

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Qwest Corporation
Interconnection/Wholesale Price
Investigation**

Case No. PU-2342-01-296

REBUTTAL EXHIBITS OF RENÉE ALBERSHEIM

QWEST CORPORATION

MAY 30, 2003

INDEX OF EXHIBITS

DESCRIPTION

Excerpt from Transcript of FCC Forum on 5/28/97

EXHIBIT

RA-REB-1

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

IN THE MATTER OF DETERMINING PRICES
(UNEs) IN QWEST CORPORATION'S
STATEMENT OF GENERALLY AVAILABLE
TERMS (SGAT)

TC 01-098

**REBUTTAL TESTIMONY OF
RENÉE ALBERSHEIM
QWEST CORPORATION
JULY 28, 2003**

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1

I. IDENTIFICATION OF WITNESS

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

3 A. My name is Renée Albersheim. I work for Qwest Corporation (Qwest) as a Staff
4 Advocate for Policy and Law in the Information Technologies organization. My
5 business address is 930 15th Street, 10th Floor, Denver, Colorado 80202.

6 **Q. HAVE YOU FILED TESTIMONY IN THIS PROCEEDING?**

7 A. Yes, I filed direct testimony on October 15, 2002.

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

9 A. The primary purpose of this testimony is to respond to statements in the testimony
10 of Sidney L. Morrison filed on behalf of the Commission Staff, with regard to
11 Qwest's Operational Support Systems (OSS).¹ I also respond to statements in the
12 testimony of Mark L. Stacy of the Commission Staff.²

13

II. EFFICIENT USE OF OSS

14 **Q. IN HIS DISCUSSION OF EFFICIENT TECHNOLOGY, MR. MORRISON**
15 **LISTS A NUMBER OF "OSS PLATFORMS."³ IS HIS LIST ACCURATE?**

16 A. Not exactly. It is a partial list, and rather than platforms, the items listed are more
17 precisely described as "downstream applications." The applications listed by Mr.

¹ See Generally *In the Matter of Determining Prices (UNEs) in Qwest Corporation's Statement of Generally Available Terms (SGAT)*, Case No. TC 01-098, Direct Testimony of Sid Morrison, on behalf of The Staff of the Public Utilities Commission of South Dakota, Before the Public Utilities Commission of the State of South Dakota, dated June 16, 2003 ("Morrison Direct").

² See Generally *Id.*, Direct Testimony of Mark L. Stacy, on behalf of The Staff of the Public Utilities Commission of South Dakota, Before the Public Utilities Commission of the State of South Dakota, dated June 16, 2003 ("Stacy Direct").

1 Morrison are only a few of the many downstream applications that are used by Qwest
2 and CLECs for pre-ordering, ordering, provisioning, maintenance and billing of
3 various products.

4 **Q. MR. MORRISON ASSERTS THAT THE SYSTEMS HE LISTS ARE**
5 **“EXAMPLES OF PROVISIONING AND MAINTENANCE OSS,**
6 **CURRENTLY DEPLOYED...WITH THE OBJECTIVE OF INCREASING**
7 **FLOW-THROUGH BY UTILIZING MECHANIZATION TO REDUCE**
8 **COSTLY MANUAL INTERVENTION.”⁴ IS THIS CHARACTERIZATION**
9 **ACCURATE?**

10

11 A. Only to a point. The applications Mr. Morrison identified are used to mechanize
12 certain specific functions, but they do not eliminate all manual operations. For
13 example, Mr. Morrison mentions the Work Force Administration/Dispatch-Out
14 (WFA/DO) application. This application does automate workload scheduling and
15 assignments for technicians who work outside the central office. The purpose is to
16 make efficient use of available technician resources. However, this system does not
17 automate the actual work the technicians do. To imply the use of applications that
18 make efficient use of technician time, such as WFA, eliminates all manual
19 intervention is erroneous and misleading.

20 **Q. MR. STACY ASSUMES THAT THE INCLUSION OF FALLOUT RATES IN**
21 **QWEST’S COST STUDIES SUGGESTS THAT QWEST HAS OVERLOOKED**

³ Morrison Direct, p. 11.

⁴ Morrison Direct, p. 12.

1 **FORWARD-LOOKING COST SAVINGS FROM A STATE-OF-THE-ART**
2 **OSS.⁵ IS HE CORRECT?**

3
4 A. No. Mr. Stacy provides no specifics to validate his assumption, so it is not possible to
5 know the basis for his assumptions beyond his unsupported personal opinion. Based
6 on my experience with a variety of OSS, I believe Qwest does have state-of-the-art
7 OSS. In addition, the flow through rates used in the NRC cost studies reflect ISC
8 flow through performance levels that Qwest is working toward, but that Qwest
9 systems do not yet consistently achieve. This is a specific indicator of the forward
10 looking nature of Qwest's cost studies.

11 **Q. MR. MORRISON ALSO ASSERTS THAT QWEST IS NOT MAKING**
12 **EFFICIENT USE OF AVAILABLE TECHNOLOGY.⁶ DO YOU AGREE?**

13
14 A. No. As I stated previously, Qwest has state-of-the-art OSS. Qwest spends a great
15 deal of time and money to make enhancements to the applications Qwest developed
16 internally, and to obtain the latest upgrades for those applications purchased from
17 outside vendors. Qwest makes every effort to maintain "efficient technology," by
18 taking advantage of technological advancements whenever feasible and cost-
19 effective. While Mr. Morrison makes claims to the contrary, he does not provide any
20 specific examples of inefficient use of the applications cited: WFA/C, WFA/DI,
21 MARCH, PAWS and TIRKS.

⁵ *Stacy Direct*, p. 21.

⁶ *Morrison Direct*, p. 13.

1 **Q. MR. MORRISON’S DISCUSSION OF “WORK FLOW ENGINES”⁷ IMPLIES**
2 **THAT QWEST DOES NOT USE A WORK FLOW ENGINE. IS THIS TRUE?**

3

4 A. No. Qwest uses a work flow engine called Customer Request Manager (CRM).⁸

5 However, contrary to the impression created by Mr. Morrison, this work flow engine
6 does not link together all systems and it cannot eliminate all manual activity. Mr.
7 Morrison suggests that a work flow engine can accomplish this feat, but he has not
8 identified any software that has the capability to establish end-to-end electronic
9 ordering and provisioning flow.

