Attachment 7

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of		
	)	
Qwest Communications	)	
International Inc.	)	WC Docket No. 02-148
	)	
Consolidated Application for Authority	)	
to Provide In-Region, InterLATA Services in	)	
Colorado, Idaho, Iowa, Nebraska	)	
and North Dakota	)	

DECLARATION OF MICHAEL LIEBERMAN
ON BEHALF OF AT&T CORP.

I. BACKGROUND AND SUMMARY

1. My name is Michael R. Lieberman. I am a District Manager in AT&T's Law and Government Affairs organization. In this position I am responsible for providing financial and industry analytical support relating to the costing and pricing of local telecommunications services. I was AT&T's primary participant in the development of the HAI/Hatfield Model of forward looking economic costs for local exchange networks and services, and I have been responsible for evaluating other costing models and methodologies such as the BCPM and the FCC's Synthesis Model. I have a Bachelor's degree in mathematics and a Master's degree in statistics from the State University of New York at Stony Brook. Prior to joining AT&T as a statistical consultant in 1978, I was a bio-statistical consultant with Carter-Wallace of Cranbury, New Jersey.

II. PURPOSE AND SUMMARY OF TESTIMONY

2. The purpose of my testimony is to demonstrate that Qwest's UNE rates in the states of Iowa, Idaho, North Dakota, Nebraska and North Dakota are vastly overstated, and that

Qwest's attempt to justify those rates using the Commission's benchmarking approach is flawed and must be rejected. Qwest's five-state Section 271 application for Colorado, Idaho, Iowa and Nebraska is unprecedented. In four of the five states – Idaho, Iowa, Nebraska and North Dakota – the state commissions did not develop rates based on TELRIC-principles.[1] In fact, in some of those states, the state commission explicitly refused to apply TELRIC principles.[2] Qwest's answer to these obvious deficiencies in its UNE rates was to lower the rates in those four states so that (according to Qwest), the new lower rates would satisfy the Commission's benchmarking test, using Colorado as the benchmark state. According to Qwest, Colorado's UNE rates are TELRIC-compliant. Qwest's argument fails on several levels.

3. First, even assuming (contrary to fact)[3] that Qwest's Colorado UNE rates are TELRIC-compliant, Qwest is wrong when it claims that its UNE rates in Iowa, North Dakota and Nebraska satisfy the Commission's benchmarking analysis using Colorado's rates as a benchmark. As I demonstrate below, Qwest's benchmarking analysis is flawed in several ways: (1) it reflects the costs of high-cost exchanges that Qwest no longer owns; (2) it fails to reflect Qwest's recurring charges for OSS and grooming;[4] and (3) it fails to reflect state-specific minutes. Correcting for these errors in Qwest's benchmarking analysis confirms that none of the states in Qwest's application pass the Commission's benchmarking test.

4. Second, I demonstrate that even if Qwest's UNE rates in Iowa, Idaho and North Dakota were TELRIC-compliant in the years that they were set – which they were not – those

[1] *See* Baker/Starr/Denny Decl. ¶¶ 12-60.

[2] *See id.*

[3] As demonstrated by AT&T's other pricing experts, Colorado's UNE rates are substantially inflated by myriad TELRIC-errors. *See* Mercer/Fassett Decl. & Mercer/Chandler Decl.

[4] Nebraska has a OSS NRC.

rates would not be TELRIC-compliant today. The rates in those states are based on pre-1997 data, and Qwest's switching and loop costs have declined dramatically since then.

5. Third, I show that Qwest's Statement of Generally Available Terms ("SGAT") for each of the five states in Qwest's application include numerous new rates that were never reviewed – let alone approved – by any state Commission. There is clearly no evidence that these rates comply with TELRIC principles.

6. Fourth, I demonstrate that Qwest's inflated UNE rates preclude competitive entry in at least three of the states in Qwest's application. As I show below, the statewide margins available to new entrants – that use a margin-maximizing combination of UNE and resale entry – are only $4.24, $5.55 and $5.19 per line per month in Iowa, Idaho and North Dakota, respectively. These margins are not remotely sufficient to cover an efficient entrant's internal costs, which as demonstrated in the attached declaration of Stephen Bickley exceed $10.00 per line per month.

III. QWEST'S BENCHMARKING ANALYSIS IS FUNDAMENTLLY FLAWED.

7. Qwest recognizes that its UNE rates in Iowa, Idaho, North Dakota and Nebraska are based upon very stale data that are inflated by several TELRIC errors. As a result, Qwest has implemented a series of arbitrary rate reductions in each of those states, and claims that the resulting rates in each state are sufficient to warrant Section 271 authority because they pass the Commission's benchmarking test relative to Colorado. Qwest argues that because the rates in Iowa, Idaho, North Dakota and Nebraska allegedly are now comparable to rates in Colorado, on a cost-adjusted basis, the fact that those rates were not developed using TELRIC principles is irrelevant. These claims are flawed.

8. As a preliminary matter, Qwest's assertions presume that the rates established in Colorado are TELRIC-compliant. However, AT&T declarations being filed by Messrs. Mercer,

Fassett, Chandler and Weiss concurrently with my declaration demonstrate that the Colorado rates are significantly higher than properly-calculated TELRIC. Thus, even if Qwest had performed its "cost-adjusted" rate calculations properly, the resulting rates in Iowa, Idaho, North Dakota and Nebraska would not be consistent with TELRIC.

9. In any event Qwest's benchmarking analysis is fundamentally flawed. Correcting the flaws in Qwest's analysis confirms that the rates in three of the states in Qwest's Application – Iowa, Nebraska, and North Dakota – do not pass the Commission's benchmark test.

10. As an initial matter, at the time that Qwest implemented rate reductions to certain loop and switching related rates, Qwest added myriad new rates and implemented numerous rate increases that were not ordered by the state commissions. *See* Exhibit A-1 (summarizing those additions in Colorado). Several of those rate increases partially offset (and in some cases entirely offset) Qwest's rate reductions. *See* Exhibit A-1 (listing the new rates in Qwest's SGAT's that affect Qwest's benchmarking analyses). For example, Qwest has filed recurring rates for grooming and cross-connect charges that affect comparisons of UNE-L loop rates.[5] Qwest's new rates also include OSS charges that are applicable to both UNE-P or UNE-L loops.[6] Because the charges for these three elements in Iowa, North Dakota and Nebraska are, in aggregate, higher than the comparable charges in Colorado, failure to include these charges distorts the relative difference in costs.

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[5] "Grooming" relates to the incremental costs that would be incurred by the ILEC, with integrated digital loop carrier, to separate a DS-1 signal into individual DS-0 analog signals if the CLEC is unwilling to take a full DS-1 digital signal from the ILEC switch to its collocation area. The cross-connect charge relates to the incremental cost the ILEC would incur to run a connection from its switch to the CLEC's collocation area.

[6] OSS charges cover the costs incurred by the ILEC for pre-ordering, ordering, provisioning, billing and processing of repair requests for purchases of UNEs by CLECs. Because these costs are incurred whether UNE-P or UNE-L is ordered by the CLEC, it is appropriate to include these charges when making comparisons across states on either basis.

11. There are also other serious deficiencies in Qwest's benchmarking analysis. For example, Qwest's benchmarking analysis fails to account for Qwest's recent sales of high cost exchanges in Idaho, Iowa and North Dakota, which have substantially decreased Qwest's costs in those states relative to Colorado. The USF cost model used by Qwest to compare loop and non-loop costs between states reflects study area wire center definitions dating back to 1996. Since then, Qwest has sold numerous high cost exchanges.[7] *See* Exhibit A-2 (listing the sold exchanges). Those sales have reduced Qwest's costs in Idaho, Iowa and North Dakota relative to Colorado, and hence those sales have reduced the UNE *rate* difference that could be justified between those states and Colorado using the Commission's benchmarking analysis. Put simply, this error in Qwest's benchmarking analysis exaggerates the actual cost differences between states, thereby allowing Qwest to claim that otherwise unlawful UNE rate differentials between those states are (contrary to fact) lawful.

