY OF

TERESA K. MILLION

ON BEHALF OF

U S WEST COMMUNICATIONS

MAY 1, 2000



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1

I. IDENTIFICATION OF WITNESS

2 **Q. PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND BUSINESS**
3 **ADDRESS.**

4 A. My name is Teresa K. (Terri) Million. I am employed by U S WEST
5 Communications, Inc. (U S WEST) as a Director, Cost Advocacy in the Retail
6 Markets Organization. My business address is 1801 California Street, Room
7 4450, Denver, Colorado 80202.

8 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?**

9 A. Yes.

10 **Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?**

11 A. The purpose of this testimony is to respond to the testimony of Douglas Denney
12 of AT&T. In addition, I respond briefly to an assertion made by Rex Knowles of
13 NEXTLINK in his testimony.

1 **II. DEAVERAGING OF UNBUNDLED NETWORK ELEMENTS**

2 **Q. DO YOU AGREE WITH MR. DENNEY'S ASSERTION THAT AT&T'S**
3 **PROPOSED METHOD IS THE "BEST WAY" TO DEAVERAGE?**

4 **A.** No. There are at least two *general* approaches that have been used in the
5 geographic deaveraging of the unbundled loop. In addition, the FCC says that
6 state commissions may use existing density-related zone pricing plans described
7 in § 69.123, or other cost-related zone plans.¹ In fact, the FCC indicated that it is
8 unwilling to dictate to the states the "best way" to deaverage UNEs, and
9 recognized that each state's circumstances must be considered in choosing an
10 appropriate method.² Nevertheless, Mr. Denney ignores this fact and says that
11 deaveraging should be based on a method other than density because "cost
12 proxies are unnecessary."³ There is *no requirement* to base deaveraging on
13 AT&T's methodology which merely aggregates wire centers into zones based on
14 their average cost. As I will explain below, the AT&T approach is arbitrary and
15 lends itself to manipulation of zones.

16 **Q. WHAT ARE THE APPROACHES THAT COULD BE USED TO DEAVERAGE**
17 **THE UNBUNDLED LOOP UNE?**

¹ 47 C.F.R. §51.507(f).

² In its May 7, 1999 Order Staying its deaveraging rule the FCC stated:

The Commission recognized the possibility that the three-zone rule may not be appropriate in all states. In some states, for instance, local circumstances may dictate the establishment of only two deaveraged rate zones. The Commission stated that it intends to address such situations on a case-by-case basis. States may file waiver requests with the Commission seeking relief from the general rule in light of their particular facts and circumstances...

³ Denney, April 24, 2000 testimony, p. 10.

1 A. First, costs can be deaveraged by *zone increments* within wire centers. This
2 method produces zones that mimic the retail rate structure currently in use in
3 Arizona. Wire centers are divided between a "base rate area" and distance
4 based zone increments. Since loop length, or distance from the wire center, is a
5 significant driver of *geographical* cost differences, the zone increment method is
6 the method that U S WEST is proposing in Arizona.

7 Alternatively, costs can be deaveraged based on the aggregation of *wire center*
8 costs into zones. This aggregation is accomplished by grouping wire centers
9 based on Metropolitan Statistical Areas (MSAs), also known as communities of
10 interest, or based on averages of wire center cost, size or density. AT&T's
11 proposed wire center method is based on averaging the costs for each wire
12 center and then grouping wire centers with similar averaged costs to create an
13 average unbundled network element (UNE) loop rate for each of five zones. This
14 is the same approach AT&T has proposed in every other state in the U S WEST
15 region. Evidently, AT&T believes that there are no significant differences among
16 U S WEST's fourteen states.

17 While AT&T's wire center method is one way to approach deaveraging, it is
18 certainly not the only, or the best way to accomplish the FCC requirement. The
19 FCC's Order and Rules for deaveraging require the Commission to establish
20 three cost-related *geographic* zones structured consistently with the manner in
21 which the costs of providing the UNE are incurred. Nevertheless, it is unclear

1 how AT&T's method has anything to do with the *geography* of an area, since
2 even in Phoenix, no matter how close some customers are to the wire center
3 they could fall into any of AT&T's five proposed zones. It is a method that results
4 in a patchwork of wire centers in five zones based on the average cost of those
5 wire centers and nothing more.

6 **Q. HAVE ANY OF U S WEST'S OTHER STATES ADOPTED AT&T'S PROPOSED**
7 **DEAVERAGING METHOD?**

8 A. No. Thus far no state in U S WEST's region has adopted AT&T's proposal,
9 although of the four states that have adopted deaveraging, two adopted zone
10 increment methods and two adopted wire center methods using U S WEST's
11 MSA approach. Both Colorado and Wyoming, whose retail structures utilize a
12 zone increment approach, have adopted a zone increment method for the UNE
13 loop rate. Utah and New Mexico have adopted wire center methods, but have
14 chosen to use the MSA proposal suggested by U S WEST.

15 **Q. WHY DOES AT&T'S METHOD OF DEAVERAGING APPEAR ARBITRARY**
16 **AND MANIPULATIVE?**

17 A. Any method of deaveraging is going to require some level of averaging of loop
18 costs across zones. AT&T's method first averages the loop costs within each
19 wire center, then averages the costs again by wire centers to, eventually,
20 produce an average rate for each of five zones. Even U S WEST's zone
21 increment method, which is distance based, is averaged for the varying loop

1 lengths in each of the zones. However, Mr. Denney implies that somehow the
2 AT&T method leads to deaveraged costs that are more precise and less
3 arbitrary.

4 The truth is that within Mr. Denney's own proposal he suggests four different sets
5 of possible loop rates. He suggests three zones and five zones, and he uses
6 groupings based on \$5 cost increments and breakpoints of \$20 and \$30. Mr.
7 Denney also suggests three zones and five zones using groupings based on an
8 equal percentage of lines in each zone.⁴ The point is that under this method
9 once the costs have been developed, the wire centers can be arbitrarily grouped
10 in any fashion, to achieve any number of different rates or zones. This practice
11 leads to manipulation of wire centers into groups that produce desired UNE rates
12 in certain zones.

13 There is simply nothing precise, objective or even scientific about the way Mr.
14 Denney has grouped the wire centers in Arizona. He could just as easily have
15 selected four zones, or used \$10 cost increments, or breakpoints of \$40 and \$60.
16 When he changed from five zones to three zones (on pages 12 and 13 of his
17 testimony), Mr. Denney left Zones 1 and 2 unchanged, and merely collapsed
18 Zones 4 and 5 into Zone 3. What is depicted clearly is that by choosing to
19 average in \$5 increments, and only select the five lowest cost wire centers in

⁴ Denney April 24, 2000 testimony, footnote 11, p. 16.

1 Phoenix, AT&T was able to manipulate the results to produce a very low loop
2 rate for Zone 1.

3 The result of this type of rate manipulation is exactly the concern I expressed in
4 my direct testimony, i.e., it is merely an opportunity for rate arbitrage.⁵ Under
5 AT&T's proposal, CLECs would receive the benefit of a UNE price decrease in
6 Zones 1 and 2, but would not pursue UNE-based competition in zones where
7 they have the advantage of below-cost resale rates. Even Mr. Denney admits
8 that competition in Arizona will likely be limited when he says, "[i]t would be
9 burdensome to the Commission, ILECs and CLECs to have to track the prices in
10 20 zones if UNE purchases are only occurring in two zones."⁶ Thus, U S WEST
11 would be left with the obligation of maintaining the more expensive loops without
12 receiving the offsetting revenues of either higher averaged UNE loop prices, or
13 higher deaveraged retail prices.

14 **Q. DOES U S WEST'S ZONE INCREMENT METHOD LEND ITSELF TO SIMILAR**
15 **MANIPULATION?**

16 **A.** No. In contrast, because U S WEST's method is driven by the underlying retail
17 rate structure that already exists in Arizona there is no similar opportunity to
18 manipulate the resulting rates. U S WEST's zones have a discernable basis,

⁵ Million, April 24, 2000 testimony, p. 6.

⁶ Denney, April 24, 2000 testimony, p. 7.

1 e.g., the base rate area and two distance-based zone increments, and cost
2 differences are influenced by the loop lengths that make up each zone.

3 **Q. DOES U S WEST'S PROPOSED METHOD ACCOMPLISH THE FCC**
4 **REQUIREMENT?**

5 A. Yes. U S WEST's zone increment proposal meets the requirements of the FCC
6 and makes sense for Arizona. First, it provides for three distance-based zones
7 that are consistent with the retail zones that are currently proposed in Arizona.⁷
8 Second, the zones reflect a level of geographic deaveraging related to the cost of
9 providing service in the proposed zones. The U S WEST proposal offers
10 unbundled loops at a price lower than the statewide average in the low-cost base
11 rate areas and at higher prices in the high-cost zones where loops are longer.
12 Finally, because the zones are consistent with the existing retail structure in
13 Arizona they will be easier to administer and more understandable to consumers.

14 **Q. SHOULD THE COMMISSION CONSIDER MORE THAN THREE ZONES IN**
15 **ARIZONA?**

16 A. No. Three deaveraged zones are sufficient in Arizona. First, U S WEST's
17 proposed three-zone structure is consistent with Arizona's retail structure and is
18 compatible with the systems used to provision service, bill customers, and
19 manage the network. Second, during the FCC's review of deaveraging, there

⁷ I have assumed the base rate areas with the expanded boundaries as recommended by David Teitzel in Docket No. T-1051B-99-105, see Teitzel Direct Testimony, filed January 8, 1999, p. 42.

1 were commenters who proposed more than three zones and who stated that
2 more zones would lead to more precise deaveraging. Nevertheless, the FCC
3 only required commissions to establish three deaveraged zones in a state.
4 Finally, the FCC even allowed for the possibility that in some states three zones
5 might be too many, and encouraged those state commissions to seek a waiver
6 from the requirement. (See footnote #2).

7 **Q. MR. DENNEY SAYS THAT IT IS IMPORTANT TO BE ABLE TO EASILY**
8 **IDENTIFY CUSTOMERS WITH THEIR ZONES. DOES AT&T'S PROPOSED**
9 **METHOD ACCOMPLISH THIS?**

10 A. No. AT&T's proposed method purports to separate zones by "relative" cost of
11 wire centers. This method does not make it easy to identify customers with their
12 zones, and results in a hodgepodge of wire centers and rates in the five
13 proposed zones. These groupings are counterintuitive to the idea of defined
14 geographic zones. For example, within a six-mile radius of the Phoenix South
15 central office there are wire centers in each of AT&T's five zones with loop rates
16 ranging from \$12.75 to \$53.94. As a result, in the Phoenix area 17.7% of loops
17 are at or above the statewide average loop rate of \$21.98. This means that a
18 CLEC would have to know which specific wire centers were in which specific
19 zones in order to identify the appropriate zone. In addition, a CLEC serving a
20 chain of gas stations would have to keep track of five different UNE loop rates for
21 that chain just within the Phoenix area.

1 **Q. IS IT DIFFICULT TO IDENTIFY CUSTOMERS WITH ZONES UNDER**
2 **U S WEST'S ZONE INCREMENT METHOD?**

3 A. No. Contrary to what Mr. Denney says, because U S WEST already identifies
4 the zone increment for each customer location for retail purposes it would be a
5 simple matter for a CLEC to determine which of the below-wire-center-level
6 zones a customer resides in.⁸ Since U S WEST has a method in which an
7 indicator is assigned to each loop based on customer location, a process does
8 exist in Arizona for CLECs to easily identify customers in the three zone
9 increments proposed by U S WEST. Further, under the zone increment method,
10 88.3% of Phoenix metropolitan consumers fall within the base rate area, and
11 therefore for those customers the CLEC would have only one rate (i.e., \$20.12)
12 to track.

13 **Q. MR. DENNEY CRITICIZES U S WEST FOR ATTEMPTING TO LINK**
14 **WHOLESALE AND RETAIL DEAVERAGING, IS HE CORRECT?**

15 A. No. Since retail prices in a competitive environment will necessarily gravitate
16 toward their underlying wholesale costs, under the AT&T method, Arizona would
17 end up with a five-zone retail structure in Phoenix that resembles the structure
18 that the Commission abandoned in 1991. AT&T argues that there is no
19 connection between retail and wholesale and, that as the customer of the
20 deaveraged UNE loop, the CLEC is the only "customer" that the Commission
21 should be concerned with. However, it should go without saying that every UNE

1 loop purchased by a CLEC is used, ultimately, to serve an Arizona consumer.

2 Therefore, this Commission must consider the impact on Arizona's retail

3 structure for any deaveraging method it adopts. Under AT&T's method, more

4 than 850,000 of the loops purchased to serve Arizona consumers will be priced

5 at or above the current statewide average rate of \$21.98. In contrast, under

6 U S WEST's proposal, less than 150,000 of Arizona consumers will have loops

7 priced above \$20.12.

8 **Q. DO OTHER CLECS AGREE WITH AT&T THAT THERE IS NO CONNECTION**
9 **BETWEEN RETAIL AND WHOLESALE RATES?**

10 **A.** No. Other CLECs have discussed the strong relationship between wholesale
11 and retail rates and the impact of that relationship on their ability to compete. For
12 example, in Minnesota, Crystal Communications, Inc. (Crystal) filed comments in
13 Docket No. P-999/CI-99-465 addressing the issue as follows:

14 "...the need for expediency cannot excuse the Commission from the
15 critical task of coordinating wholesale and retail rate deaveraging. Failure
16 to address these issues concurrently will create market distortions and
17 impact the development of facilities-based competition, particularly in the
18 more rural areas of the state where Crystal provides service. In fact,
19 facilities-based competition in rural areas may be effectively foreclosed if
20 the Commission does not address wholesale and retail issues in concert."

21 Crystal went on to say that it "urges the Commission to require that wholesale

22 geographic rate deaveraging be accompanied both in timing and in parallel

⁸ Denney, April 24, 2000 testimony, p. 9.

1 pricing by geographic [retail] rate deaveraging.”⁹ Crystal clearly understands and
2 agrees with what U S WEST has said all along, that wholesale deaveraging
3 cannot be accomplished in a vacuum because in a competitive environment retail
4 rates must reflect the underlying wholesale costs.

5 In addition to Crystal, the Minnesota Public Utilities Commission Staff also
6 expressed concerns about the relationship between retail and wholesale rates in
7 the Minnesota Deaveraging docket. Just as this Commission recognized and
8 shared U S WEST’s concerns about deaveraging in Docket No. U-3021-96-448
9 ET AL., Minnesota Staff agreed with U S WEST’s characterization of the retail
10 issue and stated:¹⁰

11 “With respect to low-cost areas, by deaveraging UNE rates in the absence
12 of retail rate deaveraging, CLECs will be able to purchase UNEs at low
13 deaveraged rates and to sell service just below the average retail rates of
14 the ILECs. In the extreme, those CLECs may be able to attract all of the
15 ILEC’s customers in those low-cost areas leaving the ILEC no source to
16 support its high-cost customers.”

17 Staff further supported U S WEST’s position, saying:¹¹

18 Granted, this serves the purpose of encouraging entry by CLECs and
19 providing choice to customers, but it may also place the ILEC at a
20 competitive disadvantage...hardly a level playing field.”

⁹ Crystal comments, Minnesota Deaveraging Docket No. P-999/CI-99-465, p. 3.

¹⁰ Staff Briefing Papers, April 18, 2000, Docket No. P-999/CI-99-465, p. 20.

¹¹ Id.