10 **Q. MR. MORRISON OFFERS THE OPINION THAT QWEST HAS NOT**
11 **INCORPORATED “THE MOST EFFICIENT CURRENTLY AVAILABLE**
12 **SYSTEMS TECHNOLOGY AND PROCESSES” INTO ITS NON-**
13 **RECURRING COST STUDIES.⁹ WITH REGARD TO QWEST’S OSS DO**
14 **YOU AGREE?**

15

16 A. No. Based on my systems experience, I have found that Qwest employs the most
17 efficient currently available systems technology. Mr. Morrison appears to
18 erroneously conclude that because full automation is possible for some processes, it is
19 likewise possible to use such automation in all circumstances. Such a conclusion is

⁷ Morrison Direct, p. 18.

⁸ In his testimony in this docket, Mr. Morrison cited Qwest responses to data requests in New Mexico where he also represented staff. Mr. Morrison was made aware of Qwest’s use of a work flow manager when he represented WorldCom in Washington. See *In the Matter of the Continued Costing and Pricing of Unbundled Network Elements, Transport, Termination, and Resale, Before the Washington Utilities and Transportation Commission, Docket UT-003013 Part E, WorldCom Data Request Set 1 number 12*, response filed October 8, 2002.

⁹ Morrison Direct, p. 6.

1 illogical and unrealistic—there is no basis to conclude that it is always economically
2 or physically feasible. Simply because certain technologies exist that are not
3 employed by Qwest does not mean that they can be made to work together
4 or with existing systems. In fact systems integration in the telecommunications issue
5 remains a recognized challenge.¹⁰ Nor is there a guarantee that an application that
6 claims to be fully automated can, for example, process all of the products that Qwest
7 offers. And finally, there is no guarantee that the application can be scaled to handle
8 the very high volume of transactions that Qwest must process on a daily basis. It is
9 my experience that linking various technology solutions together generally involves a
10 great deal of customization and retrofitting resulting in significant increases in time
11 and expense. It is also my experience that new technologies are sometimes less
12 efficient, especially when they are stressed with high volumes of data, resulting in
13 significant expenditures to expand capacity. Mr. Morrison makes several
14 recommendations to reduce work times in Qwest's cost studies based on his view of
15 available technology, but he makes no provision for the likely additional costs of
16 implementing such new technology.

¹⁰ A recent article opens with a discussion of systems integration issues in the telecommunications industry. "Despite, and perhaps because of, the number of independent software vendors that sprouted dandelion-like across the telecom landscape over the last decade, a solution for service providers' most basic back office need – a process for end-to-end flow through – goes unfulfilled. It is ironic, and a little humbling for the salesman that must pretend otherwise, that the cause is one of communication. Applications still don't talk to each other." *"An Interface Intervention"*, TELEPHONY, Tim McElligott, page 24, May 19, 2003.

1 **III. LINE SHARING OSS**

2 **Q. MR. MORRISON ASSERTS THAT QWEST'S COSTS FOR LINE SHARING**
3 **OSS ARE UNREASONABLE.¹¹ IS HE CORRECT?**

4
5 A. No. And in fact, Mr. Morrison contradicts himself. On the one hand, he indicates
6 that Qwest should take advantage of the most efficient technology. The applications
7 Mr. Morrison identified as examples of efficient technology - WFA/C, WFA/DI,
8 WFA/DO, PAWS, MARCH, TIRKS and SWITCH - are all software owned by
9 Telcordia. Then Mr. Morrison criticizes Qwest for paying a "monopoly price" for the
10 line sharing modifications needed for Telcordia-owned applications.¹² When a
11 company purchases a license to use technologically efficient software from a vendor,
12 the vendor controls how that software may be changed. When a vendor maintains
13 control over the source code, as Telcordia does, only that vendor may make changes
14 to the source code. It is illogical to state on the one hand that Qwest should purchase
15 the most efficient software, and then to criticize Qwest for its reliance on that
16 software.

17 **Q. HAS QWEST MADE EFFICIENT USE OF THE LINE SHARING**
18 **SOLUTION?**

19

¹¹ *Morrison Direct*, p. 63.

¹² A number of Telcordia-owned applications were changed to accommodate line sharing. The changes required are discussed in detail in confidential exhibit RA-13 Statement of Work for Shared Loop, attached to my direct testimony filed January 6, 2003. This document was provided by Qwest to Telcordia when Qwest requested Telcordia change its applications to make line sharing possible.

1 A. Yes. Qwest has taken advantage of the changes that Telcordia made to the systems to
2 accommodate line sharing, by incorporating these system changes into subsequent
3 shared products. This has resulted in faster, lower-cost implementations of other
4 shared products such as remote line sharing and line splitting.

5 **Q. DID QWEST PAY THE HIGHEST POSSIBLE PRICE FOR ITS LINE**
6 **SHARING OSS MODIFICATIONS AS MR. MORRISON IMPLIES?**

7

8 A. No. Telcordia did not mandate the price for the Line Sharing Solution. Qwest and
9 Telcordia engaged in negotiations for the rate Qwest paid for the line sharing
10 modifications. It is my understanding from discussions with Information
11 Technologies (IT) management involved in those negotiations that a discount was
12 applied to the price charged to Qwest, though it is not possible to quantify the amount
13 of the discount. Even so, it is not appropriate to conclude that Qwest paid a
14 monopoly price for the changes. Mr. Morrison does not indicate how the price Qwest
15 paid was at all affected by Qwest's sale of its interest in Telcordia. When Qwest sold
16 its interest, Qwest also sold the rights to the software in question. And even before
17 the sale occurred, Qwest and the other RBOCs were required to negotiate at arms
18 length for all software changes, because ownership of Bellcore (the predecessor to
19 Telcordia) was shared among all the RBOCs. Qwest had every incentive to negotiate
20 a lower price and Mr. Morrison has provided nothing, except for a bit of unsupported
21 innuendo, to suggest otherwise.