12. Qwest's non-loop benchmark analysis also is flawed because it is based on the Commission's standardized "minutes of use."[8] In the *New Jersey 271 Order* (¶ 53), the Commission rejected arguments that a benchmarking analysis should be based on the Commission's standardized minutes-of-use assumptions, stating that "we . . . disagree . . . that . . . we should use standardized MOU [minutes of use] and traffic assumptions (*i.e.*, demand assumptions) as opposed to state-specific demand to develop per-line per-month prices as part of the benchmark analysis." Of course, as noted by the Commission, there are some special circumstances in which it may be appropriate to use the Commission's standardized minutes of

[7] Qwest disposed of 22 of the 157 wire centers Qwest assumed in Iowa; 3 of the 64 wire centers Qwest assumed in Idaho; and 10 of the 35 wire centers Qwest assumed in North Dakota.

[8] Qwest's benchmark comparisons use the Commission's standardized minutes assumptions: 1200 originating and 900 terminating local minutes per line per month; and 370 originating and

use, *e.g.*, where state-specific minutes-of-use assumptions are unavailable. *See id.* No such special circumstances exist here. Rather, Qwest's state-specific minutes-of-use statistics are publicly available and, therefore, must be used to conduct any benchmarking analysis. *See* Exhibit B. And even if Qwest's state-specific minutes-of-use statistics were not publicly available, that would not automatically mean that a benchmarking analysis should be based on the Commission's standardized minutes of use. On the contrary, where, as here, Qwest bears the burden of proving that its rates are TELRIC-compliant, and has access to its own state-specific minutes-of-use statistics, Qwest should be required to use those state-specific numbers in its benchmarking analysis. Otherwise, Qwest would have the unilateral power to determine which minutes of use would be used in the benchmarking analysis. And Qwest obviously would choose the minutes-of-use statistics that produced the most beneficial results from Qwest's perspective.[9]

13. I have conducted a benchmarking analysis that corrects some of the errors in Qwest's flawed approach. *See* Exhibit A-3. That analysis confirms that Iowa, North Dakota, and Nebraska all fail the Commission's benchmarking test. *See* Exhibit A-3. Qwest's UNE-platform loop rates in those states are higher than those in Colorado on a cost adjusted basis, by 12%, 31% and 13%, respectively. Qwest's UNE-L loop rates in those states exceed Colorado's UNE-L loop rates on a cost adjusted basis by 9%, 35%, and 19%, respectively. And Qwest's

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terminating intraLATA toll, intrastate interLATA and interstate interLATA minutes per line per month.

[9] It is critical that the Commission adopt a consistent approach in this regard. To do otherwise would make a mockery of the Section 271 benchmarking process by allowing Applicants to control the outcome of the benchmarking analysis by choosing the number of minutes – either the state-specific minutes or the Commission's standardized minutes – that produce the most favorable outcome for the Applicant. Indeed, that is precisely what Qwest has done here. The Commission already has determined that state-specific data more accurately reflect relative cost

non-loop rates in those states exceed those in Colorado by 4%, 48%, and 12%, respectively. Thus, contrary to Qwest's claims, its UNE rates in Iowa, Nebraska and South Dakota do not satisfy the Commission's benchmarking analysis, using Colorado as the benchmark state. The Tables below summarize these results. *See* Exhibits A-3 (pages 1- 4) (showing how these comparisons were derived).

Table I

Cost-Adjusted Loop Rate, UNE-P Basis

Company	State	UNE Loop Rate, per line per month	% Diff: CO UNE Loop Rate per line vs Other states.	FCC SynMod Loop cost per line.	% Diff: Other states vs CO-RD Loop Rates on Cost adjusted Basis
Qwest	IA - QVR	$ 17.84	12%	$ 14.22	12%
Qwest	ND - QVR	$ 21.27	34%	$ 14.52	31%
Qwest	NE - QVR	$19.86	25%	$ 15.62	13%

Table II

Cost-Adjusted Loop Rate, UNE-L Basis

Company	State	UNE Loop Rate, per line per month	% Diff: CO-RD UNE Loop Rate per line vs Other states.	FCC SynMod Loop cost per line.	% Diff: Other states vs CO-RD Loop Rates on Cost adjusted Basis
Qwest	IA - QVR	$ 18.27	10%	$ 14.22	9%
Qwest	ND - QVR	$ 23.07	38%	$ 14.52	35%
Qwest	NE - QVR	$ 21.96	32%	$ 15.62	19%

and rate differences among states. *See New Jersey 271 Order* ¶ 53. Having made that finding, the Commission should consistently reject any analysis that fails to implement that approach.

Table III

Cost Adjusted Non-Loop Rates

State	UNE Non-Loop Rate, per line per month	% Diff in UNE Non-Loop Rate: Other states vs GA	FCC SynMod Non-Loop cost per line.	% Diff in Cost Adjusted UNE Non-Loop Rate: Other states vs CO
IA - QVR	$ 5.56	9%	$ 4.25	4%
ND - QVR	$ 8.33	63%	$ 4.48	48%
NE - QVR/RD	$ 7.45	46%	$ 5.30	12%

14. The only state with rates that even comes close to passing the benchmark analysis is Idaho. Qwest's Idaho rates are nearly identical to those in Colorado, on a cost-adjusted basis. However, as demonstrated in the Declarations of Robert Mercer, Dean Fassett, Richard Chandler, and Tom Weiss, the fact that Idaho's UNE rates are near those of Colorado is fatal to Qwest's Idaho application. As demonstrated by these experts, Qwest's Colorado rates are massively inflated by numerous clear TELRIC errors. The fact that Idaho's rates are near Colorado rates, on a cost-adjusted basis, only confirms that Idaho's UNE rates also are inflated above TELRIC-levels.

IV. QWEST'S COSTS HAVE DECLINED SUBSTANTIALLY SINCE 1995/1996.

15. Qwest's high UNE rates in Iowa, Idaho, and North Dakota for both loop and switching are traceable at least in part to the fact that the data used to develop these cost-based rates pre-dates 1997. As a result, the data and resulting rates cannot possibly reflect the tremendous reductions in forward-looking costs that have occurred in Qwest's network since the 1995/1996 time period. Because provision of local telecommunications services reflects economies of scale, scope and density, the substantial growth in demand that has occurred since 1995/1996 should yield reductions in loop and switch UNE costs. The Commission has

previously acknowledged these effects, and my review of Qwest's ARMIS data confirms that such efficiencies have, in fact, occurred.[10]

16. A simple comparison of Qwest's cable and wire facilities investment per line demonstrates such efficiencies. Changes in investment per line and investment per DEM were developed by analyzing ARMIS data provided to the FCC by Qwest. Specifically, gross investment for cable and wire, circuit equipment, and non-loop assets was drawn from schedule 43-03. Accumulated depreciation is not provided, in ARMIS, at the same level of disaggregation as is the gross investment, *i.e.*, accumulated depreciation is reported for the totality of Qwest, but not state-by-state. In order to calculate net investment by state, therefore, I developed the relationship of accumulated depreciation to gross investment for Qwest operations across all states, from schedule 43-02, and applied that ratio to the gross investment in each state. The line

[10] *See, for example,* Order on Remand and Report and Order, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic*, CC Dockets No. 96-98 and 99-68, FCC 01-131, at 84, n.157, 93 (April 27, 2001) (citing Letter from David J. Hostetter, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 14, 2001), Attachment; Donny Jackson, "One Giant Leap for Telecom Kind?," *Telephony*, Feb. 12, 2001, at 38; Letter from Gary l. Phillips, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 16, 2001). State commissions also have recently recognized such economies of scale. *See generally, for example, Interim Opinion Establishing Interim Rates For Pacific Bell Telephone Company's Unbundled Loop And Unbundled Switching Network Elements*, issued by the Public Utilities Commission of the State of California on May 16, 2002 in Application 01-02-024, *Joint Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Switching in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050*, Application 01-02-035, *Application of AT&T Communications of California, Inc. (U 5002 C) and WorldCom, Inc. for the Commission to Reexamine the Recurring Costs and Prices of Unbundled Loops in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050*, and Application 01-02-034, *Application of The Telephone Connection Local Services, LLC (U 5522 C) for the Commission to Reexamine the Recurring Costs and Prices of the DS-3 Entrance Facility Without Equipment in Its First Annual Review of Unbundled Network Element Costs Pursuant to Ordering Paragraph 11 of D.99-11-050*

counts and DEMs were drawn from ARMIS schedules 43-08 and 43-04, respectively.[11] Table 5 compares net investment in cable, wire and circuit equipment per line for each of the five states for 1995, 1996 and 2001 – developed from Qwest's ARMIS data – and demonstrates that such investment has declined significantly over this time period.[12]

17. Table 4 reflects reductions in investment per line relevant to loops that do not use DLC, which are the majority of loops in each of these states. Table 5 is a similar comparison, but includes investment in circuit equipment. The reductions in investment per line in Table 5 would be reflective of loops that use DLC.