1 Further, in Iowa, Goldfield Access Network, L.C., (Goldfield) similarly recognized
2 the connection between wholesale and retail deaveraging.¹² Even in this Docket,
3 NEXTLINK's witness, Mr. Rex Knowles discusses the strong link between
4 wholesale costs and retail prices.¹³

5 **Q. DOESN'T MR. KNOWLES GO ON TO SAY THAT THE COMMISSION**
6 **SHOULD NOT BE CONCERNED ABOUT RETAIL RATE DEAVERAGING?**

7 A. No. Mr. Knowles says that because U S WEST has not sought to deaverage its
8 retail rates in conjunction with UNE deaveraging in Utah, the Commission should
9 not be concerned about U S WEST's position regarding retail rate deaveraging.
10 However, Mr. Knowles has not told the whole story about U S WEST's retail
11 deaveraging activities.

12 It is true that in some states, because of regulatory price caps or legislation that
13 constrains U S WEST's retail rates, U S WEST has been unable to pursue retail
14 rate deaveraging. However, in other states U S WEST is actively seeking retail
15 deaveraging. For example, U S WEST has proposed retail deaveraging in
16 connection with wholesale deaveraging in both Iowa and Oregon. In addition, in
17 Colorado and Wyoming, the two states that adopted a zone increment method,
18 UNE loops have been deaveraged in concert with retail rates.

¹² Goldfield, April 3, 2000, Docket No. RPU-00-17 (TF-00-64), p. 11, stated that U S WEST "should be directed to increase its retail rates to maintain the same \$9.44 wholesale-to-retail spread that exists today and against which Goldfield must compete."

¹³ Knowles, April 24, 2000 testimony, pp. 5-6.

1 The retail rates for the base rate area and three zone increments in Wyoming are
2 \$23.10, \$38.60, \$48.60 and \$69.35, respectively.¹⁴ Similarly, Colorado's retail
3 rates have been deaveraged to reflect (for business) a base rate area rate of
4 \$34.60 and zone increments of \$7.50, \$17.50 and \$25.00 (resulting in retail rates
5 of \$34.60, \$42.10, \$52.10 and \$59.60). Thus, I believe Mr. Knowles is misguided
6 when he says that U S WEST's actions do not support its position on retail
7 deaveraging, and he is incorrect when he says the Commission should not be
8 concerned.

9 **Q. MR. DENNEY SAYS THAT THE PURPOSE OF DEAVERAGING IS TO HAVE**
10 **UNE PRICES THAT MORE CLOSELY REPRESENT THEIR UNDERLYING**
11 **COST. DOES U S WEST'S METHOD ACCOMPLISH THIS GOAL?**

12 **A.** Yes. Mr. Denney says that the unbundled loop UNE has a "high degree of cost
13 variability between geographic zones" and that UNEs should be deaveraged
14 based on "the existence of significant cost differences in providing the UNEs in
15 different geographic areas."¹⁵ The *geographic* cost differences in the unbundled
16 loop are driven by a combination of two factors: 1) loop length or a customer's
17 distance from the central office, and 2) density or the number of customers
18 served by a central office. The general rule of loop costs is the longer the loop
19 length, the higher the cost to serve the customer. It is also usually the case,
20 though not always, that density and distance from the central office correlate. In
21 other words, generally the farther away the customer is from the central office,

¹⁴ These retail rates correspond to UNE loop rates of \$19.05, \$31.83, \$40.11 and \$58.43 in Wyoming.

1 the less dense the area being served is and the higher the cost is to serve the
2 customer. U S WEST's proposed zone increment method of deaveraging
3 provides UNE loop rates that vary based on loop length and thus, generally, by
4 density. Since these are the drivers of differences in loop cost, U S WEST's
5 proposed deaveraged rates most closely reflect the underlying cost of providing
6 UNE loops in different geographic areas.

7 In contrast, AT&T's proposed method averages the costs and, therefore the
8 length of loops and density, within a wire center to produce an average loop cost
9 per wire center. AT&T then averages the costs of multiple wire centers to
10 produce loop rates by zone. This method does not produce a result that most
11 closely reflects the underlying cost of the loop and, in fact, averages the very
12 elements, i.e., loop length and density, that drive differences in loop cost.
13 Therefore, it is clear that under Mr. Denney's own analysis U S WEST's
14 proposed method produces deaveraged loop rates that send "appropriate signals
15 to the marketplace and allow competitors to make economically efficient
16 decisions on where and how to compete."¹⁶

17 III. CONCLUSION

18 Q. WHAT IS YOUR RECOMMENDATION?

¹⁵ Denney, April 24, 2000 testimony, pp. 5-6.

¹⁶ Denney, April 24, 2000 testimony, p. 3.

1 A. The deaveraging proposal U S WEST has submitted is consistent with the
2 manner in which retail rates are structured and can be easily implemented for
3 interim rates. The structure of the deaveraged rates is similar to permanent
4 decisions made by two other states in U S WEST's territory, Colorado and
5 Wyoming. It meets the FCC's requirement of three cost-related geographic
6 areas, therefore, I urge the Commission to adopt U S WEST's proposal.

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

8 A. Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
CHAIRMAN
JIM IRVIN
COMMISSIONER
WILLIAM A. MUNDELL
COMMISSIONER

IN THE MATTER OF INVESTIGATION INTO] DOCKET NO. T-00000A-00-0194
U S WEST COMMUNICATIONS, INC.'S]
COMPLIANCE WITH CERTAIN WHOLESAL]
PRICING REQUIREMENTS FOR UNBUNDLE D]
NETWORK ELEMENTS AND RESALE]
DISCOUNTS.]

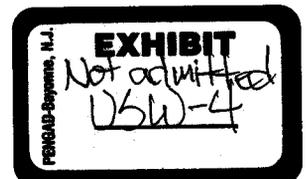
SURREBUTTAL OUTLINE OF

TERESA K. MILLION

ON BEHALF OF

U S WEST COMMUNICATIONS

MAY 9, 2000



U S WEST SURREBUTTAL OUTLINE

Response to Staff Rebuttal

CLEC ability to identify rate zone in U S WEST's proposal

It will not be difficult for CLECs to identify the rate zone in U S WEST's proposal. Rate zone information is easily identified in the normal pre-order process used by CLECs. This information is available because the current retail structure uses Base rate area and two zones.

Zones vs. Wire Centers

CLECs don't use publicly available data in provisioning UNE facilities to their customers. The CLECs use U S WEST systems for identifying an existing U S WEST customer or a new customer at an existing or new location. In the latter case there is no phone number to identify the customer. U S WEST systems identify facilities to a location/address.

Local number portability removes the link between telephone number and wire center.

U S WEST systems in Arizona identify all addresses by base rate or zones, as well as wire center, so there will be no problems for CLECs to identify which zone a potential customer is in.

Connection between wholesale and retail rates

UNE rates are in fact related to retail rates.

Regulated retail rate structure is based on implicit support to cover the cost of residential service. That is why all the current residential basic local service rates (even with zone charges) are lower than the cost of the UNE loop (in Staff's lowest cost zone), without adding switching, transport and signaling costs of basic local service.

CLECs have the ability to use de-averaged UNE rates to provide retail business service that undercuts U S WEST's retail business rates that include implicit subsidies that support residential service.

Loop Rates

The loop rate used on page 5 of Staff's testimony (\$16.95) appears to be incorrect. The rate shown on Staff Schedule 1 is \$17.82. Based on the data shown in Schedule 1, \$17.82 appears to be the correct number.

Response to AT&T Rebuttal

U S WEST's proposal is cost-based. Loop costs are primarily a function of density and distance. U S WEST's proposal uses wire center size to develop costs based on density. Distance is reflected with the break points used for the base rate area and the zones. The further the distance of the customer from the central office, the higher the cost reflected. Since all customers within the base rate area experience average retail rates and treated the same, only customers outside of those areas have been identified as the higher cost zones. See exhibit TKM-1, p. 1.

PERIOD: Bayonne, N.J.
EXHIBIT
AT&T-1
Admitted

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF INVESTIGATION)
INTO U S WEST COMMUNICATIONS,)
INC.'S COMPLIANCE WITH CERTAIN) DOCKET NO. T-00000A-00-0194
WHOLESALE PRICING)
REQUIREMENTS FOR UNBUNDLED)
NETWORK ELEMENTS AND RESALE)
DISCOUNTS)

DIRECT TESTIMONY OF

DOUGLAS DENNEY

ON BEHALF OF

AT&T COMMUNICATIONS

OF THE MOUNTAIN STATES, INC.

APRIL 24, 2000

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1 **I. INTRODUCTION**

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

3 A. My name is Douglas Denney. I work at 1875 Lawrence Street, Denver, Colorado.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am an economist for AT&T in its Local Services and Access Management
6 Organization.

7 **Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL
8 BACKGROUND.**

9 A. I received a B.S. degree in Business Management in 1988. I spent three years
10 doing graduate work at the University of Arizona in Economics, and then I
11 transferred to Oregon State University where I have completed all the
12 requirements for a Ph.D. except my dissertation. My field of study was Industrial
13 Organization, and I focused on cost models and the measurement of market
14 power. I taught a variety of courses at the University of Arizona and Oregon State
15 University. I was hired by AT&T in December of 1996 and have spent most of
16 my time with the Company analyzing cost models.

17 I have testified before numerous Commissions in U S WEST's 14-state territory
18 on cost models (including the HAI Model, BCPM, U S WEST's UNE cost
19 models, and the FCC's Synthesis Model) and issues relating to cost models.

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

2 A. The purpose of this testimony is to present to the Commission a rational
3 methodology for determining the deaveraged unbundled loop rate for U S WEST
4 in Arizona.

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

6 A. The FCC has mandated that states deaverage Unbundled Network Element
7 ("UNE") prices into at least three cost-based zones by May 1, 2000. This
8 Commission can simply and quickly complete this task based on the work it has
9 previously done in the arbitration proceeding between U S WEST and AT&T.
10 The Commission has already determined statewide average UNE prices for
11 U S WEST in Arizona. The next step is to create deaveraged rates based on wire
12 center cost differences that exist throughout U S WEST's serving area in the state.
13 This Commission need only deaverage the unbundled loop rate at this time. This
14 is the most significant cost that Competitive Local Exchange Carriers ("CLECs")
15 face and it has the greatest variability on a geographic basis.
16 The Commission is required by the Federal Communications Commission
17 ("FCC") to establish a minimum of three cost-based zones. These zones should
18 be determined by grouping together wire centers with similar costs.
19 In selecting a methodology for deaveraging, the Commission should be mindful
20 of the costs that complicated methodologies could impose on both CLECs and

1 incumbent local exchange carriers ("ILECs"). The Commission should select a
2 methodology that is simple and does not impose unnecessary implementation
3 costs.

4 **II. DEAVERAGED UNES**

5 **Q. WHY SHOULD THE COMMISSION ESTABLISH GEOGRAPHICALLY**
6 **DEAVERAGED UNBUNDLED NETWORK ELEMENTS?**

7 A. UNE prices that most closely reflect their underlying cost will best facilitate
8 efficient competition by sending the appropriate signals to the marketplace and
9 allow competitors to make economically efficient decisions on where and how to
10 compete.

11 UNE prices that are set below cost could create uneconomic incentives for
12 competitors to purchase UNES rather than deploying their own network, even
13 where the competitor is the low-cost producer. UNE prices that are set above cost
14 could create uneconomic incentives for competitors to build facilities, even if the
15 competitor is not the most efficient provider. In addition, since significant sunk
16 costs exist for a competitor attempting to provide service over its own facilities,
17 UNE prices that are set above costs can also severely limit entry into a market.

18 UNE prices should also be deaveraged because it is the law. The
19 Telecommunications Act of 1996 requires that charges for UNES should be based

1 on the cost of providing that UNE, without reference to rate-of-return.¹ Since the
2 cost of some UNEs varies significantly in different geographic areas of the state,
3 FCC rules implementing the Act require that states establish at least three cost-
4 related zones.²

5 **Q. WHAT QUESTIONS DOES THE COMMISSION NEED TO CONSIDER**
6 **WHEN BEGINNING THE PROCESS OF DETERMINING GEOGRAPHIC**
7 **DEAVERAGED UNE RATES IN ARIZONA?**

8 A. Before deaveraging the Commission needs to answer three questions: 1) What
9 UNEs warrant deaveraging; 2) How many deaveraged "zones" should be created;
10 and 3) How should the zones be defined? I will address each of these questions
11 below.

12 **Q. WHAT UNES WARRANT DEAVERAGING?**

13 A. The unbundled loop is the most important element to deaverage. The unbundled
14 loop makes up approximately 75% of the total cost a CLEC will face when
15 offering telephone service through unbundled network elements. The
16 fundamental purpose behind deaveraging of UNEs is to facilitate competition.
17 Unbundled network element prices that represent underlying cost send the
18 appropriate signals to new entrants to help them determine whether it is more

¹ 47 U.S.C., sec. 101, § 252(d)(1)(A)(i).

² 47 C.F.R. § 51.507(f)

1 efficient to lease the existing ILEC's network or build their own facilities.³ The
2 determination of whether a UNE should be deaveraged should be based on (a) the
3 existence of significant cost differences in providing the UNEs in different
4 geographic areas; and (b) the ability to appropriately distinguish these cost
5 differences.

6 Obviously, it does not make sense to deaverage rates on an interim basis where
7 significant cost differences do not exist. For example, the highest cost wire center
8 loop price in Arizona is approximately 30 times the lowest cost wire center price.
9 This ratio for the switch port is three times. In addition, the average loop cost is
10 \$21.98, and the average switch port cost is only \$1.61. The benefits of
11 deaveraging the switch port and other non-loop elements are minimal, and the
12 cost to ILECs and CLECs of maintaining distinct rates in distinct areas would
13 likely outweigh any benefit of deaveraging on an interim basis.

14 Additionally, if cost model methodologies do not appropriately assign cost to
15 different geographic areas, then the implementation of deaveraging becomes
16 nearly impossible. For example, the cost of a point-to-point interoffice
17 connection can easily be allocated to the individual wire centers at each end, but it

³ Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, 11 FCC Rcd 15499, ¶ 758 (1996) ("Local Competition Order") ("deaveraged rates more closely reflect the actual costs of providing ... unbundled network elements.")

1 is much more difficult to accurately allocate the cost of these facilities to areas
2 within a wire center.⁴

3 At this time, only the unbundled loop has all of the following characteristics: it is
4 the most significant cost in providing local service; it has a high degree of cost
5 variability between geographic zones; and the cost is easily assigned to individual
6 customers (thus zones) through the use of a cost proxy model. Thus, the
7 unbundled loop is the only element that must necessarily be deaveraged at this
8 time.⁵

9 **Q. HOW MANY DEAVERAGED "ZONES" SHOULD BE CREATED?**

10 A. AT&T recommends that the Commission establish five geographically
11 deaveraged zones, at this time. The FCC has mandated that states create **at least**
12 three deaveraged zones on or before May 1, 2000. However, the CLECs in
13 Washington recommended five zones. This was acceptable to AT&T. The
14 greater the number of zones, the more accurate the market signal observed by
15 CLECs. However, the number of zones adopted should be tempered by

⁴ Although total cost can be determined with a high degree of certainty, the appropriate allocation of cost can also be an issue with host/remote switching cost (to appropriate offices), interoffice SONET ring cost (to appropriate offices), feeder cost (to appropriate clusters), and distribution cost (to appropriate households). The greater the level of aggregation of cost, the greater degree of certainty of the estimates. However, as is discussed below, the loop cost can be appropriately assigned to wire centers. This is one reason why AT&T recommends calculating cost at the wire center level and aggregating wire centers with similar cost into zones.