1 **Q. DID QWEST HAVE A REASONABLE AND FEASIBLE ALTERNATIVE TO**
2 **THE PURCHASE OF TELCORDIA'S SOFTWARE ENHANCEMENTS FOR**
3 **LINE SHARING?**

4
5 A. No. It is important to remember that the solution Qwest chose to implement was
6 based on the recommendation of the joint team described in my direct testimony. The
7 joint team was made up of CLECs who intended to use the high frequency portion of
8 Qwest loops. The solution was based on the requirements defined by the members of
9 this joint team. The changes Qwest requested from Telcordia were necessary to meet
10 the electronic ordering requirements of the joint team, which were detailed in my
11 direct testimony Exhibit RA-12 Gap Matrix, a Gap Matrix prepared by the joint team
12 that indicates those system functions that needed to be changed to meet the CLECs
13 long term line-sharing needs. Even without CLEC participation in the development
14 of these requirements, the same Telcordia applications would have been impacted.
15 To avoid making changes to these applications Qwest would either have had to create
16 separate ordering, billing and provisioning systems for line sharing alone, or Qwest
17 would have had to replace the Telcordia-owned applications. It would have taken
18 Qwest significantly more time to develop a complete set of applications for the sole
19 purpose of providing electronic ordering for the line sharing product. This set of
20 applications would then have had to be integrated into the electronic ordering systems
21 for CLECs. Even without conducting a project to calculate the costs of such
22 development, viewing the effort at a high level, an experienced information

1 technology manager could determine that this option would cost significantly more
2 than the Telcordia software enhancements.

3 Logic and experience suggest that replacing all the Telcordia applications with Qwest
4 written applications would be even more costly. Remember that the applications are
5 downstream applications that Qwest enhanced and made available to CLECs for
6 UNEs and resold services. These applications were already in place at Qwest to serve
7 Qwest's own ordering, provisioning and billing needs. Therefore, they are highly
8 integrated into Qwest's own retail operations. Setting aside the obvious high cost of
9 replacing all of the applications, would it be reasonable for Qwest to undertake such a
10 significant effort for one product? A standard cost/benefit analysis would conclude it
11 is not.

12 **Q. IS MR. MORRISON'S CHARACTERIZATION OF THE ARIZONA AND**
13 **WASHINGTON COMMISSION ORDERS ON LINE SHARING OSS COST**
14 **RECOVERY ACCURATE?**

15

16 A. No. Mr. Morrison claims that the Arizona and Washington commissions explicitly
17 stated that Qwest should not be allowed to recover OSS costs for Line Sharing.¹³
18 That is not the case. Arizona and Washington limited the amount of recovery, but
19 both states granted Qwest the right to recover OSS costs for Line Sharing.¹⁴ In fact,

¹³ Morrison Direct, p. 63.

¹⁴ See, *In the Matter of the Investigation into Qwest Corporation's Compliance with Certain Wholesale Pricing Requirements for Unbundled Network Elements and Resale Discounts, Phase II Opinion and Order*, Arizona Corporation Commission, Docket No. T-00000A-00-0194, June 12, 2002; *In the Matter of the Continued Costing and Pricing of Unbundled Network Elements, Transport and Termination, Thirteenth Supplemental Order, Part A Order Determining Prices for Line Sharing, Operations Support*

1 in a subsequent decision the Washington commission directly contradicts Mr.
2 Morrison:

3 ILECs may incur additional OSS costs that are determined in part
4 by regulatory requirements over which they have no control...
5 Both Qwest and Verizon should recover any and all reasonable
6 expenses associated with OSS modifications that are required by
7 the FCC or that result in an increase in overall efficiency.¹⁵

8 **Q. IS MR. MORRISON CORRECT IN ASSUMING THAT THE NEBRASKA**
9 **COMMISSION DID NOT ALLOW LINE SHARING OSS COST**
10 **RECOVERY?**

11
12 A. No. Mr. Morrison claims that because there is no rate in Nebraska, the implication is
13 the commission considers the costs unrecoverable.¹⁶ That is not correct. The
14 Nebraska Commission was concerned that a standard process for determining the
15 over-all cost of line sharing did not exist. Still, the Commission allowed cost
16 recovery for line sharing OSS and included that cost recovery as a part of the line
17 sharing rate.¹⁷

18 **Q. HAVE OTHER STATES ESTABLISHED LINE SHARING OSS COST**
19 **RECOVERY RATES?**

Systems, and Collocation, Washington Utilities and Transportation Commission, Docket UT-003013, January 2001.

¹⁵ *In the Matter of the Continued Costing and Pricing of Unbundled Network Elements, Transport and Termination, Thirteenth Supplemental Order, Part B Order Line Splitting, Line Sharing over Fiber Loops; OSS; Loop Conditioning; Reciprocal Compensation; and Nonrecurring and Recurring Rates for UNES*, Washington Utilities and Transportation Commission, Docket UT-003013, June 22 2002.

¹⁶ *Morrison Direct*, p. 63.

¹⁷ See, *In the Matter of the Commission, on its own motion, to investigate cost studies to establish Qwest Corporation's rates for interconnection, unbundled network elements, transport and termination, and resale, Findings and Conclusions*, Nebraska Public Service Commission, Application No. C-2516/PI-49, April 23, 2002.

1 A. Yes. Line sharing OSS cost recovery rates have been established in Iowa, Montana,
2 Utah and Wyoming.¹⁸ Contrary to Mr. Morrison’s advocacy, no state has expressly
3 prohibited Qwest from recovering these OSS development costs where Qwest has
4 presented line sharing OSS costs.

5 **IV. FLOW-THROUGH**

6 **Q. WHAT DOES FLOW-THROUGH MEAN?**

7
8 A. A Local Service Request (LSR) is said to “flow-through” when the LSR has been
9 successfully submitted by a CLEC through an electronic interface and the LSR has
10 successfully passed through to the relevant downstream OSS without manual
11 intervention.¹⁹ This means that no human effort was required to process the LSR
12 through to the entry of the data into Qwest’s service order processors.