Table IV

Net Investment in Cable and Wire (per-line)

Net C&W Plant (per total line)

State	1995	1996	2001	% Diff (1996 to 2001)
Iowa -- IA	$ 352.12	$ 346.98	$ 271.16	-22%
Idaho -- ID	$ 474.41	$ 450.52	$ 352.19	-22%
North Dakota -- ND	$ 488.88	$ 361.74	$ 331.77	-8%

[11] The DEM data came from ARMIS 43-04. The accounts in Switching are; Analog Electronic Switching (2211), Digital Electronic Switching (2212), and Electro-Mechanical Switching (2215).

[12] Cable and wire facilities (ARMIS account 2410) contains much more than the investment in cable and wire. In fact, it includes investment in poles and associated labor and material (ARMIS account 2411), aerial cable (ARMIS account 2421), underground cable (ARMIS account 2422), buried cable (ARMIS account 2423), intrabuilding network cable (ARMIS account 2426), and conduit systems (ARMIS account 2441). These accounts, in combination, reflect the bulk of the assets associated with loops that do not use DLC. ARMIS account 2232, circuit equipment, includes DLC and other multiplexing equipment. In combination, these two major categories of investment include virtually all assets associated with loops that use DLC.

Table V

Net Investment in Cable, Wire, and Circuit (per-line)

Net C&W Plant (per total line)

State	1995	1996	2001	% Diff (1996 to 2001)
Iowa -- IA	$ 634.99	$ 633.41	$ 554.77	-12%
Idaho -- ID	$ 464.11	$ 445.19	$ 414.47	-7%
North Dakota -- ND	$ 613.26	$ 622.24	$ 534.52	-14%

18. Similar reductions have occurred in net switch investment per DEM, as demonstrated in the following table.

Table VI

Net Switch Investment (per-DEM)

Net Switch Inv per DEM

State	1995	1996	2001	% Diff (1996 to 2001)
Iowa -- IA	$0.01224	$0.01102	$0.00825	-25%
Idaho -- ID	$0.01086	$0.00971	$0.00821	-15%
North Dakota -- ND	$0.01327	$0.00995	$0.00782	-21%

19. These two tables demonstrate that growth in demand has outstripped growth in net investment, as reported in ARMIS, leading to significant reductions in cost over this time period.

V. STATE-WIDE UNE-P ENTRY IS NOT ECONOMICALLY FEASIBLE IN IOWA, IDAHO, OR NORTH DAKOTA.

20. Given Qwest's overstated UNE rates, it should be no surprise that profitable state-wide UNE-based residential entry is not possible in Iowa, Idaho, or North Dakota. The business case viability of a UNE-based offering – that is, whether it makes sense for AT&T (or any other entrant) to commit its shareholders' capital to that enterprise – is no different, analytically, from any other investment decision. The potential entrant's scarce capital must be devoted to its

highest-value uses. Thus, a carrier considering whether to enter the local services business in a state (or to continue to participate in that business) must determine whether revenues attributable to the service will exceed the costs of providing the service by an amount sufficient to generate a return that is commensurate with the expectations of investors concerning risks and returns *and* with competing uses for the capital.

21. There are three general steps in this analytical approach: (1) identifying and estimating each of the costs of providing the service, (2) identifying and estimating each of the revenue opportunities that will be generated by providing the service, and (3) deriving from these estimated "cash flows" some standard financial measure that allows the investment opportunity to be assessed (and compared to alternative investment opportunities).

22. The Commission recently offered guidance on the type of data that should be included when making these calculations. The Commission explained that, in addition to the revenues that are directly available due to local entry, several other revenue sources would be relevant to a price squeeze analysis, including intraLATA toll and interLATA toll revenue contributions, and the amount of federal and state universal service revenues that would be available to new entrants. *See, e.g., Vermont 271 Order* ¶ 71. The Commission also stated that a margin analysis should consider whether entry is viable using a mix of a UNE-based and resale-based local entry strategy. *See id.* ¶ 69.

23. As described below, my analysis accounts for all of these factors. In particular, my analysis of the level of revenues that are available to potential new entrants reflects intraLATA toll and interLATA toll revenue contributions, as well as the amount of federal and state universal service revenues that would be available to new entrants. My analysis also accounts for the possibility that a new entrant may enter a state using a combination of UNE-

based and resale services (my analysis assumes that a UNE-based approach where that is the most profitable entry mode, and a resale-based approach where that is the most profitable mode of entry).

24. Furthermore, my analysis is based on the internal costs of an efficient entrant. In the past, the Commission has expressed concern as to whether the well-known internal cost estimates in my analysis are those of efficient carriers. The answer to that question is yes. As explained in the declaration of Stephen Bickley, the internal cost figures on which my analysis is partly based do not reflect carriers' *current* internal costs, but are forward-looking costs that account for future savings associated with efficiencies and increased scale. *See* Bickley Decl. ¶ 2-25.

25. Because telecommunications carriers are subject to numerous reporting requirements, and the availability of reliable subscription market research products, obtaining the inputs necessary to conduct my analysis was relatively straightforward. Carrier-specific data, including retail local service prices, UNE prices, and access prices are largely publicly reported and directly verifiable. I am confident, therefore, that the following analysis paints an accurate picture of the barrier that Qwest's UNE prices in these states poses to residential competition.

26. The remainder of this section is organized as follows. First, I describe the costs associated with a residential UNE-Platform offering in each of the three states. Second, I describe the revenues that are available to carriers serving customers in these states. Third, I translate these cash flows into margins by looking at the differences between the revenues that would be generated and costs that would be incurred by a new entrant carrier in each state – a type of financial measure commonly used by businesses to make investment decisions.

27. This margin analysis shows that profitable residential UNE-Platform-based competition cannot be undertaken by competitive carriers in the three states IA, ID and ND at the rates contained in Qwest's application. Exhibits B-1 (for IA, ID, and ND) to my declaration, entitled "UNE Connectivity Margin" for each state summarizes the results of my cost, revenue, and margin analyses. I refer to, and generally follow, the first page of each of these exhibits in the discussion below. I also refer to back-up pages for each state, which provide additional support on the assumptions and calculations underlying Exhibits B-1 (for IA, ID, and ND).

28. **Costs.** There are two basic categories of cost associated with UNE-Platform-based services: (1) "connectivity" costs (*i.e.*, the costs associated with purchasing the necessary network elements from the incumbent), and (2) a carrier's own internal costs of running a local telephone service business (*e.g.*, developing, maintaining and operating computer support systems, as well as marketing, customer care, and administration). My analysis focuses primarily on the former category of costs.

29. Table 7 (below) displays the monthly per line rates for non-usage sensitive switching and loop elements (UNE loops and UNE switch ports). The source for these costs are shown in Exhibits B-1 (for IA, ID, and ND).

Table VII

Loop and Port Cost

State		Statewide Average	Zone 1	Zone 2	Zone 3
Iowa – IA					
	Loop	$ 17.03	$ 13.11	$ 15.64	$ 27.27
	Port	$ 1.15	$ 1.15	$ 1.15	$ 1.15
Idaho – ID					
	Loop	$ 20.90	$ 15.81	$ 24.01	$ 40.92
	Port	$ 1.34	$ 1.34	$ 1.34	$ 1.34
North Dakota – ND					
	Loop	$ 17.68	$ 14.78	$ 24.92	$ 56.44
	Port	$ 1.27	$ 1.27	$ 1.27	$ 1.27

Note: The weights used to derive the state-wide averages from the zone data are based on Residential Lines only.