⁵ As competition develops and cost models increase in precision, additional elements may need to be deaveraged. However, it is the opinion of AT&T that deaveraging the unbundled loop will capture significant cost differences between customers and will satisfy the FCC's requirement to deaverage.

1 practicality, implementation and the current state of competition in Arizona. It
2 would be burdensome to the Commission, ILECs and CLECs to have to track the
3 prices in 20 zones if UNE purchases are only occurring in two zones.

4 While it is feasible to deaverage to virtually any conceivable level, given the state
5 of competition in Arizona, the inability to foresee the precise shape of competition
6 in the near future, and the infancy of the deaveraging process at this time, five
7 deaveraged zones is a practical place for this Commission to start. The
8 Commission should consider revisiting the state of deaveraging and the need for
9 further deaveraging on a periodic basis.

10 **Q. HOW SHOULD ZONES BE DEFINED?**

11 A. While there are a variety of different methodologies for defining zones for
12 deaveraging, the most practical way to deaverage is to combine areas with similar
13 costs into zones. The best way to do this is to group wire centers with similar
14 costs into five cost-based zones.⁶ Other methods that could be used are: density
15 zones, distance from the wire center (known as a doughnut approach)⁷, central

⁶ As competition develops, further deaveraging will inevitably be necessary. The state and type of competition will help the Commission determine future methods of deaveraging.

⁷ The doughnut approach draws a circle around each wire center and creates two zones in each wire center, an "in-town" zone and an "out-of-town" zone.

1 office size, and communities of interest.⁸ However, these other methods present
2 implementation concerns, and they do not depict costs in the most accurate way.

3 When establishing zones it is important to keep in mind the purpose of
4 deaveraging. The purpose is to facilitate efficient competition by allowing the
5 prices of unbundled network elements to more closely represent their underlying
6 cost. Accurately priced UNEs will allow CLECs to make economical and
7 efficient decisions on where to purchase UNEs and where to build.

8 Thus, the decision on how to group customers into zones should be made based
9 on cost differences between customers, rather than some proxy representing cost
10 differences, such as density, doughnuts, or switch size.

11 Another important issue is the ease of identifying customers with zones. For
12 example, suppose a CLEC wishes to make a bid to provide local service to a
13 business operating throughout the state of Arizona, such as a gas station or a
14 restaurant chain. If the CLEC cannot easily determine in which zone the business
15 is located, or if the CLEC has to pay an OSS records look-up charge to the ILEC
16 to determine the zone of this customer, the CLEC will face an unnecessary
17 expense to compete. Deaveraging on a wire center basis would alleviate this
18 concern.

⁸ The communities of interest approach groups areas (clusters or wire centers) that are relatively near to each other into the same zone. Though the communities of interest approach typically creates urban, suburban and rural communities, it is technically not a cost-based approach.

1 Since the loop is the most important element to be deaveraged and each loop is
2 uniquely assigned to a wire center, the wire center is the most practical and simple
3 method of identifying customers. Thus, utilizing zones based on cost differences
4 between wire centers is the most appropriate method to begin the deaveraging
5 process.

6 **Q. DOES THE COMMISSION NEED TO DEAVERAGE COSTS BELOW**
7 **THE WIRE CENTER LEVEL AT THIS TIME?**

8 A. No. Certainly loop costs vary within a wire center. However a number of factors
9 suggest that the wire center is the appropriate place to start the deaveraging
10 process at this time. 1) This is the beginning of the deaveraging process. The
11 Commission should regularly review UNE deaveraging and its impacts on the
12 state of competition in the state. An appropriate first step in the deaveraging
13 process is to begin with a simple and clear method and define zones based on
14 existing wire center boundaries. 2) CLECs can easily identify potential customers
15 with wire centers through the customer's NPA-NXX. This will allow the CLEC
16 to easily consider business plans, identify UNE rates for customers, and make
17 efficient entry decisions. If customers are assigned to zones below the wire center
18 level of aggregation, a simple, low-cost method must exist for CLECs to
19 determine in which zone customers belong. No simple, low-cost system exists
20 today. 3) Actual line counts for the U S WEST territory by wire center are
21 publicly available and can be used to precisely calculate the cost of each wire

1 center.⁹ Precise line counts at the sub-wire center level are not available. 4) Some
2 parts of the loop are shared between customers in different areas of the wire
3 center, such as feeder cable. When deaveraging below the wire center it is
4 important that loop elements shared between different areas in the wire center, are
5 appropriately allocated to each area. A misallocation (though correct calculation)
6 of feeder cost would distort deaveraged prices in a doughnut zone approach and
7 thus could have unintended consequences on competition. Since no part of the
8 loop is shared between wire centers, the wire center is an ideal level at which to
9 calculate loop costs for the purposes of creating cost-based zones.

10 **Q. WHAT IS WRONG WITH GROUPING WIRE CENTERS BY DENSITY,**
11 **SWITCH SIZE, OR COMMUNITIES OF INTEREST?**

12 A. The purpose of deaveraging UNEs is to ensure that UNEs more closely reflect
13 their underlying cost. Density and switch size are simply proxies for cost. Since
14 actual forward-looking cost can be calculated for each wire center, cost proxies
15 are unnecessary. In fact, any grouping of wire centers into zones using a means
16 other than cost will distort deaveraged prices and potentially could have adverse
17 affects on competition.

18 For example, the communities of interest method groups wire centers that are
19 close together into zones. This has the effect of putting some high-cost wire

⁹ In order to maintain the current ordered state-wide average loop rate of \$21.98, a factor was applied to the wire center cost estimates. The factor for Arizona was 1.79.

1 centers in low-cost zones and low-cost wire centers in the high-cost zones. This
2 methodology distorts costs and gives parties (both ILECs and CLECs) incentives
3 to manipulate the assignment of wire centers for their respective company's
4 advantage. As an example, placing a low-cost wire center in with a high-cost
5 "community of interest" will, in effect, raise the unbundled loop cost for that low-
6 cost wire center and potentially protect that wire center from the threat of
7 competition. Another distortion that happens with community-of-interest
8 assignments is that the differences between the deaveraged zones become smaller,
9 thus lessening the competitive benefits of prices that are aligned with their
10 underlying cost.

11 **Q. WHAT ARE THE MECHANICS BEHIND CALCULATING THE**
12 **DEAVERAGED UNBUNDLED LOOP COST?**

13 A. First, the Commission should determine the unbundled loop cost by wire center. I
14 have relied on the HAI Model, version 5.0a, to determine relative costs by wire
15 center.¹⁰ This is a later version of the model relied upon by Arizona to establish

¹⁰ I made two changes to the HAI Model, version 5.0a. 1) I adjusted the line counts in the model to utilize U S WEST's publicly available actual wire center line counts as they provided to the FCC in a data response. The use of actual line counts should allow for the most accurate calculation of relative differences in costs between wire centers. 2) I used an Arizona specific labor factor in the model. I did not make other changes to the model, as were made to HM 2.2.2 in order to determine statewide average costs. I did not make the changes because: 1) results from HAI were multiplied by a factor of 1.79 in order to match the ordered loop rate; 2) these changes tend to effect the overall costs in the model, not the relative costs between wire centers and thus it is not necessary to make these adjustments since a factor was used to match statewide average costs; 3) the most significant cost driver changed by the Commission in HM 2.2.2, the cable sheath mileage factor, is not used in the HAI Model due to changes in the way loop plant is calculated in the newer cost proxy models.

1 the interim loop rate of \$21.98. Although the model results in an average loop
2 cost less than the Commission's ordered average loop price of \$21.98, I have
3 imposed an upward scaling factor on the results from the cost model to maintain
4 the Commission's statewide average rate.

5 Second, this data should be sorted by cost so that wire centers can be grouped
6 according to similarities in cost into wire center cost-based zones.

7 Attachment A provides scaled loop cost estimates by wire center for U S WEST
8 using the HAI Model, version 5.0a.

9 Third, wire centers with similar costs should be grouped into zones. In order to
10 group wire centers into five cost-based zones, I grouped all wire centers between
11 \$10 and \$15 into zone 1, \$15 and \$20 in zone 2, \$20 and \$25 in zone 3, \$25 and
12 \$30 in zone 4, and all wire center loop costs over \$30 in zone 5.

13 The results are summarized in the table below:

Loop Cost by Zone		
Arizona - U S WEST		
Zone	HM 5.0a (scaled) Monthly Loop Cost	Percent of Lines in Each Zone
1	\$12.75	12.0%
2	\$17.05	58.1%
3	\$21.98	9.7%
4	\$27.40	9.4%
5	\$53.94	10.8%
Average	\$21.98	100.0%

1 Q. IF THE COMMISSION DETERMINED THAT IT ONLY WANTED TO
2 CREATE THREE COST-BASED DEAVERAGED ZONES, WHAT
3 WOULD YOU RECOMMEND?

4 A. I would recommend an approach similar to the five-zone approach presented
5 above, but with the third zone containing all wire centers with loop costs above
6 \$20.00. The results of this zone designation are presented below:

Loop Cost by Zone		
Arizona – U S WEST		
Zone	HM 5.0a (scaled) Monthly Loop Cost	Percent of Lines in Each Zone
1	\$12.75	12.0%
2	\$17.05	58.1%
3	\$35.23	30.0%
Average	\$ 21.98	100.0%

7

8 Q. HOW DOES THE AT&T DEAVERAGING PROPOSAL COMPARE TO
9 PROPOSALS U S WEST HAS PUT FORTH IN OTHER STATES?

10 A. In other states U S WEST has agreed that the loop is the most important element
11 that should be deaveraged and that wire centers should be basis over which cost is
12 calculated. U S WEST has suggested three or four zones but disagrees with the
13 CLECs on how these zones should be created. U S WEST's proposals create
14 zones, not based on cost differences between wire centers, but based on
15 geographic proximity of the wire centers to be deaveraged. Thus, U S WEST

1 tends to group low- and high-cost wire centers together in each deaveraged zone.
2 The result are deaveraged prices that do not properly reflect cost differences that
3 exist within the state. U S WEST's proposals exhibit less deaveraging than what
4 has been proposed by AT&T and CLECs in other jurisdictions.

5 In addition, U S WEST has attempted to link its deaveraging proposal to the
6 current state of retail rates. Retail rates should not determine wholesale prices; in
7 fact, in a competitive market place the pressure works in precisely the opposite
8 direction.

9 The purpose of deaveraging wholesale rates is to facilitate efficient competition
10 by allowing the prices of unbundled network elements to more closely represent
11 their underlying cost. Accurately priced UNEs will allow CLECs to make
12 economical and efficient decisions on where to purchase UNEs and where to
13 build. Prices that are not based on cost will send the wrong signals to the market
14 and may encourage inefficient entry, or discourage entry by an efficient
15 competitor.

16 **Q. WHAT CRITICISMS DOES U S WEST MAKE OF AT&T'S**
17 **DEAVERAGING METHODOLOGY?**

18 **A.** U S WEST has two general criticisms of AT&T's methodology. The first is that

1 the break points between zones are arbitrary and the second is that the cost
2 differences exhibited by the HAI Model between high- and low-cost areas are not
3 reasonable. Both of these criticisms are invalid.

4 **Zone Break Points**

5 U S WEST claims that breakdown between zones is arbitrary and can be
6 manipulated by CLECs. U S WEST makes this claim because the cutoff between
7 zones can be changed. For example: the cutoff between zone 1 and 2 could be
8 changed from \$15.00 to \$14.50. This would change the wire centers assigned to
9 zones 1 and 2 and thus the cost of zone 1 and 2. However, the cost-based
10 methodology dictates that similar cost wire centers must be grouped together.
11 Changing the cutoff does not change the fact that wire centers with similar costs
12 must be grouped together. The AT&T methodology prohibits the manipulation of
13 zones which takes place in U S WEST's community of interest approach. Under
14 the community of interest approach, zones can be manipulated by conveniently
15 defining community in order to arrange specific wire centers in a manner that best
16 suits parties' needs. U S WEST prefers that cost exhibit as little deaveraging as
17 possible, and thus, they interpret communities broadly, to include both low- and
18 high-cost wire centers. The aggregation of wire centers into zones according to
19 costs allows parties to use objective demarcations between zones, such as \$5.00

1 increments, equal percent of customers in each zone, or natural breaks in cost
2 between wire centers.¹¹

3 **HAI Cost Differences between wire centers**

4 U S WEST's proposed deaveraged loop rates typically vary very little between
5 zones. In some states U S WEST has used various versions of its RLCAP model
6 to justify the low variance in costs between high- and low-cost wire centers.

7 Based on RLCAP, U S WEST has criticized the degree to which high- and low-
8 cost wire centers vary that are produced by the HAI Model. U S WEST criticisms
9 are self-serving. In universal service fund ("USF") dockets, U S WEST prefers
10 that costs vary greatly between low- and high-cost areas in order to maximize its
11 claim on Universal Service needs. To accomplish this goal, in USF dockets U S
12 WEST utilizes the BCPM model rather than its own RLCAP model. In many
13 cases BCPM costs show greater variances between wire centers than HAI costs.

14 In contrast, in UNE dockets it is in U S WEST's interest to demonstrate that costs
15 vary slightly. In these cases, U S WEST utilizes a version of RLCAP, or the
16 current retail rate structure. While there are some differences in calculating USF
17 costs and UNE costs, both set of cost estimates utilize estimates of loop
18 investment. U S WEST cannot have it both ways. The loop plant necessary to

¹¹ Natural breaks in wire center costs are not readily apparent in the Arizona cost data. Deaveraged loop costs resulting from placing an equal percent of customers in each zone for the five-zone approach are: \$13.51, \$16.02, \$17.50, \$20.42 and \$41.58; for the three-zone approach, UNE costs are: \$14.58, \$17.52, \$33.11.

1 meet universal service obligations can't vary across the state to a greater degree
2 than the loop plant necessary to provide unbundled UNEs.

3 **III. CONCLUSION**

4 **Q. WHAT CONCLUSIONS CAN BE DRAWN FROM YOUR TESTIMONY?**

5 A. The most important network element to deaverage is the unbundled loop. The
6 unbundled loop is a significant portion of a CLEC's basic service cost, and
7 unbundled loop cost estimates vary significantly throughout the state of Arizona.

8 Pursuant to Federal law, the Commission must create at least three deaveraged
9 zones. The most reasonable method for creating these zones is to calculate the
10 loop cost for each wire center and to group wire centers with similar cost together
11 in a zone.

12 Methodologies other than grouping similar cost areas together distort UNE prices
13 and diminish the benefits that can be derived from deaveraging.

14 AT&T recommends the use of the deaveraged loop rates and zones identified in
15 Attachment A to this testimony as determined by the HAI Model, scaled to
16 maintain the statewide average rate in Arizona of \$21.98 (Zone 1: \$12.75, Zone 2:
17 \$17.05, Zone 3: \$21.98, Zone 4: \$27.40 and Zone 5: \$53.94).