13 **Q. IF NO MANUAL INTERVENTION IS REQUIRED TO PROCESS AN LSR,** 14 **DOES IT NECESSARILY FOLLOW THAT NO MANUAL STEPS WILL** 15 **OCCUR IN THE PROVISIONING OF THE PRODUCT OR SERVICE** 16 **ORDERED VIA THAT LSR?**

¹⁸ See for example *In Re: Qwest Corporation, Proposed Decision and Order*, Iowa Department of Commerce Utilities Board, Docket No. RPU-01-6, March 25, 2002; *In the Matter of the Application of Qwest Corporation, For Authority to Open an Unbundled Network Elements TELRIC Cost Docket and For Approval of the TELRIC Cost Studies and Related Unbundled Network Element and Interconnection Prices, Order Confirming Bench Decision and Approving Stipulation of Parties*, Wyoming Public Service Commission, Docket No. DOCKET NO. 70000-TA-01-700 (Record No 6768), August 23 2002.

¹⁹ The FCC has consistently held to this definition of flow through. See, *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas, Memorandum Opinion and Order*, FCC 00-238, ¶ 179 n. 484. (“*SWBT Texas Order*”).

1 A. No. Some products can be ordered and provisioned entirely electronically. But there
2 are other products that will always require some manual steps in the provisioning
3 process. Provisioning issues are discussed in greater detail by Qwest witnesses
4 Dennis Pappas and Georganne Weidenbach. When Qwest uses the term “flow-
5 through” in reference to LSRs flowing through IMA, it is more accurately described
6 as “electronic order flow-through.” IMA, which stands for Interconnect Mediated
7 Access, is a set of electronic ordering interfaces that allow CLECs to electronically
8 submit LSRs to Qwest. These LSRs are then processed and provisioned through
9 Qwest’s back office systems. The steps involved in provisioning a product or service
10 would more accurately be described as “provisioning flow-through.” Manual work
11 that may be required in the provisioning process is not related to manual work that is
12 associated with electronic order “fall out.” Given that distinction, any discussion of
13 electronic flow-through rates only applies to whether or not manual intervention by
14 the Interconnect Service Center is required to allow a service order submitted through
15 IMA to continue through the electronic process, and on to the service order
16 processors. Therefore, the only steps in Ms. Million’s non-recurring cost studies as
17 discussed by Mr. Morrison, where electronic flow-through is appropriately discussed
18 are those involving the Interconnect Service Center. Any subsequent steps in the cost
19 studies relate to provisioning flow-through and are not related to the electronic
20 ordering process.

21 **Q. WHEN MR. MORRISON DISCUSSES FALLOUT, DOES HE DO SO IN THE**
22 **PROPER CONTEXT?**

23

1 A. No. Mr. Morrison claims that fallout, or more appropriately flow-through, should be
2 viewed “in the context of the total provisioning processes.”²⁰ Mr. Morrison fails to
3 recognize the very important and relevant distinction in processes that is essential to a
4 discussion of flow-through, especially in the context of an ILEC’s obligation to
5 provide CLECs access to its OSS. Using IMA as an example, once a CLEC’s LSR
6 passes through IMA and some intermediate software, the CLEC’s service order enters
7 Qwest’s service order processors. Once the CLEC service order is in Qwest’s service
8 order processors, CLEC orders are processed by the same downstream applications
9 used to process Qwest orders. As Mr. Pappas discusses in his rebuttal, after the order
10 leaves the ordering process, there are manual installation activities which simply
11 cannot be mechanized. As I stated before, discussions of flow-through are only
12 relevant to the flow of CLEC orders through interfaces such as IMA, up to the point
13 at which the orders enter downstream systems.

14 **Q. MR. MORRISON CLAIMS THAT ELIZABETH HAM OF SOUTHWESTERN**
15 **BELL HAS TESTIFIED IN SUPPORT OF HIS VIEW OF FLOW-THROUGH**
16 **LEVELS.²¹ IS THIS CORRECT?**

17

18 A. No. On the contrary, Ms. Ham’s precise and complete statement was,

19 We do not believe that any kind of particular level of flowthrough is required to meet
20 the requirement for nondiscriminatory access. The test is really whether, as has been
21 mentioned, the CLEC can order the service that is provisioned at parity with the
22 ILEC. Our consumer EASE product permits a 99 percent flowthrough of all service

²⁰ *Morrison Direct*, p. 19.

²¹ *Morrison Direct*, p. 17.

1 orders that are entered by our residential or consumer retail operations. We would
2 expect the same flowthrough from a trained CLEC service rep.²²

3 **Q. DOES MS. HAM AGREE WITH MR. MORRISON'S DEFINITION OF**
4 **FLOW-THROUGH?**

5
6 A. No. Note that Ms. Ham was speaking about only one of the four ordering interfaces
7 that Southwestern Bell (SBC) provides for CLECs to access SBC's OSS. The EASE
8 application is a Graphical User Interface (GUI) that can only be used for resale
9 residential orders and simple business orders.²³ A review of Ms. Ham's affidavit in
10 support of SBC's application to provide interLATA long distance in Texas²⁴ shows
11 varying flow-through rates that are in line with the forward looking flow-through
12 rates Qwest used in its nonrecurring cost studies. Ms. Ham's affidavit also states the
13 appropriate definition of flow-through:

14 The FCC defines flow-through as "the percentage of orders that an incumbent LEC
15 processes electronically through its gateway and accepts into its back office systems
16 without manual intervention (i.e., without additional human intervention once the
17 order is submitted into the system)." Flow-through "applies solely to the OSS
18 ordering function, not the OSS provisioning function. In other words, Order Flow-
19 through measures only how the competing carrier's order is transmitted to the

²² *In Re Common Carrier Bureau Operations Support Systems Forum*, May 29th, 1997. Ms. Ham did not participate in the forum on the first day, May 28th, 1997. An excerpt of the transcript of the Forum which contains the complete text of Ms. Ham's discussion of SBC's ordering interfaces is attached as exhibit RA-REB-1.