30. Most other network elements required for local service are charged on a usage basis. Therefore, it is necessary to combine published per minute rates with usage volumes to estimate the cost of the other network elements. As noted earlier, Colorado-specific local usage volumes are available from Qwest's annual "dial equipment minutes" ("DEM") submissions to NECA (the same data that is used in the Commission's Synthesis Cost Model). As local DEM was not yet reported for 2001, the 2000 split of intrastate between toll and local was used. This calculation of "usage minutes" retains the non-conversation time that is reflected in DEM and which is included in the cost of UNEs. I have assumed that there will be netting of charges for traffic terminating to a new entrant's UNE-P customer and thus originating local traffic and its associated termination is relevant for local usage on these lines. For the toll-related MOU categories, I am using the TNS Telecoms residential volumes per line from the Bill Harvesting market research. These toll volumes and the calculations for local, usage are detailed in Exhibit B to this declaration.

31. For each category of usage (*e.g.*, local, intraLATA toll, etc.), particular network architecture assumptions must be applied. Local usage must be apportioned to reflect the fact

that some local calls are "intra-switch" calls (where the calling and called parties are served by the same switch), some are "inter-switch" calls. Inter-switch calls require assumptions regarding the portion of these calls that are routed directly between the two switches and those that are routed via a tandem. I have assumed that approximately 2% of local inter-switch minutes and 20% of intraLATA toll and interLATA minutes are tandem-routed. Approximately 35% of local calls in Qwest's network are assumed to be intra-switch calls.[13] *See* Exhibits B-8 (for IA, ID, and ND).

32. The calculated intra-switch, inter-switch, and tandem conversation minutes (or, in the case of toll calls, the toll direct and toll tandem conversation minutes) are then multiplied by the corresponding Qwest usage charges in each state to arrive at expected monthly usage costs per line, as detailed in Exhibits B-8 (for IA, ID, and ND). The total monthly usage charges per line, which are also listed in Exhibits B-1 (for IA, ID, and ND), are summarized in the following table.[14]

[13] Although the Commission's Synthesis Model recognizes that about 50 percent of local calls would be intraswitch calls in an efficiently designed network with properly sized switches, the relevant figure for a new entrant contemplating entry is what it will actually pay Qwest. Because Qwest's existing network is not efficiently designed and sometimes uses two switches where one would be more efficient, the 35 percent figure must be used to determine expected connectivity costs that will be billed by Verizon to the competing carrier.

[14] UNE purchasers must pay switching, transport and related usage charges for access-related usage whether a call is originated or terminated by their customer, and the assumption is that the customer receives as much access traffic as he or she originates. For intraLATA toll traffic, every originating minute is associated with a terminating minute to another customer (for simplicity assumed to be served by the same ILEC) in the ILEC's service area.

Table VIII

Usage Cost

State	Statewide Average	Zone 1	Zone 2	Zone 3
Iowa -- IA	$4.53	$4.53	$4.53	$4.53
Idaho -- ID	$3.90	$3.90	$3.90	$3.90
North Dakota -- ND	$7.72	$7.72	$7.72	$7.72

Note: The weights used to derive the state-wide averages from the zone data are based on Residential Lines only.

33. I have included the development of the DUF ("Daily Usage Feed") charge on Exhibits B-10 (for IA, ID, and ND), which are summarized in the following table.

Table IX

DUF Cost

State	Statewide Average	Zone 1	Zone 2	Zone 3
Iowa -- IA	$0.29	$0.29	$0.29	$0.29
Idaho -- ID	$0.26	$0.26	$0.26	$0.26
North Dakota -- ND	$0.47	$0.47	$0.47	$0.47

Note: The weights used to derive the state-wide averages from the zone dat are based on Residential Lines only.

34. In total, the average recurring monthly connectivity costs (loop plus usage plus DUF) incurred by Qwest to serve a customer in each state are summarized in Table 10, which is the monthly connectivity costs for Zone 1, Zone 2, and Zone 3 weighted by the relative number of estimated *residence* lines in each zone served by Qwest. *See* Exhibits B-1 (for IA, ID, and ND).[15]

Table X

Platform Recurring Cost Comparison

State	Statewide Average	Zone 1	Zone 2	Zone 3
Iowa -- IA	$24.38	$20.46	$22.99	$34.62
Idaho -- ID	$26.39	$21.30	$29.50	$46.41
North Dakota -- ND	$30.63	$27.73	$37.87	$69.39

35. **Revenues.** The Qwest local service rates that UNE-Platform-based providers can obtain for their services are effectively capped by the retail rates charged by Qwest. If new entrants attempt to charge higher rates than Qwest, these new entrants would be unable to attract customers.[16] Qwest local service rates are readily available and verifiable from many sources, including CCMI. The mapping of the local rates to wire centers and then mapping the wire centers to UNE zones determines the basic revenue by zone. In some states, the same tariff applies to all wire centers.

36. There are, of course, other revenue opportunities available to new entrants. A local service provider can expect to sell vertical features to many customers. I used data taken from the TNS Telecoms (formerly PNR) Bill Harvest market research product updated through 1Q02, to determine the average vertical feature revenue per month a new entrant can expect to receive in each state. My analysis also accounts for federal Subscriber Line Charge monthly revenue updated for the July 2002 increase.

37. In addition, a UNE-Platform-based provider earns access revenues for originating and terminating long-distance calls. This revenue may either be explicit (when a CLEC charges an independent IXC), or implicit (if the CLEC acts as its own IXC). To estimate these access revenues it is necessary to multiply expected toll minutes (derived from the TNS Telecoms Bill

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[15] My margin analysis does not include non-recurring costs. As a result, my analysis understates the costs that potential entrants in each of these states would incur, which correspondingly overstates margins that are available to entrants in these states.

[16] In fact, this assumption probably overstates margins because if competitive entry of any sizeable scale were to occur, Qwest would probably decrease its retail rates in an effort to respond to such competition. While such reductions are the essence of competition – and obviously advantageous to consumers in the short run – they also increase the risk faced by the new entrant. It is for this reason that it is critical that UNE rates be based on properly calculated TELRIC, *i.e.*, the forward-looking costs of an efficiently configured and operated competitor. This will ensure that consumers receive the full benefit of competitive pricing over the long run by maximizing the likelihood that competitors are not squeezed out of the market.

Harvest toll MOU data) by the relevant access charges that AT&T can replace with UNEs.[17] My calculations of amounts for estimated monthly per line access charge revenues are set forth in Exhibits B-5 (for IA, ID, and ND).

38. I also sought to include amount of portable federal and state universal service fund revenues that would be available to carriers in each state. However, there were no such revenues available to potential entrants for these states.

39. In addition, I have computed the intraLATA and InterLATA toll contributions that may be available to new entrants. This information is proprietary, and is summarized in confidential Exhibit C.

40. The following table summarizes my calculations of the total revenues by state that AT&T (or another entrant) could expect to receive from residential UNE-based service (this table excludes intraLATA and interLATA toll revenue contributions because those values are proprietary).

Table XI

Total Revenues (for a New Entrant) from Residential UNE-based Services

State	Total Revenue
Iowa -- IA	$ 23.87
Idaho -- ID	$ 28.06
North Dakota -- ND	$ 33.38

Note: The above Total Revenue is comprised of:
=>*Vertical Feature Revenue*
=>*Federal Subscriber Line Charge Revenue*
=>*Access Charge Revenue*

41. **Margin.** There are many standard financial measures for assessing the profitability of investing (or continuing) in a line of business. The margin per line can be

[17] Dedicated transport access charges are not included because AT&T does not avoid these access charges through its acquisition of a UNE-P local customer.

computed by comparing a carrier's expected costs with its expected revenues for each line. A "gross" UNE-P margin can be determined by subtracting expected direct connectivity expenses (e.g., cost of goods sold) from expected revenues. A "net" (or operating) UNE-P margin can only be determined by subtracting all expected operating expenses (*e.g.*, marketing, customer service, billing, order processing, and other operating activities) from expected revenues.

42. Also, as noted above, this analysis accounts for the possibility that a new entrant may enter a state using a combination of UNE-based and resale services by assuming, on a zone-by-zone basis, that a CLEC will adopt a UNE-based approach where that is the most profitable entry mode, and a resale-based approach where that is the most profitable mode of entry.

43. These margin analyses for each of the three Qwest states highlighted in this declaration show that residential *gross* margins (for this profit-maximizing amalgam of UNE-based/Resale-based local entry) in each of the three states are very low. *See* Exhibits B-1 (for IA, ID, and ND). The following table summarizes these results, on a state wide average, for each of the three states. The table below does not reflect the proprietary interLATA and IntraLATA toll contributions. Those values are shown in Exhibit C.