18 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

19 A. Yes.

Arizona -- HAI Model Scaled Cost Estimates

For Sale (=1)	Wire Center	CLLI	Total Lines	Scaled Loop Cost	Percent Change in WC Cost	Cumulative Percent of Total Lines	Zone
0	PHOENIX MAIN	PHNXAZMA	92,248	\$ 11.26		3.2%	1
0	PHOENIX NORTH	PHNXAZNO	113,451	\$ 11.88	5.5%	7.1%	1
0	PHOENIX EAST	PHNXAZEA	40,170	\$ 13.71	15.4%	8.5%	1
0	PHOENIX SOUTHEAST	PHNXAZSE	25,508	\$ 14.31	4.4%	9.3%	1
0	PHOENIX NORTHEAST	PHNXAZNE	76,469	\$ 14.78	3.3%	12.0%	1
0	TEMPE	TEMPAZMA	74,733	\$ 15.05	1.8%	14.5%	2
0	TUCSON MAIN	TCSNAZMA	82,933	\$ 15.35	2.0%	17.4%	2
0	SCOTTSDALE MAIN	SCDLAZMA	77,817	\$ 15.46	0.7%	20.1%	2
0	PHOENIX NORTHWEST	PHNXAZNW	59,263	\$ 15.51	0.3%	22.1%	2
0	SUNNYSLOPE	PHNXAZSY	62,045	\$ 15.59	0.5%	24.3%	2
0	PHOENIX WEST	PHNXAZWE	44,135	\$ 15.98	2.5%	25.8%	2
0	MESA	MESAAZMA	106,484	\$ 16.10	0.8%	29.4%	2
0	FLOWING WELLS	TCSNAZFW	35,723	\$ 16.19	0.6%	30.7%	2
0	CRAYCROFT	TCSNAZCR	41,635	\$ 16.25	0.4%	32.1%	2
0	TUCSON EAST	TCSNAZEA	65,506	\$ 16.38	0.8%	34.4%	2
0	GLENDALE	GLDLAZMA	56,304	\$ 16.43	0.3%	36.3%	2
0	GILBERT	MESAAZGI	61,575	\$ 16.54	0.7%	38.4%	2
0	MCCLINTOCK	TEMPAZMC	85,839	\$ 16.60	0.4%	41.4%	2
0	MARYVALE	PHNXAZMY	39,752	\$ 16.90	1.8%	42.7%	2
0	CHANDLER WEST	CHNDAZWE	40,682	\$ 17.18	1.7%	44.1%	2
0	PEORIA	PHNXAZPR	41,770	\$ 17.45	1.6%	45.6%	2
0	THUNDERBIRD	SCDLAZTH	82,981	\$ 17.65	1.1%	48.4%	2
0	GREENWAY	PHNXAZGR	96,619	\$ 17.66	0.0%	51.8%	2
0	SUPER WEST	SPRSZAZWE	85,511	\$ 17.70	0.2%	54.7%	2
0	CACTUS	PHNXAZCA	94,096	\$ 18.06	2.1%	57.9%	2
1	YUMA MAIN	YUMAAZMA	31,466	\$ 18.15	0.5%	59.0%	2
0	MID RIVERS	PHNXAZMR	53,470	\$ 18.17	0.1%	60.9%	2
0	PECOS	PHNXAZPP	16,078	\$ 18.35	1.0%	61.4%	2
0	SHEA	SCDLAZSH	41,784	\$ 18.63	1.5%	62.9%	2
0	TUCSON SOUTH	TCSNAZSO	38,968	\$ 18.97	1.8%	64.2%	2
0	SUPER MAIN	SPRSZAZMA	33,033	\$ 19.12	0.8%	65.3%	2
0	CHANDLER MAIN	CHNDAZMA	65,456	\$ 19.47	1.8%	67.6%	2
0	RINCON	TCSNAZRN	71,111	\$ 19.76	1.5%	70.0%	2
0	DEER VALLEY NORTH	DRVYAZNO	43,224	\$ 20.05	1.5%	71.5%	3
0	FT MCDOWELL	FTMDAZMA	14,578	\$ 20.46	2.0%	72.0%	3
0	SIERRA VISTA MAIN	SRVSAZMA	22,286	\$ 20.86	1.9%	72.8%	3
0	CATALINA	TCSNAZCA	28,054	\$ 21.01	0.7%	73.8%	3
0	PRESCOTT EAST	PRSCAZEA	15,137	\$ 21.45	2.1%	74.3%	3
0	CHANDLER SOUTH	CHNDAZSO	13,358	\$ 22.12	3.1%	74.7%	3
0	PHOENIX SOUTH	PHNXAZSO	28,936	\$ 22.35	1.0%	75.7%	3
0	SUNRISE	AGFIAZSR	25,979	\$ 22.56	1.0%	76.6%	3

0	BEARDSLEY	BRDSAZMA	29,918	\$ 23.39	3.7%	77.7%	3
0	TUCSON NORTH	TCSNAZNO	45,835	\$ 23.51	0.5%	79.2%	3
0	BETHANY WEST	PHNXAZBW	14,769	\$ 23.63	0.5%	79.7%	3
0	CORTARO	TCSNAZCO	16,862	\$ 25.36	7.3%	80.3%	4
0	TOLLESON	TLSNAZMA	10,160	\$ 25.44	0.3%	80.7%	4
0	SUPER EAST	SPRSAZEA	26,715	\$ 25.54	0.4%	81.6%	4
0	FLAGSTAFF MAIN	FLGSAZMA	28,213	\$ 25.61	0.3%	82.6%	4
0	COLDWATER	GDYRAZCW	9,272	\$ 26.42	3.2%	82.9%	4
0	PRESCOTT MAIN	PRSCAZMA	36,751	\$ 26.63	0.8%	84.1%	4
1	FORTUNA	YUMAAZFT	12,001	\$ 26.71	0.3%	84.6%	4
0	CASA GRANDE	CSGRAZMA	16,445	\$ 27.58	3.2%	85.1%	4
0	COTTONWOOD SOUTH	CTWDAZSO	2,832	\$ 27.71	0.5%	85.2%	4
1	DOUGLAS	DGLSAZMA	8,173	\$ 28.38	2.4%	85.5%	4
0	NOGALES MAIN	NGLSAZMA	6,737	\$ 28.59	0.7%	85.7%	4
0	CORONADO	CRNDAZMA	9,585	\$ 28.62	0.1%	86.1%	4
1	YUMA SOUTHEAST	YUMAAZSE	23,383	\$ 28.64	0.1%	86.9%	4
0	SEDONA SOUTH	SEDNAZSO	4,481	\$ 29.10	1.6%	87.0%	4
0	PINNACLE PEAK	PRVYAZPP	34,461	\$ 29.21	0.4%	88.2%	4
0	FLAGSTAFF SOUTH	FLGSAZSO	2,577	\$ 29.31	0.4%	88.3%	4
0	FOOTHILLS	PHNXAZ81	7,656	\$ 29.78	1.6%	88.6%	4
0	LITCHFIELD PARK	LTPKAZMA	12,677	\$ 29.93	0.5%	89.0%	4
1	PAGE	PAGEAZMA	5,133	\$ 29.97	0.1%	89.2%	4
0	PAYSON	PYSNAZMA	12,290	\$ 30.70	2.5%	89.6%	5
0	COTTONWOOD MAIN	CTWDAZMA	12,838	\$ 33.29	8.4%	90.0%	5
0	SEDONA MAIN	SEDNAZMA	12,479	\$ 33.54	0.8%	90.5%	5
0	SAN MANUEL	SNMNAZMA	2,075	\$ 34.31	2.3%	90.5%	5
0	TANQUE VERDE	TCSNAZTV	11,474	\$ 34.98	1.9%	90.9%	5
1	SAFFORD	SFFRAZMA	11,100	\$ 35.13	0.4%	91.3%	5
0	FLAGSTAFF EAST	FLGSAZEA	15,892	\$ 35.17	0.1%	91.9%	5
0	GREEN VALLEY	GNVYAZMA	17,803	\$ 35.71	1.5%	92.5%	5
1	GLOBE	GLOBAZMA	8,348	\$ 35.87	0.4%	92.8%	5
0	NOGALES MIDWAY	NGLSAZMW	10,728	\$ 36.39	1.5%	93.1%	5
0	CAVE CREEK	CVCKAZMA	14,384	\$ 36.80	1.1%	93.6%	5
0	LAVEEN	PHNXAZLV	2,641	\$ 37.88	2.9%	93.7%	5
0	MUNDS PARK	MSPKAZMA	2,567	\$ 37.97	0.2%	93.8%	5
0	TUCSON SOUTHWEST	TCSNAZSW	18,170	\$ 38.57	1.6%	94.4%	5
0	COOLIDGE	CLDGAZMA	5,145	\$ 38.59	0.1%	94.6%	5
0	TUCSON SOUTHEAST	TCSNAZSE	7,924	\$ 41.26	6.9%	94.9%	5
0	TUCSON WEST	TCSNAZWE	5,213	\$ 41.39	0.3%	95.1%	5
1	SUPERIOR	SPRRAZMA	1,423	\$ 42.60	2.9%	95.1%	5
1	HAYDEN	HYDNAZMA	899	\$ 43.33	1.7%	95.1%	5
0	ELOY	ELOYAZ01	5,391	\$ 43.90	1.3%	95.3%	5
1	WINSLOW	WNSLAZMA	4,877	\$ 43.93	0.1%	95.5%	5
1	SOMERTON	SMTNAZMA	6,431	\$ 44.55	1.4%	95.7%	5
1	WICKENBURG	WCBGAZMA	5,628	\$ 45.17	1.4%	95.9%	5
1	BISBEE	BISBAZMA	5,348	\$ 45.43	0.6%	96.1%	5
1	MIAMI	MIAMAZMA	2,094	\$ 48.61	7.0%	96.2%	5
0	HIGLEY	HGLYAZMA	3,308	\$ 48.62	0.0%	96.3%	5

0	SIERRA VISTA SOUTH	SRVSAZSO	7,056	\$ 48.85	0.5%	96.5%	5
0	CHINO VALLEY	CHVYAZMA	6,355	\$ 49.55	1.4%	96.7%	5
0	WHITE TANKS	WHTKAZMA	2,013	\$ 50.04	1.0%	96.8%	5
1	ASHFORK	ASFKAZMA	528	\$ 50.70	1.3%	96.8%	5
1	MT LEMMON	TCSNAZML	503	\$ 51.67	1.9%	96.8%	5
0	BUCKEYE	BCKYAZMA	6,825	\$ 55.45	7.3%	97.1%	5
0	BLACK CANYON	BLCNAZMA	1,664	\$ 58.58	5.7%	97.1%	5
0	MARANA	MARNAZ02	7,366	\$ 59.82	2.1%	97.4%	5
0	QUEEN CREEK	HGLYAZQC	4,063	\$ 59.96	0.2%	97.5%	5
0	NEW RIVER	NWRVAZMA	4,024	\$ 61.80	3.1%	97.7%	5
0	SIERRA VISTA NORTH	SRVSAZNO	2,151	\$ 62.71	1.5%	97.7%	5
0	PINE	PINEAZMA	2,808	\$ 62.95	0.4%	97.8%	5
1	BENSON	BNSNAZMA	4,757	\$ 64.98	3.2%	98.0%	5
0	RIO VERDE	FTMDAZNO	1,625	\$ 65.87	1.4%	98.1%	5
0	FLORENCE	FLRNAZMA	4,723	\$ 67.90	3.1%	98.2%	5
1	WHITLOW	WHTLAZMA	740	\$ 68.12	0.3%	98.2%	5
0	HUMBOLDT	HMBLAZMA	4,215	\$ 70.21	3.1%	98.4%	5
0	VAIL SOUTH	VAILAZSO	2,162	\$ 71.09	1.3%	98.5%	5
1	KEARNY	KRNYAZMA	1,369	\$ 71.67	0.8%	98.5%	5
0	CAMP VERDE	CMVRAZMA	6,727	\$ 78.78	9.9%	98.7%	5
0	ORACLE	ORCLAZMA	1,742	\$ 79.03	0.3%	98.8%	5
1	WILLIAMS	WLMSAZMA	3,221	\$ 81.69	3.4%	98.9%	5
1	ST DAVID	BNSNAZSD	1,004	\$ 84.75	3.8%	99.0%	5
1	PIMA	PIMAAZMA	1,391	\$ 85.66	1.1%	99.0%	5
1	CIRCLE CITY	CRCYAZMA	1,426	\$ 87.37	2.0%	99.1%	5
1	MARICOPA	MRCPAZMA	1,853	\$ 88.41	1.2%	99.1%	5
0	MARANA	MAYRAZMA	1,110	\$ 93.34	5.6%	99.2%	5
1	WILLCOX	WLCXAZMA	4,024	\$ 97.25	4.2%	99.3%	5
1	DUDLEYVILLE	DDVLAZNM	448	\$ 99.85	2.7%	99.3%	5
1	STANFIELD	STFDAZMA	1,041	\$ 104.07	4.2%	99.3%	5
0	TUBAC	TUBCAZMA	2,356	\$ 115.44	10.9%	99.4%	5
1	ELGIN	PTGNAZEL	1,047	\$ 120.65	4.5%	99.5%	5
1	TONTO CREEK	TNCKAZMA	1,078	\$ 121.26	0.5%	99.5%	5
0	VAIL NORTH	VAILAZNO	1,174	\$ 122.40	0.9%	99.5%	5
1	PALOMINAS	PLMNAZMA	629	\$ 125.12	2.2%	99.6%	5
1	TOMBSTONE	TMBSAZMA	1,166	\$ 129.40	3.4%	99.6%	5
1	JOSEPH CITY	JSCYAZMA	581	\$ 139.72	8.0%	99.6%	5
1	GILA BEND	GLBNAZMA	1,057	\$ 143.47	2.7%	99.7%	5
0	ARIZONA CITY	AZCYAZ03	1,261	\$ 151.23	5.4%	99.7%	5
1	MAMMOTH	MMTHAZMA	860	\$ 151.63	0.3%	99.7%	5
1	WELLTON	WLTNAZMA	2,210	\$ 152.63	0.7%	99.8%	5
1	YARNELL	YRNLAZMA	1,470	\$ 165.26	8.3%	99.9%	5
0	WINTERSBURG	WNBGAZ01	786	\$ 212.79	28.8%	99.9%	5
1	PATAGONIA	PTGNAZMA	822	\$ 247.26	16.2%	99.9%	5
1	GRAND CANYON	GRCNAZMA	2,621	\$ 336.34	36.0%	100.0%	5
38	134 Wire Centers	Total	2,905,325	\$ 21.98		5 Zones	
0	5 Wire Centers	Zone 1	347,846	\$ 12.75		12.0%	

1	28 Wire Centers	Zone 2	1,686,769	\$ 17.05	33.7%	58.1%
0	11 Wire Centers	Zone 3	282,074	\$ 21.98	28.9%	9.7%
4	19 Wire Centers	Zone 4	274,114	\$ 27.40	24.7%	9.4%
33	71 Wire Centers	Zone 5	314,522	\$ 53.94	96.9%	10.8%
0						
0						
0						
0						
0						

After Sale of 38 Wire Centers						
	84 Wire Centers	Total	2,743,175	\$ 20.30		5 Zones
	5 Wire Centers	Zone 1	347,846	\$ 12.75		12.7%
	27 Wire Centers	Zone 2	1,655,303	\$ 17.02	33.6%	60.3%
	11 Wire Centers	Zone 3	282,074	\$ 21.98	29.1%	10.3%
	15 Wire Centers	Zone 4	225,424	\$ 27.21	23.8%	8.2%
	38 Wire Centers	Zone 5	232,528	\$ 46.23	69.9%	8.5%

CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of the Direct Testimony of Douglas Denney on behalf of AT&T Communications of the Mountain States, Inc., regarding Docket No. T-00000A-00-0194, were sent via overnight delivery on this 21st day of April, 2000, to:

Arizona Corporation Commission
Docket Control - Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and a true and correct copy was sent via United States Mail, postage prepaid, on this 21st day of April, 2000, to:

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BEFORE THE ARIZONA CORPORATION COMMISSION WEST Corp. Legal - Denver

CARL J. KUNASEK 2000 MAY -1 P 4:05
Chairman
JAMES M. IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner

MAY 3 2000

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IN THE MATTER OF INVESTIGATION) DOCKET NO. T-00000A-00-0194
INTO U S WEST COMMUNICATIONS,)
INC.'S COMPLIANCE WITH CERTAIN) AT&T COMMUNICATIONS OF
WHOLESALE PRICING REQUIREMENTS) THE MOUNTAIN STATES, INC.'S
FOR UNBUNDLED NETWORK) NOTICE OF FILING REBUTTAL
ELEMENTS AND RESALE DISCOUNTS) TESTIMONY OF DOUGLAS
) DENNEY

AT&T Communications of the Mountain States, Inc. hereby files the Rebuttal
Testimony of Douglas Denney in the above-referenced matter. A copy of which is
attached to this notice.