²³ A description of SBC's electronic interfaces and other OSS may be found in the OSS Overview at <https://clec.sbc.com/clec/hb/getmenu.cfm>. EASE for Business orders is described on page 2 of the overview for MO, OK, KS, AR, TX. "Business Easy Access Sales Environment (B-EASE), which is used for basic Business Resale, is a client server version of the Business Easy Access Environment (EASE) used in SWB's retail business service centers. B-EASE supports full service order generation and flow through for accounts with up to 30 lines and features a Graphic User Interface (GUI) front-end."

²⁴ See. *In the Matter of Application of SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region InterLATA Services in Texas*, CC Docket No. 00-65, Affidavit of Elizabeth Ham.

1 incumbent's back office ordering system, not how the incumbent ultimately
2 completes that order."²⁵

3 Indeed, in its decisions granting ILECs authorization to sell long distance, the FCC
4 has adopted the definition of order flow-through as: CLECs orders that "are
5 transmitted electronically through the gateway and accepted into [the ILEC's] back
6 office ordering systems without manual intervention."²⁶

7 **Q. DOES QWEST HAVE AN ORDERING INTERFACE EQUIVALENT TO THE**
8 **SBC EASE INTERFACE MENTIONED BY MR. MORRISON?**

9
10 A. No. None of Qwest's electronic ordering interfaces are limited, like EASE, to resale
11 residential or small business orders. The IMA GUI and IMA EDI interfaces take
12 CLEC orders for a wide array of residential and business network elements and resale
13 products. Notably, Mr. Morrison neglects to mention that Ms. Million's cost study
14 for OSS includes a 95% flow-through for mechanized resale orders. This level of
15 flow through is comparable to that experienced by SBC's EASE interface, but for
16 Qwest this covers orders submitted via GUI and EDI, and the orders are not limited in
17 the same way EASE orders are limited.

18 **Q. HOW IS THIS DISCUSSION OF FLOW-THROUGH RELEVANT TO**
19 **QWEST'S NON-RECURRING COST STUDIES?**

²⁵ *Id.* at ¶125.

²⁶ See, *In the Matter of Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York*, CC Docket No. 99-295, December 21, 1999, at ¶160 (FCC 99-404). See also, *In the Matter of Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, CC Docket No. 00-65, June 30, 2000, at ¶179 (FCC 00-238); *In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, CC Docket No. 00-217, January 19, 2001, at ¶ 144 (FCC 01-29).

1 A. Mr. Morrison claims that the non-recurring cost studies contain too many manual
2 operations that are not reflective of an appropriate level of flow-through. First, it is
3 only relevant to speak of flow-through with regard to activities related to transmission
4 of orders via Qwest's interfaces to Qwest's downstream systems. In the cost studies
5 presented by Ms. Million, the activities associated with the Service Delivery
6 Coordinator are the relevant manual activities that would be performed for orders that
7 do not flow-through. As will be discussed more thoroughly by Ms. Million, Mr.
8 Morrison appears not to have recognized that a flow-through factor was applied to
9 relevant products in the non-recurring cost studies, reflecting a significant reduction
10 in manual activities.

11 **Q. MR. MORRISON CLAIMS THAT TO BE TRULY FORWARD LOOKING,**
12 **AN OSS SHOULD HAVE NEGLIGIBLE FALLOUT. IS THIS REALISTIC?**
13

14 A. No. Mr. Morrison's "up-to-date electronic processing environment"²⁷ is evocative of
15 a fantasy network. A "forward looking OSS" must be based on existing technology.
16 Forward looking flow-through is that which can be realistically achieved. It is not
17 realistic to assume that a 2% fallout rate for an entire ordering and provisioning
18 process can be achieved as suggested by Mr. Morrison. To my knowledge, no ILEC
19 has achieved 2% flow through from end to end in the ordering and provisioning
20 process. In addition, I believe it would be cost-prohibitive to attempt to achieve the
21 order processing flow through levels advocated by Mr. Morrison. The cost of each
22 enhancement must be weighed against the return the enhancement will provide. As

1 each system enhancement is added to a system, fewer and fewer transactions in that
2 system will be impacted. For example, when Qwest is evaluating a change in an
3 ordering system, Qwest must compare the number of orders and/or clients that change
4 will benefit against the cost of the proposed change. Qwest believes that the cost of
5 these additional potential enhancements most likely exceeds the cost of manual
6 processing that occurs in the provisioning processes. Notably, while Mr. Morrison
7 makes changes to Qwest's cost studies by reducing work times based on his theories
8 of flow through, I am not aware that he made any changes to the cost studies to reflect
9 the significant additional costs of systems enhancements. The bottom line is that if
10 Mr. Morrison's "flow through" objectives were to be realized, the costs to CLECs
11 could actually be greater than those contained in the Qwest cost studies presented in
12 this case.

13 **Q. MR. MORRISON CITES ORDERS FROM MICHIGAN, MASSACHUSETTES**
14 **AND CONNECTICUT AS SUPPORTING HIS VIEW ON FLOW-**
15 **THROUGH.²⁸ DO THE CITED ORDERS PROVIDE THIS SUPPORT?**

16
17 A. No. Close reading of the orders indicates that the commissions were dealing with
18 circumstances far different from those in the present case. For example, the Michigan
19 Commission concluded in its order that it should set the fallout rate at 2% as an

²⁷ Morrison Direct at page 17.

²⁸ Morrison Direct at page 22.

1 incentive to Ameritech to make further improvements in its systems, since Ameritech
2 had no plans to make any further enhancements.²⁹

3 The same is true of the Connecticut order cited by Mr. Morrison. The Connecticut
4 Commission also used the 2% fallout rate to serve as an incentive to Southern New
5 England Telephone Company to make system enhancements, since the ILEC in that
6 case had demonstrated that it had no intention of improving its systems.³⁰

7 The circumstances of Ameritech and Southern New England Telephone Company at
8 the time of the Michigan and Connecticut orders do not match Qwest's. Qwest has
9 made continuous improvements to all of its systems, and has every intention to
10 continue making improvements going forward. Qwest recognizes the need to make
11 these improvements and to take advantage of technological advancements to improve
12 efficiency. Such improvements benefit Qwest as well as the CLECs. Qwest needs no
13 further incentive to continue to improve the efficiency of its systems.