Table XII
Margin
(State-wide Average)

State	Margin (state wide average)
Iowa -- IA	$ 4.24
Idaho -- ID	$ 5.55
North Dakota -- ND	$ 5.19

44. To compute a potential entrant's *net margins*, it is necessary to account for the potential entrant's internal costs of entry. As explained in the declaration of Stephen Bickley, an efficient entrant entrant's internal costs – *e.g.*, customer care, uncollectibles, and general and

administrative costs, , exceed $10.00 per line per month in each of these states. *See* Bickley Decl. ¶¶ 2-25.

45. As shown in the above table, on a statewide basis, none of the states generate margins sufficient to recover a new entrant's internal costs of $10.00 or more of providing local services. And adding interLATA and IntraLATA toll contributions to this analysis does not change those results. *See* Exhibit C. Thus, there is no question that Qwest's UNE rates in Idaho, Iowa, and North Dakota, create a price squeeze that precludes competitive entry.

VI. THE MARGIN ANALYSES SUBMITTED BY QWEST ARE UNDOCUMENTED AND INACCURATE.

46. Qwest conducted its own "margin analyses" for each state that it contends show that its rates provide "ample opportunity for CLECs using the UNE-P or other UNE-based configurations to compete successfully. *See, e.g.*, Thompson CO Declaration at 74. However, these analyses are flawed.

47. Qwest's analysis substantially understates the costs associated with local entry. Qwest's analysis does not account for the costs associated with OSS, DUF or NRCs – even though its SGATs indicate that such charges would be applicable. Qwest's analyses also fail to account for internal costs of entry, and focuses only on *gross* margins. In so doing, Qwest's analysis ignores that new entrants will incur additional costs, internally, to provide the marketing, customer service, order processing and billing functions. Moreover, many of the costs (and revenues) used in Qwest's analyses are entirely undocumented.

48. Another deficiency in Qwest's margin analysis is that it relies on the FCC standard minutes-of-use estimates, rather than on residential state-specific values. Where, as here, the state-specific toll-related minutes of use are publicly available, it makes no sense to compute a potential entrant's costs and revenues based on either a standardized benchmark or an

aggregate business/residence melded figure. Using the FCC benchmark minutes of use overstates access revenues available to new entrants because the FCC standardized toll minutes of use vastly exceed the state-specific residential toll minutes of use.

49. Thus, Qwest's margin analysis is fundamentally flawed and cannot be relied upon.

VII. CONCLUSION

50. Contrary to Qwest's claims, Qwest's UNE rates for Iowa, Idaho, and North Dakota do not satisfy the Commission's Benchmark analysis, using Colorado as the benchmark state. And the UNE rates in Iowa, Nebraska and North Dakota are so inflated above TELRIC principles that local entry is not economically feasible.

VERIFICATION PAGE

I declare under penalty of perjury that the foregoing Declaration is true and correct.

/s/ Michael Lieberman

Michael Lieberman

Executed on: July 3, 2002

Exhibit A ---------->

Impact of SGAT on Loop Related Rates

	CO	ID	IA	NE	ND
Rates Ordered by Commission					
OSS (NRC)	$ -	$ -	$ -	$ -	$ -
OSS (RC)	$ -	$ -	$ 0.36	$ -	$ -
Cross Connect (*)	$ 0.44	$ 0.83	$ 0.75	$ 0.44	$ 0.45
Grooming	$ 2.06	$ -	$ 4.61	$ 1.17	$ -
Estimated % of loops to which Grooming applies	17.9%		3.1%	100.0%	
Total	$ 0.81	$ 0.83	$ 1.25	$ 1.61	$ 0.45
SGAT Rates					
OSS (NRC)	$ -	$ -	$ -	$ 14.65	$ -
OSS (RC)	$ -	$ -	$ 1.38	$ 2.52	$ 3.49
Cross Connect	$ 0.44	$ 0.83	$ 0.43	$ 0.44	$ 0.45
Grooming	$ 2.06	$ -	$ -	$ 1.17	$ 1.35
Estimated % of loops to which Grooming applies	17.9%			100.0%	100.0%
Total	$ 0.81	$ 0.83	$ 1.81	$ 4.62	$ 5.29
Changes in Rates not Ordered by Commission					
OSS (NRC)	$ -	$ -	$ -	$ 14.65	$ -
OSS (RC)	$ -	$ -	$ 1.02	$ 2.52	$ 3.49
Cross Connect	$ -	$ -	$ (0.32)	$ -	$ -
Grooming	$ -	$ -	$ (4.61)	$ -	$ 1.35
Estimated % of loops to which Grooming applies			-3.1%		100.0%
Increase from OSS	**$ -**	**$ -**	**$ 1.02**	**$ 3.01**	**$ 3.49**
Increase from OSS, Grooming & xConnect	**$ -**	**$ -**	**$ 0.56**	**$ 3.01**	**$ 4.84**
Loop before 271 application					
residence average	$ 16.60	$ 25.52	$ 20.83	$ 23.66	$ 19.53
total state average	$ 15.87	$ 25.52	$ 20.15	$ 21.62	$ 19.75
Loop after 271 application					
residence average	$ 16.60	$ 20.90	$ 17.03	$ 18.97	$ 17.59
total state average	$ 15.87	$ 20.35	$ 16.47	$ 17.34	$ 17.78
Difference					
residence average reduction	**$ -**	**$ 4.62**	**$ 3.81**	**$ 4.69**	**$ 1.94**
total state average reduction	**$ -**	**$ 5.17**	**$ 3.68**	**$ 4.28**	**$ 1.96**
Net Impact					
residence UNE-P Loop	**$ -**	**$ (4.62)**	**$ (2.79)**	**$ (1.68)**	**$ 1.55**
total state UNE-P Loop	**$ -**	**$ (5.17)**	**$ (2.66)**	**$ (1.27)**	**$ 1.53**
residence UNE-L Loop	**$ -**	**$ (4.62)**	**$ (3.25)**	**$ (1.68)**	**$ 2.90**
total state UNE-L Loop	**$ -**	**$ (5.17)**	**$ (3.12)**	**$ (1.27)**	**$ 2.88**

(*) No cross connect was ordered by the Commission. The SGAT cross connect was used in this scenario.

COLORADO SGAT -- Non Ordered Rates

		Recurring	Non-Recurring	NOTES
7.0 Interconnection				
7.2 LIS EICT				
7.2.1 DS1		$0.00	$0.00	
7.2.2 DS3		$0.00	$0.00	
7.9 LIS Forecasting Deposit				
DS1 End Office Direct Trunking			$6,500.00	
DS1 Tandem Trunking			$16,000.00	
8.0 Collocation				
8.2 All Collocation				
8.1.8 Channel Regeneration				
DS1 Regeneration		$2.32	$477.52	Rates in misc section in the
DS3 Regeneration		$7.34	$1,806.53	577T order, but not in collo.
8.1.9 Collocation Terminations				
OCn Termination				
OCn Terminations, Per 12 Fibers		ICB	ICB	
Cable Racking for OCn Terminations, 1st 12 fibers		ICB	ICB	
8.1.12 Space Availability Charge			$318.96	
8.1.13 Collocation Space Reservation Fee			$200.00	
8.1.14 Collocation Space Option Administration Fee			$1,751.41	
8.1.15 Collocation Space Option Fee		$2.00 [1]		
8.2 Cageless Physical Collocation				
8.2.1 Site Preparation Fee			ICB	
8.2.2 Space Construction				
Adjustment for 100A Initial Power Feed		$40.40	$16,355.02	
Adjustment for 200A Initial Power Feed		$88.94	$36,003.34	
Adjustment for 300A Initial Power Feed		$147.93	$59,885.69	
Adjustment for 400A Initial Power Feed		$217.71	$88,130.60	
Each Additional 100A Power Feed		$58.65	$23,742.49	
Each Additional 200A Power Feed		$107.19	$43,390.81	
Each Additional 300A Power Feed		$166.18	$67,273.16	