Respectfully submitted this 1 day of May, 2000.

AT&T COMMUNICATIONS OF
THE MOUNTAIN STATES, INC.

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CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of the Rebuttal Testimony of Douglas Denney on behalf of AT&T Communications of the Mountain States, Inc., regarding Docket No. T-00000A-00-0194, were hand delivered on this 1st day of May, 2000, to:

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Docket Control - Utilities Division
1200 West Washington Street
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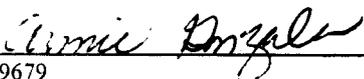
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339679

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF INVESTIGATION)
INTO U S WEST COMMUNICATIONS,)
INC.'S COMPLIANCE WITH CERTAIN)
WHOLESALE PRICING)
REQUIREMENTS FOR UNBUNDLED)
NETWORK ELEMENTS AND RESALE)
DISCOUNTS)

DOCKET NO. T-00000A-00-0194

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MAY 3 2000

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REBUTTAL TESTIMONY OF
DOUGLAS DENNEY

ON BEHALF OF
AT&T COMMUNICATIONS
OF THE MOUNTAIN STATES, INC.

MAY 1, 2000

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I.	INTRODUCTION	1
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1 **I. INTRODUCTION**

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

3 A. My name is Douglas Denney. I work at 1875 Lawrence Street, Denver, Colorado.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am an economist for AT&T in its Local Services and Access Management
6 Organization.

7 **Q. ARE YOU THE SAME DOUGLAS DENNEY WHO FILED DIRECT**
8 **TESTIMONY IN THIS DOCKET ON APRIL 24, 2000?**

9 A. Yes, I am.

10 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

11 A. The purpose of this testimony is to compare U S WEST's deaveraging proposal to
12 AT&T's proposal and rebut the April 24, 2000 direct testimony of U S WEST's
13 witness, Teresa K. Million filed in this docket.

14 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

15 A. Deaveraged loop rates that are based on costs will help to stimulate competition in
16 the state of Arizona. The appropriate methodology for establishing cost-based
17 rates is to create deaveraged wholesale rate zones that reflect significant cost
18 differences that exist within the state. Only cost-based rates will send the

1 appropriate signals to the market and allow efficient competition to develop
2 within the state.

3 U S WEST deaveraged loop proposal seeks to limit competition in the state by
4 creating rates that are deaveraged as little as possible. U S WEST zones
5 erroneously rely upon U S WEST's current retail rate zone proposal, are not based
6 on costs, and exhibit very little deaveraging.

7 In contrast, AT&T's proposal is based on significant cost differences that exist
8 between different geographic areas within the state. AT&T's proposal will best
9 promote efficient competition in the state of Arizona.

10 **II. DEAVERAGED UNES**

11 **Q. PLEASE SUMMARIZE U S WEST'S PROPOSAL FOR DEAVERAGING**
12 **UNES AND COMPARE IT TO AT&T'S PROPOSAL.**

13 A. U S WEST proposes to deaverage the unbundled loop into "three cost-related"
14 zones. U S WEST zones are based on their current retail rate un-deaveraging
15 proposal and places 95% of the loops into zone one, which results in virtually no
16 deaveraging at all.

¹ Direct Testimony of Teresa K. Million, page 3, line 1.

1 AT&T's proposal deaverages the unbundled loop into five cost based zones. The
2 AT&T proposal calculates cost at the wire center level and then assigns customers
3 to zones by grouping wire centers with similar costs together.

4 The table below, summarizes the results of U S WEST's and AT&T's proposal:

Zone	AT&T Proposal		U S WEST proposal	
	Loop Cost	% of Lines	Loop Cost	% of Lines
1	\$12.75	12.0%	\$20.12	94.7%
2	\$17.05	58.1%	\$40.65	2.0%
3	\$21.98	9.7%	\$63.70	3.3%
4	\$27.40	9.4%		
5	\$53.94	10.8%		
average	\$21.98		\$21.98	

5

6 **Q. WHAT ARE THE PROBLEMS WITH U S WEST'S PROPOSAL?**

- 7 A. There are three major problems with U S WEST's deaveraging proposal.
- 8 1) U S WEST bases its wholesale deaveraging proposal on its current retail
9 deaveraging proposal.
- 10 2) U S WEST's deaveraged zones are not cost based.
- 11 3) U S WEST's proposal results in virtually no deaveraging at all.

12 **Q. WHY IS IT INAPPROPRIATE TO BASE WHOLESALE COSTS ON THE**
13 **RETAIL COST STRUCTURE?**

- 14 A. First, retail rates do not determine wholesale rates. In fact, the opposite
15 relationship exists. Wholesale rates are one factor in influencing retail rates.

1 The purpose of the deaveraging requirement is to facilitate competition by
2 sending the appropriate cost signals to the market place. Thus, the deaveraged
3 loop rate should be based on cost, not on a retail rate structure.

4 U S WEST acknowledges this when they say, "wholesale rates *drives* the
5 deaveraging of retail rates."² Though U S WEST's belief that wholesale and retail
6 rates are "inextricably linked"³ is in error, they are correct in the causal
7 relationship that wholesale rates influence retail rates.

8 The "inextricable link" between retail and wholesale rates is hardly a market
9 reality. Retail rates tend to be driven as much or more by consumer wants, supply
10 and demand, and marketing plans than geographic cost differences. Numerous
11 examples can be seen in every day life. Long distance carriers tend to offer one
12 rate across the country even though costs vary between and within states. Airlines
13 often charge lower prices for a flight from Phoenix to New York than Phoenix to
14 Denver, even though the costs of getting to Denver is undoubtedly cheaper. Fast
15 food restaurants market national pricing of popular food items even though labor
16 and rent vary across geographic territories.

17 Clearly, companies don't plan on losing money, thus their pricing packages tend

² Direct Testimony of Teresa K. Million, page 6, lines 6-7

³ Direct Testimony of Teresa K. Millio, page 6, line 5

1 to recover total costs. The recovery of total costs hardly leads to an “inextricable
2 link” between wholesale and retail rates within distinct geographic areas.

3 Second, as I understand U S WEST’s current retail price deaveraging proposal,
4 U S WEST is seeking to expand the base rate area, in effect, reducing the degree
5 of retail rate deaveraging that currently exists in Arizona. U S WEST’s current
6 retail rate plan is an averaging of the current rate structure, not a deaveraging.
7 Thus, basing a wholesale deaveraging cost proposal on an averaging retail rate
8 proposal is absolutely in conflict with the intent and purpose of the FCC’s rule to
9 deaverage wholesale rates.

10 **Q. WHY DO YOU SAY THAT U S WEST’S WHOLESALE DEAVERAGED**
11 **ZONES ARE NOT COST BASED?**

12 A. U S WEST deaveraging proposal is based upon their current retail deaveraging
13 proposal. Based on the retail proposal, U S WEST calculates costs, using a cost
14 model that is not designed to calculate cost differences within the state, and
15 determines what they call, “cost related” zones. U S WEST calls the zones “cost
16 related” because the cost for each zone is related to their cost model estimate of
17 costs in that zone.

18 U S WEST cost’s are not, however, cost based. Cost-based zones mean that cost
19 is the basis for creating zones. Since the purpose of establishing deaveraged rates
20 is to facilitate competition by setting the prices of UNEs closer to the actual cost,

1 clearly cost should be the basis for establishing zones. U S WEST fails to use
2 cost as a determinant for establishing deaveraged loop prices and thus their
3 deaveraged proposal, though related to cost, is not very cost reflective.

4 The Commission should consider what proposal best relates prices to cost. Any
5 proposal is cost related, as long as a cost model is used to determine zone costs.

6 U S WEST has implied in a variety of proceedings that since all proposals include
7 some degree of averaging of costs all proposals are equal in their cost relatedness.

8 This is not true. Clearly a proposal that uses cost as the basis for establishing
9 zones, such as AT&T's proposal does, is superior to a proposal that ignores costs,
10 such as U S WEST's proposal.

11 **Q. WHY DO YOU SAY THAT U S WEST'S PROPOSAL EXHIBITS**
12 **VIRTUALLY NO DEAVERAGING?**

13 A. U S WEST deaveraging proposal places 95 percent of its Arizona customers in
14 the least-cost zone. This proposal fails to create deaveraged prices for 95 percent
15 of U S WEST customers in the state. Using U S WEST's philosophy, placing one
16 customer in one zone and all other customers in another zone would satisfy the
17 FCC requirement of deaveraging. The purpose of deaveraging is to facilitate
18 competition by sending the appropriate cost signals to the marketplace.
19 Deaveraging methodologies that seek to mask costs do not comply with the spirit
20 of the deaveraging rule.

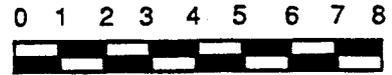
1 Methodologies other than grouping similar cost areas together, as proposed by
2 AT&T, distort UNE prices and diminish the benefits that can be derived from
3 deaveraging.

4 AT&T recommends the use of the deaveraged loop rates and zones identified in
5 Attachment A to Mr. Denney's direct testimony.

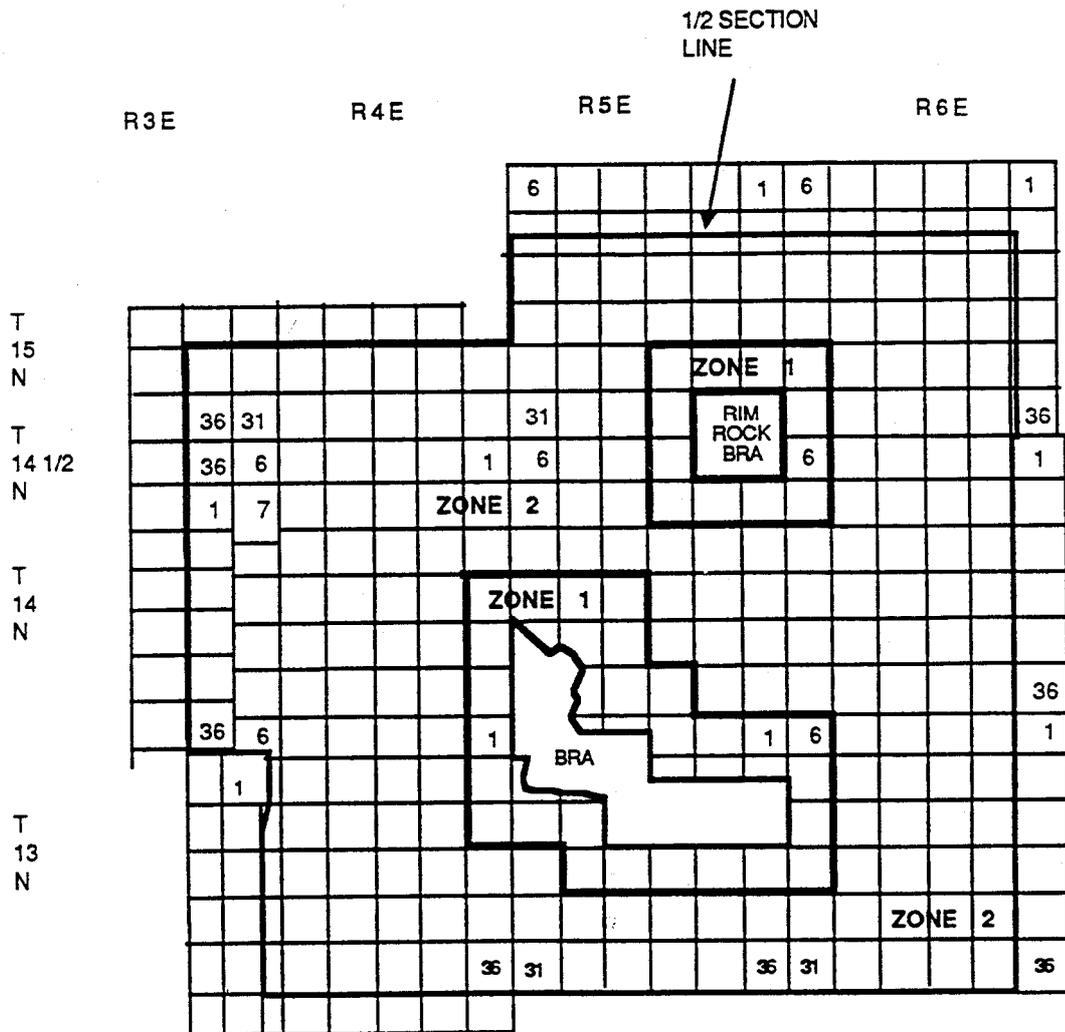
6 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

7 **A. Yes.**

Fourth Revised Sheet
Supersedes Third Revised Sheet



SCALE IN MILES



ISSUED: January 8, 1999

EFFECTIVE:
BY W.G. ALLCOTT, ARIZONA VICE PRESIDENT
3033 NORTH THIRD STREET, PHOENIX ARIZONA

PERMAD-Systems, N.L.