14 **Q. DOES THE MASSACHUSETTS ORDER SUPPORT MR. MORRISON'S**
15 **CONTENTION?**

16

17 A. No. While the Massachusetts Commission did order a 2% rate, it did not intend that
18 rate to apply end-to-end from ordering through provisioning, nor did the commission
19 intend the rate to apply to all orders. The commission made this clarification in a

²⁹ See *Michigan PUC Case U-11831* (November 1999) at 41-42. (The Michigan order cited by Mr. Morrison was incorrectly labeled as Case No. U-11280. The Correct Case No. was U-11831 for the order issued November 1999.)

³⁰ See Connecticut PUC, Docket 97-04-10 decision (May 1998) at 129-132.

1 subsequent decision in the same docket cited by Mr. Morrison.³¹ The Massachusetts
2 commission clarified that the 2% fallout rate should only apply to electronic orders,
3 and that it should not apply to orders that require some manual intervention. “We did
4 not expect Verizon to remove Coordination Bureau costs from orders that would
5 normally be handled manually, such as hot cuts.”³² Thus, the Massachusetts
6 Commission had a much narrower view of appropriate application of flow-through, a
7 view more consistent with Qwest’s position.

8 **Q. HAS FLOW-THROUGH BEEN REVIEWED WITHIN QWEST’S REGION?**

9
10 A. Yes. The Colorado Public Utilities Commission found:

11 The Joint Interveners' proposal to include 100% electronic flow-
12 through is unrealistic. Although 100% flow-through would occur in an
13 ideal forward-looking network, TELRIC does not require an
14 assumption that even a "forward-looking" network will be an ideal
15 forward-looking network. Therefore, a level of electronic order flow-
16 through of less than 100% is appropriate. Qwest's proposed figure
17 represents a flow-through percentage higher than is currently achieved.
18 Qwest's figure also strikes us as a plausible forward-looking
19 assumption. **We adopt Qwest's figure on flow-through rates.**³³

20 **Q. DID THE WASHINGTON COMMISSION AGREE WITH MR. MORRISON’S**
21 **FLOW-THROUGH ADVOCACY WHEN HE PRESENTED IT THERE ON**
22 **BEHALF OF WORLDCOM?**

31 See, Massachusetts, D.P.U./D.T.E. 96-73/74, 96-75, 96-80/81, 96-83, 96-94 Phase 4S (September 2000).

32 *Id.*

33 See *In the Matter of U S WEST Communications, Inc.’s Statement of Generally Available Terms and Conditions*, Decision No. C01-1302; Docket No. 99A-577T Colorado Public Utilities Commission, 2001 Colo. PUC LEXIS 1140, November 13, 2001 at 63 (Emphasis Added).

1 A. No. The ALJ for The Washington Utilities and Transportation Commission adopted

2 Qwest's flow through recommendations:

3 WorldCom proposes that the Commission require Qwest to assume
4 2% fallout in its studies. WorldCom also suggests that this rate should
5 be applied once during the entire end-to-end ordering and provisioning
6 process. WorldCom's arguments are rejected because they are not
7 supported by the record. WorldCom fails to establish that the alleged
8 forward looking systems – namely Lucent's Actiview Service
9 Management System and OKI's SMART-MDF – are currently
10 available and function as represented. Furthermore, Qwest argues that
11 the application of fallout rates to individual work steps is more
12 accurate because it allows the Commission to evaluate the efficiencies
13 reflected in the cost studies in greater detail. **Qwest's argument is**
14 **persuasive and Qwest's fallout rates and methodology are**
15 **approved.**³⁴

16 Please see the rebuttal testimony of Teresa K. Million for a more thorough discussion

17 of how Qwest's flow-through rates are applied to the non-recurring cost studies.

18 **Q. WHAT IS YOUR UNDERSTANDING OF THE EXHIBIT, SLM-003, THAT**
19 **ACCOMPANIED MR. MORRISON'S TESTIMONY?**

20

21 A. As I understand it, Mr. Morrison's exhibit is constructed from the work papers that
22 were submitted with Ms. Million's non-recurring cost studies. He has extracted the
23 work steps involved in the electronic ordering and provisioning for the installation of
24 an unbundled loop. His purpose is to point out work steps that he believes represent
25 excessive manual processing. His approach is based on his inaccurate definition of
26 flow-through.

³⁴ See *In the Matter of the Continued Costing and Pricing of Unbundled Network Elements, Transport and Termination, Forty-First Supplemental Order; Part D Initial Order; Establishing Nonrecurring and*

1 **Q. DID MR. MORRISON APPROPRIATELY ANALYZE THE WORK STEPS**
2 **WITH REGARD TO FLOW-THROUGH IN HIS EXHIBIT SLM-003?**

3
4 A. No. The transmittal of the CLEC LSR to the interface with Qwest's downstream
5 systems is identified in the work papers filed by Ms. Million with the non-recurring
6 cost studies as occurring in the Interconnect Service Center. Only work at this step of
7 the product ordering and provisioning process is relevant to a discussion of flow-
8 through. All subsequent steps involve activities and downstream systems that are
9 common to the CLECs and to Qwest's retail orders. Again, since a discussion of
10 flow-through is only relevant until a CLEC order reaches the incumbent's back office
11 systems, it is not appropriate for Mr. Morrison to recommend modifications to
12 processes that are shared. It is also inappropriate and unrealistic to expect Qwest to
13 provide systems to CLECs that are far superior to those downstream systems that
14 Qwest and the CLECs both use. In addition, it appears that Mr. Morrison has ignored
15 the probability assigned to the work steps in the Interconnect Service Center. The
16 probability, as displayed in his exhibit, is 0.15, meaning 15%. In other words,
17 Qwest's cost study assumes 85% electronic order flow-through for unbundled loops,
18 indicating that these work steps will not occur 85% of the time. Or, put another way,
19 85% of the orders will flow-through to Qwest's downstream applications without any
20 manual intervention.