COLORADO SGAT – Non Ordered Rates

Each Additional 400A Power Feed		$235.96	$95,518.07	
Adjustment to use a Single Bay (2 Bays are included in Space Construction)		($5.78)	($2,340.28)	
8.3 Caged Physical Collocation				
8.3.1 Site Preparation Fee			ICB	
Fencing Credit- Cage Up to 100 Sq. Ft.		($12.21)	($4,942.00)	
Fencing Credit- Cage 101 to 200 Sq. Ft.		($15.23)	($6,162.00)	
Fencing Credit- Cage 201 to 300 Sq. Ft.		($17.09)	($6,921.00)	
Fencing Credit- Cage 301 to 400 Sq. Ft.		($18.88)	($7,643.00)	
8.5 Adjacent Collocation			ICB	
8.6 Remote Collocation				
8.6.1 Physical Remote Collocation				
Space (per Standard Mounting Unit)		$0.94	$826.52	
FDI Terminations (per binder group)		$0.55	$532.20	
8.6.2 Adjacent Remote Collocation (New)			ICB	
Adjacent Remote Collocation (Existing)		See Physical Remote Collo.		
8.6.3 Virtual Remote Collocation				
Space		$0.94	$826.52	
FDI Terminations (per binder group)		$0.55	$532.20	
Power			See Collo. Rates	
8.6.4 Labor Charges				
Flat Labor Rate, per Job			$34.34	
Engineering Labor (per 1/2 hour)			$30.13	
Maintenance Labor (per 1/2 hour)			$27.92	
Installation Labor (per 1/2 hour)			$27.92	
Training, (per 1/2 hour)			$27.92	
8.8 ICDF Collocation			ICB	
8.9 Cancellation / Decommission		No Charge		
8.10 Microwave Entrance Facility		ICB	ICB	
9.0 Unbundled Network Elements (UNEs)				
9.2 Unbundled Loops				
9.2.2 Digital Capable Loops				
9.2.2.4 OC n Capable Loop				

COLORADO SGAT -- Non Ordered Rates

OC - 3		$734.81		
OC - 12		$1,208.65		
OC - 48		$3,220.54		
9.2.4 DS1 Loop Installation Charges				
9.2.4.5 Basic Install with Cooperative Testing				
First			$176.82	
Each Additional			$126.58	
9.2.5 DS3 Loop Installation Charges				
9.2.5.5 Basic Install with Cooperative Testing				
First			$176.82	
Each Additional			$126.58	
9.2.6 OC n 3, 12, 48 Loop Installation Charges				
9.2.6.1 Basic Installation				
First			$55.72	
Each Additional			$46.48	
9.2.6.2 Basic Installation with Performance Testing				
First			$176.82	
Each Additional			$126.58	
9.2.6.3 Coordinated Installation with Cooperative Testing				
First			$206.60	
Each Additional			$136.68	
9.2.6.4 Coordinated Installation without Cooperative Testing				
First			$62.29	
Each Additional			$53.04	
9.2.6.5 Basic Install with Cooperative Testing				
First			$176.82	
Each Additional			$126.58	
9.2.7 Private Line to Unbundled Loop Conversions			$30.72	
9.3 Subloop				
9.3.2 Intra-Building Cable				
Intra-Building Cable No Dispatch First			$35.85	
Intra-Building Cable No Dispatch Each Additional			$14.93	
Intra-Building Cable Dispatch First			$75.58	
Intra-Building Cable Dispatch Each Additional			$25.14	
9.3.4 MTE Terminal Subloop Access				
Subloop MTE - POI Site Inventory (per request)			$205.89	

COLORADO SGAT -- Non Ordered Rates

MTE - POI Rearrangement of Facilities			ICB	
MTE - POI Construction of New SPOI		ICB		
9.3.5 Trouble Isolation Charge			See MSC Charges	
9.4 Line Sharing				
9.4.2 OSS, per Line per Month		No charge at this time.		
	Recurring Fixed	Recurring Per Mile	Non-Recurring	NOTES
9.6 Unbundled Dedicated Interoffice Transport (UDIT)				
9.6.6 OC-48 UDIT			$247.42	
OC-48 Over 0 to 8 Miles	$8,115.76	$238.63		
OC-48 Over 8 to 25 Miles	$8,115.76	$257.54		
OC-48 Over 25 to 50 Miles	$8,115.76	$291.95		
OC-48 Over 50 Miles	$8,115.76	$365.64		
9.6.9 Remote Node / Remote Port				
OC - 3 UDIT Remote Node		$382.76		
DS1 Remote Port		$3.13	$175.04	
DS3 Remote Port		$42.83	$175.04	
OC - 12 UDIT Remote Node		$750.44		
DS1 Remote Port		$10.03	$175.04	
DS3 Remote Port		$27.31	$175.04	
OC-3 Remote Port		$90.52	$175.04	
OC - 48 UDIT Remote Node		$2,339.76		
DS1 Remote Port		$18.87	$175.04	
DS3 Remote Port		$106.53	$175.04	
OC-3 Remote Port		$419.87	$175.04	
9.7 Unbundled Dark Fiber (UDF)				
9.7.1 Single Strand Increments - 1 Fiber				
Termination, Fixed 1 Fiber/Office		$4.66		
Fiber Transport, per Mile / 1 Fiber		$71.78		
Fiber Cross-Connect / 1 Fiber		$1.94		
UDF-Loop Charges - 1 Fiber				
Termination, Fixed 1 Fiber/Office		$4.66		
Termination, Fixed 1 Fiber /Prem		$120.61		
Fiber Loop, per Route/ 1 Fiber		$4.01		

COLORADO SGAT -- Non Ordered Rates

	Extended Unbundled Dark Fiber (E-UDF) - 1 Fiber			
	Termination, Fixed 1 Fiber/Office	$4.66		
	Termination, Fixed 1 Fiber /Prem	$120.61		
	Fiber Transport, per Route/ 1 Fiber	$4.01		
9.7.4	Field Verification (Engineering Verification)		$344.96	
9.7.8	Dark Fiber Splice		$658.93	
9.11	**Local Switching**			
9.11.1	Analog Line Side Port, First Port		$30.00	
9.11.2	Each Additional Port (ordered concurrently with an unbundled loop)		$10.00	
9.11.7	Digital Trunk Ports			
	DS1 DID Trunk Port	$54.19		
9.12	**Local Switching - Market Based Rates**	[2]	[2]	
9.13	**Customized Routing**			
9.13.1	Development of Custom Line Class Code – Directory Assistance or Operator Services Routing Only		$329.01	Listed as ICB in 577T Order
9.13.2	Installation Charge, per Switch – Directory Assistance or Operator Service Routing Only		$241.01	Listed as ICB in 577T Order
9.23	**UNE Combinations**			
9.23.1	UNE - P with Qwest DSL		See applicable Qwest retail Tariff, catalog or price list.	
9.23.2	UNE-P Line Splitting			
	Basic Installation Charge for UNE-P Line Splitting		$34.24	
9.23.4	UNE-P New Connection Non-Recurring Charges			
	9.23.4.3 UNE - P PBX DID - per Trunk		$132.41	
	9.23.4.4 UNE - P ISDN BRI		$180.49	
	9.23.4.5 UNE - P Trunks			
	DSS Basic Trunk - In Only, Out Only, or Two Way		$38.99	
	DSS, ISDN PRI Adv. Trunk - In only w/DID & Hunting, or 2 Way w/DID, Hunting & Answer Sup'v		$38.32	
	DSS, ISDN PRI Adv. Trunk - Out Only w/Answer Sup'v		$39.30	
	9.23.4.6 DID TRUNKS			