EXHIBIT

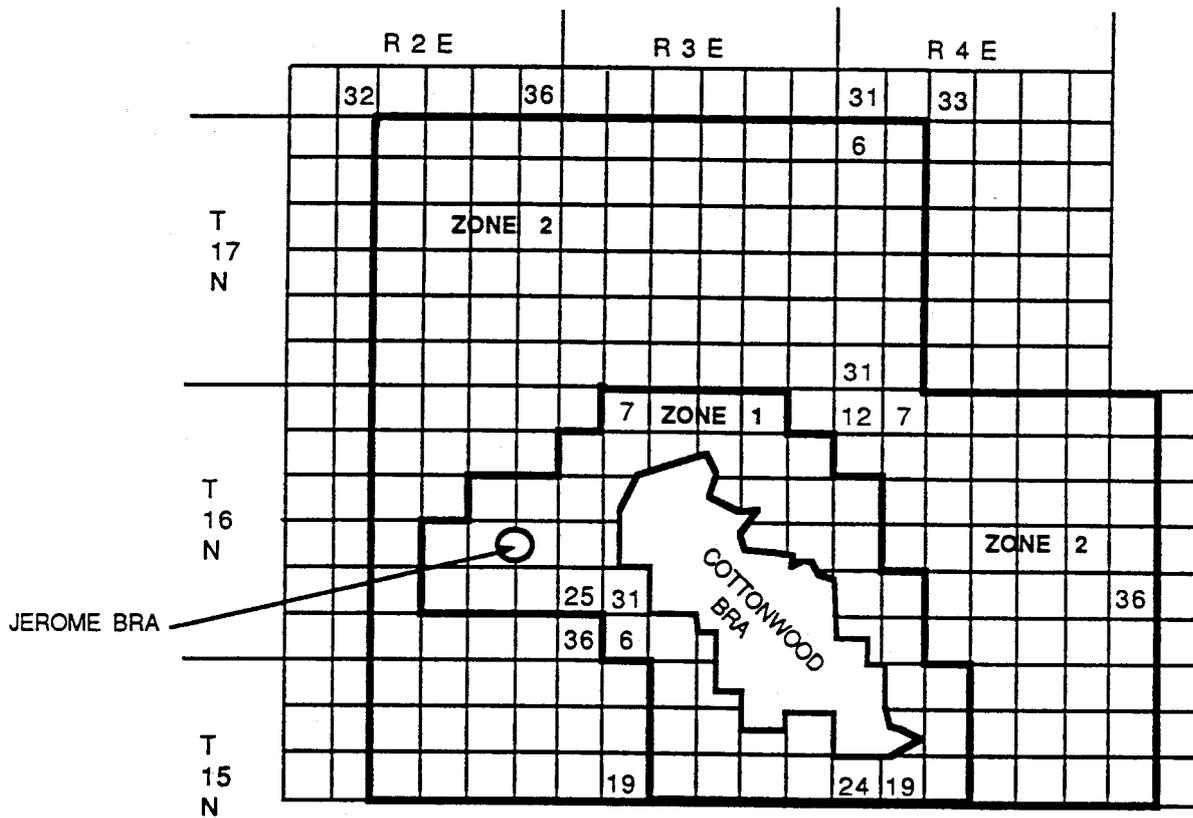
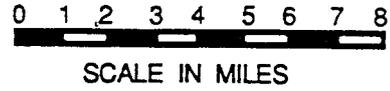
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Admitted

U S WEST COMMUNICATIONS

COTTONWOOD, ARIZONA
EXCHANGE AREA

Seventh Revised Sheet
Supersedes Sixth Revised Sheet



ISSUED: January 8, 1999

EFFECTIVE:
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PERIOD-Bygones, N.J.

EXHIBIT

AT&T-4
Admitted

BEFORE THE
ARIZONA CORPORATION COMMISSION

IN THE MATTER OF INVESTIGATION INTO)
U S WEST COMMUNICATIONS, INC.'S) DOCKET NO. T-00000A-00-0194
COMPLIANCE WITH CERTAIN WHOLESALE)
PRICING REQUIREMENTS FOR UNBUNDLED)
NETWORK ELEMENTS AND RESALE)
DISCOUNTS)

DIRECT TESTIMONY
OF
REX KNOWLES
NEXTLINK ARIZONA, INC.

April 24, 2000



1 **Q. PLEASE STATE YOUR NAME, EMPLOYER, AND BUSINESS ADDRESS.**

2 A. My name is Rex Knowles. I am a Vice President Regulatory for NEXTLINK, 111 East
3 Broadway, Suite 1000, Salt Lake City, Utah 84111.

4

5 **Q. PLEASE IDENTIFY AND DESCRIBE THE PARTY ON WHOSE BEHALF YOU**
6 **ARE TESTIFYING.**

7

8 A. I am testifying on behalf of NEXTLINK Arizona, Inc. ("NEXTLINK"), a competitive
9 local exchange company ("CLEC") that provides facilities-based local and long distance
10 telecommunications services in Arizona in competition with U S WEST
11 Communications, Inc. ("U S WEST").

12

13 **Q. WHAT ARE YOUR RESPONSIBILITIES?**

14

15 A. I am responsible for all regulatory, legislative, municipal, and incumbent local exchange
16 carrier ("ILEC") initiatives on behalf of NEXTLINK and other affiliates in several
17 western states, including Arizona and other states in the U S WEST region.

18

19 **Q. WHAT IS YOUR BUSINESS AND EDUCATION BACKGROUND?**

20

21 A. I graduated from Portland State University in Portland, Oregon, with a degree in Business
22 Administration/Finance Law in 1989. I was employed by United Telephone of the
23 Northwest from 1989 to 1993 as a regulatory staff assistant and product manager
24 responsible for incremental cost studies and creation and implementation of extended
 area service ("EAS") and 911. From 1993 to 1996, I was employed by Central Telephone

1 of Nevada as manager of revenue planning and research and was responsible for
2 supervising cost study preparation and developing and implementing regulatory reform,
3 including opening the local exchange market to competition and alternative forms of
4 regulation for ILECs. I joined the NEXTLINK organization in the Spring of 1996.
5

6 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN OTHER REGULATORY**
7 **PROCEEDINGS?**
8

9 A. Yes, I have provided testimony on costing, pricing, and policy issues in various
10 proceedings before the Utah Public Service Commission and the Washington Utilities
11 and Transportation Commission.
12

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**
14

15 A. The purpose of my testimony is to provide a business perspective on the need for
16 geographic deaveraging. I have reviewed proposals made by U S WEST in other states
17 for the manner in which loop rates should be deaveraged. These proposals do not
18 represent legitimate geographic deaveraging. In contrast, the proposal made by AT&T in
19 testimony submitted by Douglas Denney does meet the requirements of the
20 Telecommunications Act of 1996 ("Act") and also makes sense for Arizona consumers.
21

22 For this reason, NEXTLINK supports AT&T's proposed approach to geographic
23 deaveraging.
24

1 **Q. HOW SHOULD THE COMMISSION EVALUATE THE GEOGRAPHIC**
2 **DEAVERAGING PROPOSALS SUBMITTED IN THIS PROCEEDING?**

3
4 A. The Commission should analyze the proposals using two areas of inquiry. First, the
5 Commission should determine which proposal best reflects geographic cost differences
6 between providing unbundled loops in at least three different areas. The Act requires that
7 unbundled network element prices be based on cost, and FCC Rule 507 further requires
8 that the Commission establish such prices in a minimum of three cost-related zones.
9 Moreover, as provided in paragraph 765 of its *Local Competition Order*, "A state may
10 establish more than three zones where cost differences in geographic regions are such that
11 it finds that additional zones are needed to adequately reflect the costs of interconnection
12 and access to unbundled network elements." NEXTLINK believes that it is appropriate
13 to establish more than three zones in Arizona to reflect more accurately the costs
14 associated with providing unbundled loops across the state. Mr. Denney's testimony
15 proposes five zones. NEXTLINK supports that proposal.

16
17 The other area of inquiry for the Commission is implementation. While compliance with
18 appropriate costing requirements should be the primary focus of the Commission's
19 inquiry, the cost of implementing deaveraging proposals is also important. In other
20 words, the benefits of the geographically deaveraged pricing should outweigh the cost to
21 implement it. For example, an unnecessarily complex deaveraging proposal could force
22 both U S WEST and competitors to incur significant time and expense in determining the
23 appropriate price of a particular loop. The proposal made by Mr. Denney in his

1 testimony is simple and relatively easy to administer. NEXTLINK supports that proposal
2 for this reason as well.

3
4 **Q. SHOULDN'T POLICY CONCERNS ALSO PLAY A ROLE IN ADOPTING A**
5 **PROPOSAL FOR GEOGRAPHIC DEAVERAGING?**

6
7 A. Yes, but only a supporting role. The Commission's primary policy concern should be
8 whether the geographic deaveraged loop rates it establishes will foster or inhibit the
9 development of effective local exchange competition in Arizona. The availability of
10 unbundled loops at appropriate geographically deaveraged cost-based rates is critical to
11 that policy objective. Congress, the FCC, and this Commission have all recognized that
12 broad-based alternatives to the local service provided by U S WEST will not develop
13 unless competitors can use portions of U S WEST's network on the same terms and
14 conditions that U S WEST makes use of its network.

15
16 NEXTLINK, for example, is a facilities-based company that has deployed its own switch
17 and network facilities. NEXTLINK, however, has not duplicated the size and scope of
18 U S WEST's network in Arizona, and could not hope to do so in the foreseeable future.
19 Thus, while NEXTLINK serves some customers using only its own network facilities,
20 NEXTLINK cannot offer service to customers throughout a particular service territory
21 without access to unbundled loops that can be combined with its own facilities.
22 NEXTLINK obtains such access through collocating the necessary equipment in U S
23 WEST's central offices and connecting that equipment with the rest of NEXTLINK's

1 network. NEXTLINK thus can potentially offer service to all customers served out of a
2 central office in which NEXTLINK has collocated by using unbundled loops, rather than
3 being limited to serving only those customers located on, or in close proximity to,
4 NEXTLINK's own facilities.

5
6 NEXTLINK or any other CLEC, however, cannot use U S WEST unbundled loops if the
7 rates U S WEST charges approach or exceed the retail rates of the service the loop is used
8 to provide. CLECs incur not only the cost of the loop itself, but costs for collocation and
9 the equipment to be collocated, as well as other network, administrative, and retailing
10 costs. CLECs cannot economically use unbundled loops if CLECs cannot recover the
11 costs to provide service using that loop through the CLEC's retail rates, which generally
12 can be no higher than U S WEST's retail rates. Similarly, U S WEST increases its
13 already daunting competitive advantage as the incumbent monopoly provider if it can
14 charge more to a CLEC to use an unbundled loop than it "charges" itself.

15
16
17 **Q. HOW DOES GEOGRAPHIC DEAVERAGING OF UNBUNDLED LOOP RATES**
18 **ADDRESS THESE CONCERNS?**

19
20 A. The statewide averaged loop rate the Commission previously established approaches or
21 exceeds the retail rates for basic local exchange service, as well as the costs U S WEST
22 incurs to provide loops in most of its Arizona exchanges. A CLEC cannot recover the
23 \$21.98 loop price along with its other costs when the retail rate for local residential

1 service is \$13.18 (even with the addition of the \$3.50 Subscriber Line Charge (“SLC”)).
2 The statewide averaged loop rate also exceeds the basic business rate of \$17.43 (\$20.93,
3 including the SLC), without any consideration of CLECs’ need to recover their other
4 costs, which quickly approach or exceed the revenues the CLEC can expect to generate
5 by matching U S WEST’s existing rates from most small and mid-sized business
6 customers. As Mr. Denney’s calculations demonstrate, moreover, U S WEST currently
7 charges CLECs far more for the use of a loop in urban and suburban areas than the costs
8 U S WEST incurs to provide that loop. Appropriate geographic deaveraging of
9 unbundled loop rates, therefore, would more accurately reflect the costs of providing
10 unbundled loops and would enable CLECs economically to use unbundled loops in at
11 least a portion of the state.

12
13 U S WEST’s own figures demonstrate the need for loop rates that more accurately reflect
14 the underlying costs. According to testimony U S WEST filed in connection with the
15 proposed merger between its parent company and Qwest Communications, U S WEST
16 currently provides 8,265 unbundled loops in Arizona, which represents less than 0.3% of
17 the nearly 3 million access lines U S WEST serves in this state. Other factors, such as
18 service quality and availability, likely contribute to the exceedingly low number of
19 unbundled loops CLECs obtain from U S WEST, but the current statewide averaged price
20 is undeniably a major reason that CLECs generally are not using unbundled loops to
21 provide local service in Arizona.

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Q. SHOULD THE COMMISSION BE CONCERNED THAT WHOLESALE GEOGRAPHIC DEEVERAGING WILL IMPERIL UNIVERSAL SERVICE OR NECESSITATE PARALLEL RETAIL RATE DEEVERAGING?

A. No. U S WEST's primary policy argument in opposition to legitimate geographic deeveraging in other states has been that deeveraging unbundled loop rates allegedly will have a negative impact on universal service and will require that U S WEST's retail rates be geographically deeveraged to mirror the wholesale deeveraging. U S WEST has yet to produce any evidence that wholesale geographic deeveraging will have any such effect. In Utah, for example, the Commission deeveraged unbundled loops almost one year ago, but U S WEST never sought to deeverage retail rates when it had the opportunity to do so or to allege, much less prove, any shortfall in revenues used to provide universal service. To the contrary, U S WEST is exceeding anticipated revenues under its current price cap regulation in Utah and is seeking pricing flexibility, which would enable U S WEST selectively to *lower* its retail rates in response to competition, without the ability to raise retail rates in other areas where customers lack choice.

In Arizona, U S WEST's recent retail rate proposals do not contemplate geographic deeveraging, even though U S WEST has long been on notice of the need to deeverage wholesale rates. The Commission should not be concerned about universal service shortfalls or retail rate deeveraging when U S WEST's past actions demonstrate that wholesale rate deeveraging simply does not raise these issues.

1
2 The only legitimate policy issue presented by geographic deaveraging in this proceeding
3 is whether the Commission wants to foster the development of local exchange
4 competition – other than wholly facilities-based competition – *anywhere* in Arizona.
5 Unless the Commission adopts cost-based geographically deaveraged loop prices, at least
6 some of which are significantly less than the statewide averaged recurring price, CLECs
7 will simply have no economic incentive or ability to use U S WEST unbundled loops to
8 serve the vast majority of Arizona consumers, and there will be no effective competition
9 beyond the reach of CLECs' own networks.

10
11 **Q. WHY DOES NEXTLINK SUPPORT ADOPTION OF FIVE GEOGRAPHIC**
12 **ZONES GROUPED BY WIRE CENTER COSTS?**

13
14 A. The five zone proposal in Mr. Denney's testimony represents a good compromise
15 between cost-based rates and ease of implementation. The wire center costs contained in
16 the exhibit to Mr. Denney's testimony demonstrate that costs vary significantly between
17 wire centers. Accordingly, the more zones created using these wire center costs, the more
18 accurately the resulting rates will reflect the underlying costs. It is my understanding
19 based on testimony U S WEST presented in Washington state that U S WEST's
20 operations support systems currently account for unbundled loops on a wire center basis.
21 Establishing five zones based on wire center groupings, therefore, should minimize any
22 implementation concerns while bringing prices closer to cost in two more zones than the
23 minimum number the FCC has required. Given that U S WEST maintains well over 100

1 wire centers in Arizona ranging in per loop cost from \$11.46 to \$336.34, grouping those
2 wire centers by loop cost into five zones is the least the Commission should consider
3 doing to fulfill the FCC's mandate.

4
5 Taking the principle of deaveraging even farther, NEXTLINK and other CLECs
6 sponsored testimony in Washington that proposed geographic deaveraging based on loop
7 length from the central office within defined zones. I explained in those proceedings that
8 distance-sensitive pricing not only more accurately reflects underlying cost, but it
9 encourages CLECs to collocate in more central offices, because loops closest to the
10 central office are affordable in most central offices. As CLECs are able to recover their
11 investment using the shorter and least expensive loops, the CLEC could afford to serve
12 customers located farther away from the central office, maximizing the use of collocated
13 equipment and CLEC network facilities while offering service alternatives to a greater
14 number of potential customers. The result is a broader customer choice and the attendant
15 consumer benefits that the Commission has sought to encourage.

16
17 NEXTLINK continues to believe that distance sensitive pricing should be explored, but
18 as was the case in Washington, insufficient time is available in this phase of the
19 proceeding to develop a record sufficient to address cost, implementation, and other
20 issues. NEXTLINK, therefore, supports the use of five zones based on wire center
21 groupings by cost as described in Mr. Denney's testimony to develop interim deaveraged

1 rates, just as all participating CLECs in Washington ultimately agreed to support a similar
2 proposal. If the Commission decides to develop prices for only the FCC-minimum of
3 three zones, NEXTLINK also supports the alternative three-zone proposal AT&T is
4 sponsoring. NEXTLINK further recommends that the Commission consider distance
5 sensitive pricing as part of the second phase of this proceeding.