1 **Q. WHY SHOULD DISCUSSIONS OF FLOW-THROUGH CENTER ON THE**
2 **ORDERING PROCESS?**

3

4 A. Flow-through applies to the electronic ordering process, because CLECs are given
5 mediated as opposed to direct access to ILEC back office systems. Qwest, like other
6 ILECs, has created electronic interfaces such as IMA-EDI and IMA-GUI for CLECs
7 to submit Local Service Requests (LSRs) for ordering. These interfaces were created
8 on the basis of national standards for processing LSRs, and are the only systems
9 uniquely designed for CLEC use. CLEC LSRs are processed by these electronic
10 interfaces and passed on to Qwest's back office systems for provisioning.

11 **Q. ONCE CLEC ORDERS REACH QWEST BACK OFFICE SYSTEMS, ARE**
12 **THE SYSTEMS USED TO PROCESS CLEC ORDERS THE SAME AS**
13 **THOSE USED TO PROCESS QWEST ORDERS?**

14

15 A. Yes. Once CLEC orders pass through Qwest's electronic interfaces, they enter the
16 provisioning process. At this point, CLEC orders and Qwest orders both use the same
17 systems and the same processes and personnel.

18 **Q. DOES THIS MEAN QWEST DOES NOT NEED OR DOES NOT INTEND TO**
19 **IMPROVE ITS OSS?**

20

21 A. No, of course not. Qwest is constantly striving to enhance and improve its systems
22 and processes. As with most businesses, these efforts are on-going. This is true for
23 the electronic interfaces used by CLECs to access Qwest's OSS as well as for the

1 back office systems that are used by Qwest and the CLECs. Contrary to Mr.
2 Morrison's assertion that there is no incentive for improvement,³⁵ Qwest recognizes
3 the need for enhancements, especially to improve its service to customers, both its
4 wholesale CLEC customers and its retail end-user customers. The forward looking
5 cost studies filed by Ms. Million reflect Qwest's intention to continue improving all
6 of its processes. As evidence of Qwest's commitment to OSS enhancements, Qwest
7 agreed to meet a schedule of increased benchmark levels for flow through for four
8 products: UNE-P POTS, POTS Resale, LNP and Unbundled Loops. And Qwest has
9 made and continues to make the system enhancements necessary for each benchmark
10 level.

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

12 A. Yes, it does.

³⁵ *Morrison Direct*, p. 21.

FEDERAL COMMUNICATIONS COMMISSION

In Re:)
)
COMMON CARRIER BUREAU)
OPERATIONS SUPPORT)
SYSTEMS FORUM)

Volume: 2
Pages: 151 through 293
Place: Washington, D.C.
Date: May 29, 1997

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In Re:)
)
COMMON CARRIER BUREAU)
OPERATIONS SUPPORT)
SYSTEMS FORUM)

Room 856
FCC Building
1919 M Street, N.W.
Washington, D.C.

Thursday,
May 29, 1997

The parties met, pursuant to the notice, at

9:02 a.m.

BEFORE: RICHARD WELCH
Common Carrier Bureau
Federal Communications Commission

APPEARANCES:

On behalf of the FCC:

RICHARD WELCH
KALPAK GUDE

Panel I:

STUART KUPINSKY
Department of Justice

CHARLOTTE TERKEURST
Illinois Commerce Commission

JOHN LENAHAN
Assistant General Counsel, Ameritech

APPEARANCES: (CONT'D)

Panel I (Cont):

ELIZABETH HAM
Executive Director, Interconnection & Resale
Technical Implementation
Southwestern Bell Telephone Company

WAYNE FONTEIX
Local Markets Director, AT&T

PATRICK SOCCI
Vice-President MIS, Teleport Communications Group

VENKATES SWAMINATHAN
Director of Marketing, Telesphere Solutions

Panel II:

BETH LAWSON
Area Manager, Finance Operations
Southwestern Bell Telephone Company

MARY BERUBE
Senior Product Manager, Network Marketing & Sales
SNET

ROBERT V. FALCONE
District Manager, New Market Development, AT&T

DENNIS PERKINS
Vice-President Corporate Controller, Brooks Fiber

Panel III:

GLORIA CALHOUN
Director, BellSouth

DAVID SWAN
Vice-President Carrier Services, Bell Atlantic

BOB WELBORN
Director, Operations Planning, Sprint

ROD COX
Manager of Market Expansion/Operations,
Consolidated Communications, Inc.

APPEARANCES: (CONT'D)

LARRY BLAINE, Staff Economist, Nevada PSC

DIANE MOORE, MCI

TRACY STROMBOTNY, LCI

NANCY DALTON, AT&T

JAY BRADBURY, AT&T

HANK CLUBFELD, SAIC

I N D E X

	DIRECT	CROSS	REDIRECT	RE CROSS	VOIR DIRE
WITNESSES:					
None.					

Hearing Began: 9:02 a.m.

Hearing Ended: 1:00 p.m.

P R O C E E D I N G S

Elizabeth Ham from Southwestern Bell.

MS. HAM: Thank you, Richard.

I guess to follow also the baseball analogy -- I do not want to be the one that is left out -- I certainly hope that Southwestern Bell has hit a grand slam with the operational support systems that we are offering. We think we have, and we hope those that signed up to use them will agree.

We believe that we have provided a meaningful opportunity for the CLECs to compete by providing the multiple interfaces that we are offering. We also offer a 90 day free trial to test the interfaces, a 90 day free trial in a live mode to train the service reps with the CLEC to use the systems.

We also have support organizations that are specifically designed to help the CLECs. We have an OSS help desk that is manned 24 hours, seven days a week, to help with any interface problems that the CLEC has. We also have the local service provider service center, which is our pre-order and ordering manual center, and we have the local service provider center, which is our provisioning and repair and maintenance group.