COLORADO SGAT -- Non Ordered Rates

Complex Translations Digits Outpulsed Change Signaling			$10.96	
DID Complex Translations Signaling Change			$24.96	
DID Block Compromise			$18.83	
DID Group of 20 Numbers			$25.06	
DID Reserve Sequential # Block			$18.73	
DID Reserve Non Sequential TN			$17.48	
DID Trunk Termination			$16.56	
DID NonSequential TN			$26.30	
9.23.4.7 Facilities for UNE - P DSS, UNE - P ISDN PRI				
DS1 Loop Facility (for Basic Trunk)			$176.82	
DS1 Loop Facility (for Advanced Trunks)			$176.82	
DS3 Loop Facility			$176.82	
9.23.4.8 UNE - P PRI Configurations				
UNE-P PRI Dedicated PRI 23B + D			$509.22	
UNE-P PRI Dedicated PRI 24B			$488.47	
UNE-P PRI Dedicated PRI 23B + Back-Up D Configuration			$491.67	
9.23.5 UNE Combinations Loop with MUX Combination (LMC)				
9.23.5.1 ITP DS1/DS3		See Exhibit A - Section 9.1		
9.23.5.2 Loop with MUX DS0 2/4 Wire Analog			$175.66	
Loop with MUX DS0 Wire 2/4 Wire Analog Each Additional			$114.64	
9.23.5.3 Loop with MUX DS0 2-Wire		See Exhibit A - Appendix A		
9.23.5.4 Loop with MUX DS0 4-Wire		See Exhibit A - Appendix A		
9.23.5.5 DS1 Loop with MUX			$222.20	
DS1 Loop with MUX Each Additional			$162.68	
9.23.5.6 DS1 Capable Loop		See Exhibit A - Section 9.2.2.2		
9.23.5.7 Private Line to Loop MUX Conversion		$30.72		
9.23.5.8 LMC DS3 to DS1 Multiplexer		$157.16	$279.00	
LMC DS1 to DS0 Multiplexer		$156.81	$272.52	
9.23.5.9 DS1/DS0 Low Side Channelization	See Exhibit A - Section 9.6.7			577T price list states rate element not necessary

COLORADO SGAT -- Non Ordered Rates

9.23.6 Enhanced Extended Loop (EEL)				
9.23.6.3 EEL Loop DS 2-Wire		See Exhibit A - Appendix A		
9.23.6.4 EEL Loop DS 4-Wire		See Exhibit A - Appendix A		
9.23.6.6 DS1 Capable Loop		See Exhibit A - Section 9.2.2.2		
9.23.7 Private Line EEL Conversion (UNE-Combination Private Line)		$30.72		
	Recurring Fixed	Recurring Per Mile	Non-Recurring	NOTES
9.23.8 EEL Transport				
OC-3				
OC-3 Over 0 to 8 Miles	$685.45	$186.59		
OC-3 Over 8 to 25 Miles	$690.94	$51.30		
OC-3 Over 25 to 50 Miles	$661.23	$67.66		
OC-3 Over 50 Miles	$680.28	$40.55		
OC-12				
OC-12 Over 0 to 8 Miles	$1,950.85	$58.28		
OC-12 Over 8 to 25 Miles	$1,950.85	$61.43		
OC-12 Over 25 to 50 Miles	$1,950.85	$67.62		
OC-12 Over 50 Miles	$1,950.85	$80.14		
OC-48				
OC-48 Over 0 to 8 Miles	$8,115.76	$238.63		
OC-48 Over 8 to 25 Miles	$8,115.76	$257.54		
OC-48 Over 25 to 50 Miles	$8,115.76	$291.95		
OC-48 Over 50 Miles	$8,115.76	$365.64		
		Recurring	Non-Recurring	NOTES
9.24 Unbundled Packet Switching				
9.24.1 Unbundled Packet Switch Customer Channel		$23.18		
DSLAM Functionality		$19.95		
9.24.2 Customer Channel and CLEC Provided Subloop			$60.01	
Customer Channel and Unbundled Distribution Subloop			$126.91	
Customer Channel and Shared Distribution Subloop			$60.01	
9.24.3 Unbundled Packet Switch Interface Port				
DS1		$148.55	$227.02	

COLORADO SGAT -- Non Ordered Rates

DS3		$229.13	$227.02	
10.0 Ancillary Services				
10.1 Local Number Portability				
10.1.2 LNP Managed Cuts				
Standard Managed Cuts per person per 1/2 Hr.			$26.01	
Overtime Managed Cuts per person per 1/2 Hr.			$33.66	
Premium Managed Cuts per person per 1/2 Hr.			$41.32	
10.7 Access to Poles, Ducts, Conduits and Rights of Way				
10.7.3 ROW Inquiry Fee			$143.18	
10.7.4 ROW Doc Prep Fee			$143.18	
10.7.7 Planner Verification, Per Manhole			$15.97	
10.7.8 Manhole Verification Inspector Per Manhole			$286.37	
10.7.9 Manhole Make-Ready Inspector, per Manhole			$429.56	
10.7.10 Pole Attachment Fee, per Foot, per Year				
Urban				
2002		$2.21		
2003		$2.39		
2004		$2.58		
2005		$2.77		
Non-Urban				
2002		$2.77		
2003		$3.24		
2004		$3.71		
2005		$4.18		
10.7.11 Innerduct Occupancy Fee, per Foot, per Year		$0.339		
10.7.12 Access Agreement Consideration			$10.00	
12.0 Operational Support Systems				
12.1 Development and Enhancements, per Order			No charge at this time	
12.2 Ongoing Maintenance, per Order		No charge at this time		
12.4 Trouble Isolation Charge			See MSC Charges	

[1] Rate agreed upon in workshop.

[2] Qwest will utilize the Commission TELRIC ordered rates for this element. However, Qwest reserves its right to implement market based prices sometime in the future, pursuant to CC Docket No. 96-98, paragraphs 278-287.

Exchanges in Synthesis Model (but sold by Qwest)

Idaho	Iowa	North Dakota
DRGSIDMA	AKRNIAAE	ALXNNDBC
TTONIDMA	ALSNIAAB	DNSTNDBC
VCTRIDMA	BNCRIAAB	FAMTNDBC
	BYDNIAAC	GWNRNDBC
	CLVLIAAA	LSBNNDBC
	CYDNIAAE	PMBNNDBC
	DOONIAAA	ROLLNDBC
	EKDRIAAE	WLSTNDBC
	ELGNIAAB	WTCYNDBA
	GRNVIAAB	WYNDNDBA
	GTBRIAAC	
	HULLIAAC	
	HWRDIAAE	
	IRTNIAAA	
	LAKTIAAB	
	LRMRIAAA	
	MCGRIAAE	
	MRHDIAAA	
	MRRYIAAA	
	RCRPIAAC	
	RCVYIAAC	
	SBLYIAAC	

Statewide Average -- Unbundled Platform Rates

	Rate Element		
	IA	*ND*	*NE*
Loop - 2 Wire Analog	$ 16.47	$ 17.78	$ 17.34
Line Port - Basic (2 Wire Analog)	$ 1.15	$ 1.27	$ 2.47
Intraswitch local /	$ 0.001929	$ 0.002435	$ 0.001989
Interswitch direct local /	$ 0.004968	$ 0.005980	$ 0.005088
Interswitch tandem local /	$ 0.004968	$ 0.005980	$ 0.005088
Daily Usage Record File			
DUF: Per Record /	$ 0.000948	$ 0.001100	$ 0.000829
Grooming Charges			
(Apply only in UNE-L scenario)	$ 4.61	$ 1.35	$ 1.17
Grooming-- % of Loops	3.10%	100.00%	100.00%
			$ 1.17
Grooming-- % of Loops			100.00%
OSS Charges			
On Going Maintenance, per Order (RC)	$ 1.02	$ 3.49	$ 2.52
	$ 0.3565		
NRC	Under Development	Under Development	$ 14.65
Cross Connect Charge	$ 0.43	$ 0.45	$ 0.44

/ Theses items were taken from Exhibit B

Cost-Adjusted Loop rate, UNE-P Basis

Company	State	UNE Loop Rate, per line per month	% Diff: CO UNE Loop Rate per line vs Other states.	% Diff: CO-RD UNE Loop Rate per line vs Other states.	FCC SynMod Loop cost per line.	% Diff: CO FCC SynMod Loop cost vs Other states.	% Diff: Other states vs CO Loop Rates on Cost adjusted Basis	% Diff: Other states vs CO-RD Loop Rates on Cost adjusted Basis
Qwest	IA - QVR	$ 17.84	-1%	12%	$ 14.22	0%	-1%	12%
Qwest	ND - QVR	$ 21.27	18%	34%	$ 14.52	3%	15%	31%
Qwest	NE - QVR	$ 19.86	10%	25%	$ 15.62	10%	0%	13%