6

7 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

8 **A.** Yes, it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK
Chairman
JAMES M. IRVIN
Commissioner
WILLIAM A. MUNDELL
Commissioner

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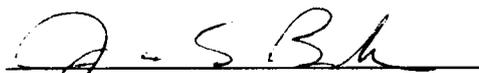
ARIZONA CORPORATION COMMISSION
CORPORATE CONTROL

IN THE MATTER OF INVESTIGATION)	DOCKET NO. T-00000A-00-0194
INTO U S WEST COMMUNICATIONS,)	
INC.'S COMPLIANCE WITH CERTAIN)	NEXTLINK ARIZONA, INC.'S
WHOLESALE PRICING REQUIREMENTS)	NOTICE OF FILING ERRATA
FOR UNBUNDLED NETWORK)	
ELEMENTS AND RESALE DISCOUNTS)	

NEXTLINK Arizona, Inc. herein files a replacement page 6 to the Direct Testimony of Rex Knowles in the above-referenced matter. This replacement page changes the sentence beginning at line 2 of Page 6 to reflect the correct basic business rate in Arizona.

Respectfully submitted this 1st day of May, 2000.

NEXTLINK ARIZONA, INC.



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1 service is \$13.18 (even with the addition of the \$3.50 Subscriber Line Charge ("SLC")).
2 The statewide averaged loop rate is also not far below the basic business rate of \$32.78,
3 particularly taking into account the CLECs' need to recover other costs associated with
4 providing service. Moreover, As Mr. Denney's calculations demonstrate, U S WEST
5 currently charges CLECs far more for the use of a loop in urban and suburban areas than
6 the costs U S WEST incurs to provide that loop. Appropriate geographic deaveraging of
7 unbundled loop rates, therefore, would more accurately reflect the costs of providing
8 unbundled loops and would enable CLECs economically to use unbundled loops in at
9 least a portion of the state.

10
11 U S WEST's own figures demonstrate the need for loop rates that more accurately reflect
12 the underlying costs. According to testimony U S WEST filed in connection with the
13 proposed merger between its parent company and Qwest Communications, U S WEST
14 currently provides 8,265 unbundled loops in Arizona, which represents less than 0.3% of
15 the nearly 3 million access lines U S WEST serves in this state. Other factors, such as
16 service quality and availability, likely contribute to the exceedingly low number of
17 unbundled loops CLECs obtain from U S WEST, but the current statewide averaged price
18 is undeniably a major reason that CLECs generally are not using unbundled loops to
19 provide local service in Arizona.

20
21

CERTIFICATE OF SERVICE

I hereby certify that the original and 10 copies of the Notice of Filing Direct Testimony of Rex Knowles, Docket No. T-00000A-00-0194, were hand-delivered on this 1st day of May, 2000, to:

Arizona Corporation Commission
Docket Control - Utilities Division
1200 West Washington Street
Phoenix, AZ 85007

and a true and correct copy was sent via United States Mail, postage prepaid on this 1st day of May, 2000, to:

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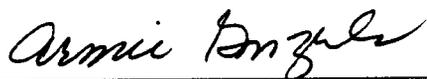
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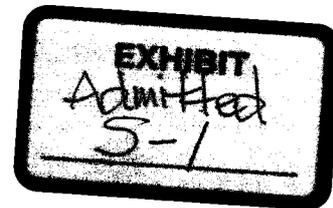
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339644



BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK

Chairman

JIM IRVIN

Commissioner

WILLIAM A. MUNDELL

Commissioner

IN THE MATTER OF THE INVESTIGATION)
INTO U S WEST COMMUNICATIONS, INC.'S)
COMPLIANCE WITH CERTAIN WHOLESAL)
PRICING REQUIREMENTS FOR UNBUNDLED)
NETWORK ELEMENTS AND RETAIL)
DISCOUNTS)

DOCKET NO. T-00000A-00-0194

REBUTTAL
TESTIMONY
OF
MATTHEW ROWELL
SENIOR RATE ANALYST
UTILITIES DIVISION

May 1, 2000

Table of Contents

I. INTRODUCTION	1
II. Discussion of Deaveraging Methodology	2
III. Retail Rates	6
IV. Conclusion	6

Attachments

Schedule 1

1 I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

3 A. My name is Matthew Rowell. My business address is: Arizona Corporation Commission.
4 1200 W. Washington. Phoenix. AZ 85007.

5 Q. WHAT IS YOUR POSITION AT THE COMMISSION?

6 A. I am a Senior Rate Analyst in the Utilities Division at the Commission.

7 Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL BACKGROUND.

8 A. I received a B.S. degree in economics from Florida State University in 1992. I spent the
9 following four years doing graduate work at Arizona State University where I received a M.S. degree
10 and successfully completed all course work and exams necessary for a Ph.D. My specialized fields
11 of study were Industrial Organization and Statistics. I was hired by the Commission in October of
12 1996 as an Economist II. Prior to my Commission employment I was employed as a lecturer in
13 economics at Arizona State University, as a statistical analyst for Hughes Technical Services, and
14 as a research analyst at the Arizona Department of Transportation.

15 Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

16 A. The purpose of this testimony is to address the testimonies filed in Phase I of the arbitration.
17 Phase I regards the interim geographic deaveraging of wholesale rates in response to the FCC's
18 requirements that Unbundled Network Element (UNE) rates be geographically deaveraged into at
19 least three areas by May 1, 2000.

20 Q. WHAT UNBUNDLED RATE ELEMENTS WILL YOU ADDRESS DURING THE
21 INTERIM PHASE OF THIS PROCEEDING?

22 A. Both the U S WEST (USW) and the AT&T witnesses recommended that the loop be the only
23 UNE that should be unbundled. Both witnesses provided support for that recommendation. At least
24 for purposes of the interim geographic deaveraging, the Staff recommends that the loop element be
25 the only element that is geographically deaveraged. Whether other elements should also be
26 deaveraged can be further addressed when the permanent rates are addressed.

27 All other recommendations for this interim phase are subject to review and Staff reserves the
28 right to take a different position for the permanent rates. By their nature, interim rates are designed

1 using a more abbreviated analysis and review than is used for the permanent rates.

2 **II. Discussion of Deaveraging Methodology**

3 **Q. WHAT BASIS FOR GEOGRAPHIC DEAVERAGING DO YOU RECOMMEND?**

4 **A.** AT&T recommends deaveraging on a wire center basis, grouping the wire centers with
5 similar costs. USW recommends establishing one rate that applies inside the base rate area, a second
6 rate that applies outside of the base rate area in Zone 1, and a third higher rate that would apply
7 outside the base rate area in Zone 2.

8 USW indicates that approximately 95% of the lines would be inside the base rate area, with
9 the remaining 5% of the lines in Zones 1 and 2. (Page 16, Milton Direct)

10 Staff does not recommend USW's proposed areas. First of all, the USW structure appears to be a
11 token deaveraging - 95% of all lines would have the same rate. Only 5% of lines would have a
12 different rate. The vast majority of the customers would not be deaveraged, but would still be
13 grouped together in one averaged group. Also, there is no cost standard that is used to determine base
14 rate area boundaries. Thus, the use of the inside/outside distinction is meaningless from a cost
15 justification perspective.

16 In addition, AT&T points out that it would be difficult for a CLEC to know what UNE rate
17 would apply to any given customer. The CLEC can easily determine what wire center a customer
18 is in based upon that customer's telephone number. The first three digits of a seven digit phone
19 number are generally (but not always) unique to a given wire center. Therefore, if UNE pricing is
20 based upon wire centers, in most cases the CLEC would easily be able to determine, using publicly
21 available information, what UNE rate would apply to that customer.

22 However, if the "inside v. outside the base rate area" demarcation is used, then there would be no
23 simple and publicly available information that a CLEC could use to determine what UNE rate would
24 apply to that customer. There is nothing in the customer's telephone number that identifies whether
25 a specific telephone number is inside or outside the base rate area. Staff recommends that for
26 purposes of setting interim rates, that the rates be geographically deaveraged on a wire center basis,
27 as recommended by AT&T.

28

1 Q. WHAT COST MODEL DO YOU RECOMMEND BE USED FOR INTERIM
2 PURPOSES?

3 A. AT&T used the HAI Model, version 5.0a. USW's testimony does not provide the name of
4 the model it used. Staff is aware that there are many different cost models, and that criticisms exist
5 of each. Examining the various models in detail is beyond the scope of what can be accomplished
6 in setting the interim rates. Therefore for interim purposes, Staff looked for the most "neutral" and
7 pre-examined model that is available. This is the FCC's Hybrid Cost Proxy Model, Version 2.6 —
8 October 25, 1999 (the FCC Model), which is utilized by the FCC in establishing costs for purposes
9 of determining universal service funding.¹ That model was developed over a several year process
10 that involved inputs and repeated evaluations from numerous parties.

11 Staff recognizes that the issue of what model should be utilized and what adjustments to the model
12 are appropriate are valid issues in establishing permanent geographic deaveraged UNE rates, but the
13 schedule does not allow such detailed analysis for interim purposes. The FCC model is a good
14 neutral source, and the results are from an elaborate evaluation by another telephone regulatory
15 agency. The loop costs of each wirecenter in Arizona, as calculated by that FCC model, are publicly
16 available at: <http://www.fcc.gov/ccb/and.hcqm/>.

17 Q. WHAT NUMBER OF GEOGRAPHIC GROUPS DOES STAFF RECOMMEND?

18 A. AT&T recommends five zones, but also provides calculations based upon three zones.
19 (Pages 12 and 13, Denny Direct) USW recommends three zones. The FCC requires a minimum of
20 three zones be established. Since the purpose of establishing the interim rates is to meet the FCC
21 requirements, the Staff recommends three zones for interim purposes. The issue of establishing a
22 number of zones which exceeds the FCC requirement can be addressed in setting the permanent
23 rates. Using more than three zones may be appropriate because of the wide variability in costs in
24 Staff's Zone 3.² However, this issue could be better addressed when permanent rates are established.

25 Q. HOW DO YOU RECOMMEND THE WIRE CENTERS BE GROUPED AMONG
26 THESE THREE GROUPS?

27
28 ¹FCC Order 99-304 released November 2, 1999, Paragraph 8.

² Staff calculated the standard deviations of the loop rates in each of the three zones. They are, for Zone 1: 0.99, for Zone 2: 1.1, and for Zone 3: 51.5.

1 A. At least for interim purposes. Staff recommends grouping the wire centers by cost. The FCC
2 requirement is to have different UNE prices that reflected the differences in costs. Conceptually, the
3 purpose of deaveraging is to allow UNE rates to more accurately reflect their underlying costs.
4 Therefore, cost should be the primary driver for the difference in rates.

5 Staff proposes that Zone 1 contain all of the wirecenters with loop costs of \$14.99 or less.
6 as calculated by the FCC's model. Zone 2 should contain all of the wirecenters with loop costs from
7 \$15.00 to \$18.99. Zone 3 should contain all of the wirecenters with loop costs of \$19.00 and higher.

8 Q. WHAT PORTION OF THE CUSTOMERS DOES STAFF RECOMMEND BE
9 PLACED IN EACH OF THE THREE RATE GROUPS, FOR INTERIM RATE PURPOSES?

10 A. USW proposes placing 95% of the lines in one of the geographic groups, with the other 5%
11 of the lines being spread among the two remaining groups.

12 AT&T, for its five zone proposal, has as little as 9.4% of the lines in one zone, and a
13 maximum of 58% of the lines in the largest zone. In AT&T's three zone proposal, one zone contains
14 12% of the lines, another zone contains 58% of the lines, and the third zone contains 30% of the
15 lines. (Page 13, Denny Direct) It is obvious that deciding how many lines go in each group is a
16 matter of judgement. It is also apparent that the rate for each of the zones would depend upon what
17 portions of the customers were placed in those zones.

18 For interim purposes, Staff recommends that costs be the determining factor in determining rate
19 zones. Under Staff's proposal 20% of the lines are included in Zone 1, 59% are included in Zone 2,
20 and 21% are included in Zone 3.

21 Q. WHAT IS SCHEDULE 1?

22 A. Schedule 1 summarizes Staff's calculations and results.

23 Q. WHAT ARE THE GEOGRAPHICALLY DEAVERAGED LOOP RATES
24 DEVELOPED FROM THE ABOVE ANALYSIS?

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1 A. The geographically deaveraged loop rates are shown below:

2 Arizona-All USW Exchanges

3

4 ZONE	LOOP RATE	% OF LOOPS IN EACH ZONE
5 1	\$16.95	20%
6 2	\$19.97	59%
7 3	\$32.41	21%
8 Average	\$21.98	100%

9 The wire centers that are included in each of these Zones are shown on Schedule 1 attached hereto.

10 Q. IN THE ABOVE ANALYSIS HOW DID YOU TREAT THE EXCHANGES THAT
11 USW IS PROPOSING TO SELL?

12 A. They were included in the above analysis. However, it appears likely that these exchanges
13 will no longer be USW exchanges in the future. Therefore, I have performed a second calculation
14 which excludes the exchanges that are subject to sale. The results are shown below:

15 Arizona- USW Exchanges Excluding exchanges for sale

16

17 ZONE	LOOP RATE	% OF LOOPS IN EACH ZONE
18 1	\$16.95	21%
19 2	\$19.97	61%
20 3	\$30.18	18%
21 Average	\$21.98	100%

22 Q. COULD YOU PLEASE EXPLAIN THE ANALYSIS ON SCHEDULE 1?

23 A. Yes. As a starting point for the analysis, Staff obtained the calculated per-line loop costs and
24 the access line quantities for each of USW's wire centers in Arizona from the FCC's model results.

25 Staff then sorted each of these USW wire centers from lowest loop cost to highest loop cost. Next,
26 the sorted wire centers were broken into three groups, or "zones", based on the break points
27 mentioned above: Zone 1 contains all of the wirecenters with loop costs of \$14.99 or less. Zone 2
28

1 contains all of the wirecenters with loop costs from \$15.00 to \$18.99, and Zone 3 contains all of the
2 wirecenters with loop costs of \$19.00 and higher.

3 Next, Staff calculated a scaling factor of 1.21 to true-up the difference between the weighted
4 statewide average loop cost from the FCC's high cost fund model for USW in Arizona (\$18.17) and
5 the Commission's approved UNE loop rate of \$21.98 ($\$21.98 \div \$18.17 = 1.21$). A weighted
6 average interim UNE loop rate was developed for each of the three zones and the scaling factor was
7 applied to them. As shown on Schedule I, Zone 1 has a rate of \$16.95, Zone 2 has a rate of \$19.97
8 and Zone 3 has a rate of \$32.41. The statewide average scaled up UNE loop rate across the three
9 zones is \$21.98.

10 In addition, and in recognition of the fact that USW has proposed to sell a number of
11 exchanges, Staff has determined what the calculated interim UNE loop rates would be using this
12 same analysis.

13 except excluding the "for sale" exchanges. As shown on Schedule I, the interim UNE loop rates for
14 Zones 1 and 2 would remain the same if these exchanges are sold, however the UNE loop rate for
15 Zone 3 would decrease by approximately \$2.23, to \$30.18.

16 III. Retail Rates

17 Q. ON PAGE 7 OF HER DIRECT TESTIMONY, MS. MILLION DISCUSSES THE
18 ISSUE OF DE-AVERAGING RETAIL RATES. IS THE ISSUE OF DE-AVERAGING
19 RETAIL RATES RELEVANT TO THIS PROCEEDING?

20 A. No. The purpose of this proceeding is to address the FCC's requirement to de-average
21 wholesale UNE rates. The FCC has not ordered de-averaging of any retail rates. To the extent that
22 any parties wish to address issues relating to USW's retail rates, they should properly be addressed
23 in the general rate case of USW in Arizona (Docket No. T-1051B-99-105).