We have delivered on our promise to provide nondiscriminatory access to all CLECs. We have 23 signed agreements with CLECs to use our OSSs. Eight of them have committed to implementation, and seven of them are using our proprietary interface.

Yesterday one of the panelists indicated that one size does not fit all. We agree 100 percent. We provide both proprietary interfaces that have been developed by Southwestern Bell so that CLECs may use them immediately, and we also provide an application to application interface based on the available industry guidelines so a CLEC can in fact build their own custom user software.

We have available EASE, which is our Easy Access Sales Environment. It is exactly the same system that our retail centers use. We provide an EDI Gateway. We also provide a new system called LEX, which is LSR Exchange

System. All of these, we believe, meet the FCC's requirements for equivalent access.

EASE, as I said, is used by our retail operation. We have over 5,000 consumer residential service reps that use it every single day. Business EASE is our proprietary business interface system. We have over 1,200 service reps using that.

The CLECs who are using EASE have exactly the same access to pre-ordering and ordering capabilities that our retail operation has. We will support in the business EASE environment up to 30 business lines and in the residential environmental up to five residential lines in one order. EASE also presents the information in both English and in USOC, so they are both there. The translation is done for the service representative.

In addition, with the EASE application there is no need for a CLEC to re-enter into their system, into their customer care system, the billing and customer information. We will provide daily a tape of all the pending and completed service order activity to each CLEC so they can feed that into their system, and they do not have to do dual entry.

LEX is a new system that we developed. It is Windows based. It is a GUI that provides the OBF/LSR standards, and it is used by CLECs that either do not have the IS capability or they are not interested in providing or doing the work for an EDI Gateway.

The CLECs can submit both resale and UNE orders into LEX. The LEX GUI uses the LSR standard formats. The use of the LSR standard formats then provides the same standards that are developed for all ILECs to be used with the mechanized system into the Southwestern Bell interfaces.

LEX will be available for testing. We have two CLECs who will test it in June, and it will be updated as any OBF standards have been issued and finalized.

Of course, EDI is the application to application interface based on the OBF standards. It provides both capabilities for resale and UNE. I believe that EDI is an example of the work that Southwestern Bell is doing in advance of industry standards, just as the ATIS committee recommended yesterday.

EDI does meet all of our negotiated agreements. It provides functionality in advance of finalized standards, and we are conforming to the guidelines to merge all of the EDI standards that have been provided by OBF. We started testing ED with a large CLEC, and we hope to have good results on the transactions that are being provided by the CLEC over the Gateway.

We also support the submission of manual orders. We will also submit the submission of manual orders into our LSP service center who do not want for whatever reason to utilize an electronic interface.

For order status, we provide a GUI located on our tool bar that provides real time access to pending and posted service orders for individual CLECs.

I have ten seconds. I better hurry up.

We do not believe that any kind of particular level of flowthrough is required to meet the requirement for nondiscriminatory access. The test is really whether, as

has been mentioned, the CLEC can order the service that is provisioned at parity with the ILEC.

Our consumer EASE product permits a 99 percent flowthrough of all service orders that are entered by our residential or consumer retail operations. We would expect the same flowthrough from a trained CLEC service rep.

In addition, on our EDI flowthrough we support residential and basic business resale, conversion with change, conversion as is, a disconnect, suspend, restore and semi-public. We will have enhancements to EDI available in June for a new connect, a change order and a records order.

We have, and I guess I will talk a little bit about performance measurements. We have negotiated measurements for installation, repair, ordering and provisioning. We also have liquidated damages. Southwestern Bell will provide any parity measurement that we currently measure for ourselves for resale services.

In addition to that, we will negotiate any other performance measurements on unbundled network elements that the CLEC wishes to negotiate. We believe they are free to negotiate any kind of additional measurements, and if they are willing to pay for them we will put them in.

In no event do we believe that performance standards should be imposed upon a CLEC or an ILEC. They should be required. In fact, the CLEC should be required, if we do have imposed measurements, to provide accurate and detailed forecasts of their volumes.

We will, as we have been, continue to negotiate in good faith. We will work individually with CLECs and the industry to provide the interfaces and to provide the functionality that they require for their business.

Thank you.

MR. WELCH: Thank you, Elizabeth.

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Would any of the other panelists like to respond to that?

MS. HAM: I would.

MR. WELCH: Elizabeth?

MS. HAM: Thank you.

As I said in my opening statement, we believe that we have met the requirement. We also agree with Stuart. We do not want manual processes in Southwestern Bell. They are expensive on the human size, and we agree that any type of fallout may delay the process.

We also are working diligently to flowthrough as much of the EDI application to application transactions and capabilities as possible. What we have done is to focus on the high volumes. There will be some manual fallout and some manual handling on unbundled network elements because that does not, at least in our market, seem to be where the

high volume is currently. The high volume is in resale, whether you are using an EDI Gateway or whether you are using our proprietary interface.

There are certain orders that we do not process for ourselves in a mechanized environment. They are manual. When we do develop a mechanized process for any of those order types for our own retail operations, we will pass along the same capabilities to the CLECs who are using our proprietary interfaces.

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(Whereupon, at 1:00 p.m., the hearing was concluded.)

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REPORTER'S CERTIFICATE

FCC DOCKET NO.: N/A
CASE TITLE: Common Carrier Bureau Operations Support
Systems Forum
HEARING DATE: May 29, 1997
LOCATION: Washington, D.C.

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the Federal Communications Commission.

Date: _05/29/97_

Official Reporter
Heritage Reporting Corporation
1220 "L" Street, N.W.
Washington, D.C. 20005
Peter Knight Shonerd

TRANSCRIBER'S CERTIFICATE

I hereby certify that the proceedings and evidence were fully and accurately transcribed from the tapes and notes provided by the above named reporter in the above case before the Federal Communications Commission.

Date: _06/06/97_

Official Transcriber
Heritage Reporting Corporation
Diane Duke

PROOFREADER'S CERTIFICATE

I hereby certify that the transcript of the proceedings and evidence in the above referenced case that was held before the Federal Communications Commission was proofread on the date specified below.

Date: _06/09/97_

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Don R. Jennings