Cost-Adjusted Loop Rate, UNE-L Basis

Company	State	UNE Loop Rate, per line per month	% Diff: CO-RD UNE Loop Rate per line vs Other states.	FCC SynMod Loop cost per line.	% Diff: CO FCC SynMod Loop cost vs Other states.	% Diff: Other states vs CO-RD Loop Rates on Cost adjusted Basis
Qwest	IA - QVR	$ 18.27	10%	$ 14.22	0%	9%
Qwest	ND - QVR	$ 23.07	38%	$ 14.52	3%	35%
Qwest	NE - QVR	$ 21.96	32%	$ 15.62	10%	19%

Cost Adjusted Non-Loop Rates

State	UNE Non-Loop Rate, per line per month	% Diff in UNE Non-Loop Rate: Other states vs GA	FCC SynMod Non-Loop cost per line.	% Diff in SynMod UNE Non-Loop Cost: Other states vs CO	% Diff in Cost Adjusted UNE Non-Loop Rate: Other states vs CO
IA - QVR	$ 5.58	9%	$ 4.25	4%	4%
ND - QVR	$ 8.33	63%	$ 4.48	10%	48%
NE - QVR/RD	$ 7.45	46%	$ 5.30	30%	12%

Exhibit B ---------->

Connectivity Margin for Qwest Iowa
SGAT Rates

COSTS	Statewide Average	Zone 1	Zone 2	Zone 3
Zone weights		28%	54%	18%
Loop	$17.03	$13.11	$15.64	$27.27
Port	$1.15	$1.15	$1.15	$1.15
Features	$0.00	$0.00	$0.00	$0.00
Usage	$4.53	$4.53	$4.53	$4.53
DUF	$0.29	$0.29	$0.29	$0.29
OSS - RC	$1.38	$1.38	$1.38	$1.38
Platform - Recurring Cost	$24.38	$20.46	$22.99	$34.62
NRC	$0.21	$0.21	$0.21	$0.21
Total Platform (w/NRC)	$24.59	$20.67	$23.20	$34.83

REVENUES		RES @ Qwest IA
Basic Local Svc		
UNE Zone 1	$	12.51
UNE Zone 2	$	11.81
UNE Zone 3	$	11.65
Basic Local Svc - Statewide	$	11.98
Other Revenue Sources		
Features	$	6.09
Subscriber Line Charge	$	4.82
IntraLATA Toll Contribution		
InterLATA Toll Contribution		
Access	$	0.97
Total Revenue (average)	$	23.87

TNS Bill Harvest _ 2Q01 - 1Q02

REDACTED

MARGINS - RES @ Qwest IA	Level	%

UNE-P Margins

$ / Line			Average
UNE Zon	1 - (28%)	$	3.73
	2 - (54%)	$	0.50
	3 - (18%)	$	(11.29)
	Average	$	(0.72)

% / Line		Average
UNE Zon	1	15%
	2	2%
	3	-48%
	Average	-4%

UNE-P and Resale Discount

$ / Line			Average
UNE Zon	1 - (28%)	$	4.24
	2 - (54%)	$	4.24
	3 - (18%)	$	4.24
	Average	$	4.24

EXHIBIT B (IA)-2

REDACTED FOR PUBLIC INSPECTION

Iowa Resale Margin

TSR Discount	23.5%
Residence	10.27%
Features	49.38%
Retail Revenue	
Residence	$ 11.98
Features	$ 6.09
TSR Margin (no Toll)	$ 4.24

Residential Toll Conversation MOU Per line Per Month

Average Residential Toll Minutes 2Q01 - 1Q02

Qwest		Iowa
Intra-Lata	Intra-State	30.8
	Inter-State	1.1
Inter-Lata	Intra-State	12.8
	Inter-State	66.4

Source: TNS ReQuest Market Monitor and Bill Harvesting Study

ARMIS-Based Local DEM Per line Per Month

	2001 Per Line Per Month Local DEM	Local DEM per line CAGR: 2001 vs 1998	Estimated 2002 Per Line Per Month Local DEM
2-Way DEM per Line	1,906	10.1%	2,098
1-Way DEM per Line	953		1,049

EXHIBIT B (IA)-5

REDACTED FOR PUBLIC INSPECTION

Basic Local Rates

Access Area	Monthly Line Charge	# of Wire Centers	# of Lines	Line Distribution
1	$ 10.71	55	114,087	16%
2	$ 11.68	37	266,137	37%
3	$ 12.65	43	335,920	47%
Totals/Avg.	$ 11.98	135	717,192	**100%**

Local Rate Effective Date 11/7/2000

Average Monthly Feature Revenue Per Bill	**$**	**6.09**

Source: TNS Bill Harvesting Study, 2Q01 - 1Q02

Basic Local and UNE Loop Rates by UNE Zone

UNE Rate Zone	Res Lines	UNE Loop Price	Average Local Rate	# of Wire Centers	Line Distribution
1	199,804	$13.11	$ 12.51	15	28%
2	387,434	$15.64	$ 11.81	46	54%
3	128,906	$27.27	$ 11.65	75	18%
Totals/Avg.	**716,144**	**$ 17.03**	**$ 11.98**	**136**	**100%**

Iowa - Qwest — **UNE Unit Cost Development**

		Local			Intralata toll		Intrastate InterLATA		Interstate InterLATA	
			interswitch local		On ILEC Network					
	Rates	intraswitch local	direct	tandem	intralata toll direct	intralata toll tandem	interlata toll direct	interlata toll tandem	interlata toll direct	interlata toll tandem
EO Switching orig	$ 0.001929	1	1	1	1	1	1	1	1	1
Common Switched xport	$ 0.001340									
Tandem switching usage	$ 0.000690									
Shared Transport	$ 0.001110		1	1	1	1		1		1
Reciprocal Comp/ EO sw term	$ 0.001929		1	1	1	1				
		$ 0.0019290	#########	#########	$ 0.0049680	$ 0.0049680	#########	$ 0.0030390	#########	#########
MOU		367.2	668.2	13.6	24.7	6.2	0.0	0.0	106.3	26.6
Cost per Line		$ 0.708	$ 3.320	$ 0.068	$ 0.123	$ 0.031	$ -	$ -	$ 0.205	$ 0.081

MOU Assumptions	Outbound	Inbound	total	intraoffice	tandem
Local	1049	0	1049	35%	2%
IntraLATA Toll	31	0	31	0%	20%
Intrastate InterLATA				0%	20%
Interstate InterLATA	66	66	133	0%	20%
Total	1146	66	1213		

DUF Record Calculation	Conversation MOU/MSG	Usage Records Outbound	Usage Records Inbound
Local	4	262	
IntraLATA Toll	4	8	8
Intrastate InterLATA	4	0	0
Interstate InterLATA	5	13	13
		304	

UNE Usage Cost by Service	% MOU	UNE Cost	Average Cost per Line
Local			
Intraswitch local	35%	$ 0.001929	
Interswitch direct local	64%	$ 0.004968	
Interswitch tandem local	1%	$ 0.004968	
		$ 0.003904	4.10
IntraLATA Toll			
On ILEC Network			
intralata toll direct	80%	$ 0.004968	
intralata toll tandem	20%	$ 0.004968	
		$ 0.004968	0.15
Intrastate InterLATA			
interlata toll direct	80%	$ 0.001929	
interlata toll tandem	20%	$ 0.003039	
		$ 0.0021510	-
Interstate InterLATA			
interlata toll direct	80%	$ 0.001929	
interlata toll tandem	20%	$ 0.003039	
		$ 0.0021510	0.29
Total Usage Per Line			$ 4.53

Qwest Iowa

UNE-P: Commission Ordered Rates

	By Density Zone	Zone 1	Zone 2	Zone 3	Statewide
A.	Residence Line Distribution	28%	54%	18%	100%
B.	Loop	$13.11	$15.64	$27.27	$17.03
C.	Analog Line Side Port	$1.15	$1.15	$1.15	$1.15
D.	Features	$0.00	$0.00	$0.00	$0.00
E	Local Switch Usage				$0.001929
F	Tandem Switching				$0.000690
G	Common Transport				$0.001340
H.	Shared Transport				$0.001110
I.	DUF: Per Record				$0.000948

Qwest Iowa_Daily Usage File Calculation

Usage Recording Costs	Rate	Application	Factor		Cost/Month
DUF: Per Record	$ 0.000948	Per Record	304	Records/Bill	$ 0.29