24 Q. WOULD DE-AVERAGING UNE RATES WHILE NOT DE-AVERAGING RETAIL
25 RATES RESULT IN ANTI-COMPETITIVE EFFECTS DUE TO THE DISCREPANCY
26 BETWEEN RETAIL AND UNE RATES?

27 A. No. Rates for UNE loops are designed to recover the *entire* cost of the loop to the ILEC. On
28 the retail side the ILEC receives revenues not only from the rate for basic retail service but also from

1 access revenues and vertical features. With the possible exception of some vertical features, this is
2 also true of resold service. Thus, the UNE loop rate and the basic retail rates are not analogous.

3 **IV. Conclusion**

4 **Q. WHAT DO YOU RECOMMEND?**

5 **A.** I recommend that the geographically deaveraged UNE loop rates which include the
6 exchanges subject to sale, be in effect until that sale is effective. The Order in this case should state
7 that if the interim rates are still in effect when the sale becomes effective, then the interim rates
8 automatically change to those that exclude the sold exchanges. Both sets of rates are shown on
9 Schedule I.

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

11 **A.** Yes.

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Schedule 1

Arizona Summary

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	CURRENT RATE	SCALING FACTOR (=\$21.98/\$18.17)
138 (38 for sale)	2,719,294	\$ 18.17	\$21.98	\$1.21

Zone 1 Summary

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	AVERAGE COST PER LINE SCALED UP
10 (0 for sale)	542,755	\$14.01	\$ 16.95

Zone 1 Details

FOR SALE?	WIRE CENTER	CLLI	LOOP COST	SWITCHED LINES	TOTAL COST
NO	PHOENIX MAIN	PHNXAZMA	\$12.67	71,128	\$ 901,192
		PHNXAZ93	\$13.03	1,785	\$ 23,259
NO	PHOENIX SOUTHEAST	PHNXAZSE	\$13.05	25,387	\$ 331,300
NO	PHOENIX EAST	PHNXAZEA	\$13.38	43,118	\$ 576,919
NO	CHANDLER WEST	CHNDZWE	\$13.67	54,403	\$ 743,689
NO	PHOENIX NORTH	PHNXAZNO	\$13.88	84,776	\$1,176,691
NO	TEMPE	TEMPAZMA	\$14.04	64,841	\$ 910,368
NO	PHOENIX WEST	PHNXAZWE	\$14.80	50,874	\$ 752,935
NO	SCOTTSDALE MAIN	SCDLAZMA	\$14.90	80,700	\$1,202,430
NO	PHOENIX NORTHEAST	PHNXAZNE	\$14.98	65,743	\$ 984,830

Zone 2 Summary

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	AVERAGE COST PER LINE SCALED UP
32 (1 for sale)	1,603,382	\$ 16.50	\$ 19.97

Zone 2 Summary after proposed sale of wirecenters

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	AVERAGE COST PER LINE SCALED UP
31	1,569,386	\$ 16.50	\$ 19.97

Zone 2 Details

FOR SALE?	WIRE CENTER	CLLI	LOOP COST	SWITCHED LINES	TOTAL COST
NO	FLOWING WELLS	TCSNAZFW	\$15.05	41,216	\$ 620,301
NO	TUCSON MAIN	TCSNAZMA	\$15.10	73,262	\$1,106,256
NO	CRAYCROFT	TCSNAZCR	\$15.33	47,098	\$ 722,012
NO	SUNNYSLOPE	PHNXAZSY	\$15.35	56,762	\$ 871,297
NO	TUCSON EAST	TCSNAZEA	\$15.49	77,853	\$1,205,943
NO	PHOENIX NORTHWEST	PHNXAZNW	\$15.53	63,120	\$ 980,254
NO	MESA	MESAAZMA	\$15.67	112,186	\$1,757,955
NO	GLENDALE	GLDLAZMA	\$15.79	64,821	\$1,023,524
NO	MCCLINTOCK	TEMPAZMC	\$16.07	78,631	\$1,263,600
NO	THUNDERBIRD	SCDLAZTH	\$16.15	58,985	\$ 952,608
NO	TUCSON SOUTH	TCSNAZSO	\$16.39	44,979	\$ 737,206
NO	GILBERT	MESAAZGI	\$16.40	51,769	\$ 849,012
YES	YUMA MAIN	YUMAAZMA	\$16.44	33,996	\$ 558,894
NO	MARYVALE	PHNXAZMY	\$16.53	44,948	\$ 742,990
NO	CACTUS	PHNXAZCA	\$16.66	95,145	\$1,585,116
NO	GREENWAY	PHNXAZGR	\$16.66	101,633	\$1,693,206
NO	PEORIA	PHNXAZPR	\$16.69	44,182	\$ 737,398
NO	SUPER WEST	SPRSAZWE	\$17.16	79,155	\$1,358,300
NO	TOLLESON	TLSNAZMA	\$17.17	10,438	\$ 179,220
NO	DEER VALLEY NORTH	DRVYAZNO	\$17.22	39,016	\$ 671,856
NO	SHEA	SCDLAZSH	\$17.33	34,905	\$ 604,904

NO	CHANDLER MAIN	CHNDAZMA	\$17.36	66,294	\$1,150,864
NO	MID RIVERS	PHNXAZMR	\$17.54	55,332	\$ 970,523
NO	PHOENIX SOUTH	PHNXAZSO	\$17.62	31,651	\$ 557,691
NO	PECOS	PHNXAZPP	\$17.80	16,542	\$ 294,448
NO	RINCON	TCSNAZRN	\$17.99	84,167	\$1,514,164
NO	FLAGSTAFF MAIN	FLGSAZMA	\$18.02	27,086	\$ 488,090
NO	SIERRA VISTA MAIN	SRVSAZMA	\$18.07	24,553	\$ 443,673
NO	COLDWATER	GDYRAZCW	\$18.13	9,359	\$ 169,679
NO	NOGALES MAIN	NGLSAZ03	\$18.76	399	\$ 7,485
NO	BETHANY WEST	PHNXAZBW	\$18.81	15,463	\$ 290,859
NO	CATALINA	TCSNAZCA	\$18.93	18,436	\$ 348,993

Zone 3 Summary

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	AVERAGE COST PER LINE SCALED UP
96 (37 for sale)	573,157	\$ 26.78	\$ 32.41

Zone 3 Summary after proposed sale of wirecenters

TOTAL WIRE CENTERS	TOTAL SWITCHED LINES	AVERAGE COST PER LINE	AVERAGE COST PER LINE SCALED UP
59	457,803	\$24.94	\$30.18

Zone 3 Details

FOR SALE?	WIRE CENTER	CLLI	LOOP COST	SWITCHED LINES	TOTAL COST
NO	BEARDSLEY	BRDSAZMA	\$19.00	26,609	\$ 505,571
NO	CORTARO	TCSNAZCO	\$19.04	14,166	\$ 269,721
NO	CASA GRANDE	CSGRAZMA	\$19.31	17,550	\$ 338,891
NO	SUPER MAIN	SPRSAZMA	\$19.31	25,800	\$ 498,198
NO	PRESCOTT EAST	PRSCAZEA	\$19.33	13,122	\$ 253,648
NO	PRESCOTT MAIN	PRSCAZMA	\$19.52	35,617	\$ 695,244
NO	TUCSON NORTH	TCSNAZNO	\$19.52	40,146	\$ 783,650
NO	SUNRISE	AGFIAZSR	\$19.88	16,258	\$ 323,209
YES	YUMA SOUTHEAST	YUMAAZSE	\$19.89	21,751	\$ 432,627
NO	PAYSON	PYSNAZMA	\$19.99	10,151	\$ 202,918
NO	NOGALES MIDWAY	NGLSAZMA	\$20.22	7,190	\$ 145,382
NO	SAN MANUEL	SNMNAZMA	\$20.24	2,550	\$ 51,612
YES	FORTUNA	YUMAAZFT	\$20.37	10,735	\$ 218,672
NO	FOOTHILLS	PHNXAZ81	\$20.40	6,773	\$ 138,169
NO	CHANDLER SOUTH	CHNDAZSO	\$20.52	6,044	\$ 124,023
NO	LITCHFIELD PARK	LTPKAZMA	\$21.26	6,657	\$ 141,528
NO	FLAGSTAFF EAST	FLGSAZEA	\$21.43	16,441	\$ 352,331
NO	TUCSON SOUTHEAST	TCSNAZSE	\$21.64	6,770	\$ 146,503
NO	SUPER EAST	SPRSAZEA	\$21.76	18,186	\$ 395,727
NO	SEDONA MAIN	SEDNAZMA	\$22.06	10,348	\$ 228,277
YES	DOUGLAS	DGLSAZMA	\$22.28	8,110	\$ 180,691
NO	FT MCDOWELL	FTMDAZMA	\$22.33	10,632	\$ 237,413

NO	FLAGSTAFF SOUTH	FLGSAZSO	\$22.56	2,295	\$ 51,775
NO	TANQUE VERDE	TCSNAZTV	\$22.94	9,114	\$ 209,075
NO	SEDONA SOUTH	SEDNAZSO	\$23.02	3,526	\$ 81,169
YES	SUPERIOR	SPRRAZMA	\$23.62	1,614	\$ 38,123
YES	GLOBE	GLOBAZMA	\$23.98	9,080	\$ 217,738
YES	WINSLOW	WNSLAZMA	\$23.99	5,571	\$ 133,648
NO	PINNACLE PEAK	PRVYAZPP	\$24.04	12,396	\$ 298,000
YES	SAFFORD	SFFRAZMA	\$24.13	10,058	\$ 242,700
NO	COTTONWOOD SOUTH	CTWDAZSO	\$24.85	1,915	\$ 47,588
YES	SOMERTON	SMTNAZMA	\$25.48	6,567	\$ 167,327
NO	COOLIDGE	CLDGAZMA	\$25.74	5,248	\$ 135,084
NO	TUCSON WEST	TCSNAZWE	\$25.77	5,926	\$ 152,713
NO	GREEN VALLEY	GNVYAZMA	\$26.25	17,725	\$ 465,281
		NGLSAZMW	\$26.85	4,481	\$ 120,315
NO	LAVEEN	PHNXAZLV	\$26.93	2,904	\$ 78,205
NO	COTTONWOOD MAIN	CTWDAZMA	\$26.97	11,497	\$ 310,074
NO	CORONADO	CRNDAZMA	\$27.26	6,095	\$ 166,150
YES	PAGE	PAGEAZMA	\$27.90	3,048	\$ 85,039
YES	BISBEE	BISBAZMA	\$27.92	5,168	\$ 144,291
NO	TUCSON SOUTHWEST	TCSNAZSW	\$28.33	17,402	\$ 492,999
NO	ELOY	ELOYAZ01	\$29.12	2,633	\$ 76,673
NO	CAVE CREEK	CVCKAZMA	\$29.37	6,474	\$ 190,141
NO	SIERRA VISTA SOUTH	SRVSAZSO	\$31.64	6,200	\$ 196,168
NO	WHITE TANKS	WHTKAZMA	\$33.04	1,135	\$ 37,500
NO	SIERRA VISTA NORTH	SRVSAZNO	\$34.06	2,097	\$ 71,424
YES	WICKENBURG	WCBGAZMA	\$34.13	5,210	\$ 177,817
NO	HIGLEY	HGLYAZMA	\$34.70	1,903	\$ 66,034
YES	MIAMI	MIAMAZMA	\$34.80	1,146	\$ 39,881
NO	QUEEN CREEK	HGLYAZQC	\$35.10	3,621	\$ 127,097
YES	BENSON	BNSNAZMA	\$36.01	4,179	\$ 150,486
NO	NEW RIVER	NWRVAZMA	\$38.27	3,084	\$ 118,025
NO	BUCKEYE	BCKYAZMA	\$38.62	5,497	\$ 212,294
NO	MARANA	MARNAZ02	\$40.25	6,102	\$ 245,606
NO	CAMP VERDE	CMVRAZMA	\$40.36	3,386	\$ 136,659
NO	CHINO VALLEY	CHVYAZMA	\$42.37	4,566	\$ 193,461
NO	FLORENCE	FLRNAZMA	\$42.90	3,350	\$ 143,715
YES	WILLIAMS	WLMSAZMA	\$43.15	2,598	\$ 112,104
YES	HAYDEN	HYDNAZMA	\$45.55	504	\$ 22,957
NO	ORACLE	ORCLAZMA	\$47.16	1,853	\$ 87,387

YES	WILLCOX	WLCXAZMA	\$50.47	3,472	\$ 175,232
YES	DUDLEYVILLE	DDVLAZNM	\$50.71	515	\$ 26,116
NO	MUNDS PARK	MSPKAZMA	\$51.14	164	\$ 8,387
NO	PINE	PINEAZMA	\$51.78	1,228	\$ 63,586
NO	ARIZONA CITY	AZCYAZ03	\$54.63	1,434	\$ 78,339
YES	TOMBSTONE	TMBSAZMA	\$54.79	896	\$ 49,092
YES	WHITLOW	WHTLAZMA	\$57.54	523	\$ 30,093
YES	KEARNY	KRNYAZMA	\$57.65	1,324	\$ 76,329
NO	HUMBOLDT	HMBLAZMA	\$58.00	2,032	\$ 117,856
NO	MARANA	MAYRAZMA	\$59.00	1,088	\$ 64,192
NO	BLACK CANYON	BLCNAZMA	\$61.10	933	\$ 57,006
YES	ST DAVID	BNSNAZSD	\$64.29	769	\$ 49,439
NO	VAIL NORTH	VAILAZNO	\$65.85	1,595	\$ 105,031
YES	JOSEPH CITY	JSCYAZMA	\$68.73	342	\$ 23,506
YES	MARICOPA	MRCPAZMA	\$73.48	1,337	\$ 98,243
NO	TUBAC	TUBCAZMA	\$75.58	1,901	\$ 143,678
YES	WELLTON	WLTNAZMA	\$76.10	1,639	\$ 124,728
YES	PIMA	PIMAAZMA	\$76.47	1,020	\$ 77,999
YES	PALOMINAS	PLMNAZMA	\$78.20	447	\$ 34,955
YES	TONTO CREEK	TNCKAZMA	\$78.52	1,057	\$ 82,996
NO	RIO VERDE	FTMDAZNO	\$80.05	347	\$ 27,777
YES	STANFIELD	STFDAZMA	\$83.10	578	\$ 48,032
NO	VAIL SOUTH	VAILAZSO	\$85.63	1,030	\$ 88,199
		CMVRAZRR	\$86.04	1,575	\$ 135,513
YES	CIRCLE CITY	CRCYAZMA	\$87.35	840	\$ 73,374
YES	GILA BEND	GLBNAZMA	\$89.93	806	\$ 72,484
YES	MAMMOTH	MMTHAZMA	\$91.38	792	\$ 72,373
YES	PATAGONIA	PTGNAZMA	\$95.17	1,400	\$ 133,238
YES	YARNELL	YRNLAZMA	\$112.36	1,126	\$ 126,517
YES	GRAND CANYON	GRCNAZMA	\$155.89	875	\$ 136,404
		SNCRAZMA	\$170.34	398	\$ 67,795
NO	WINTERSBURG	WNBGAZ01	\$182.84	643	\$ 117,566
YES	ASHFORK	ASFKAZMA	\$187.14	168	\$ 31,440
YES	ELGIN	PTGNAZEL	\$299.76	81	\$ 24,281
YES	MT LEMMON	TCSNAZML	\$324.58	8	\$ 2,597