

BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE PRICING)
PROCEEDING FOR INTERCONNECTION,)
UNBUNDLED ELEMENTS, TRANSPORT) Docket Nos. UT-
960369; UT-960370;)
AND TERMINATION, AND RESALE) UT-960371
[FOR U S WEST COMMUNICATIONS, INC.])
[FOR GTE NORTHWEST INCORPORATED])

EXHIBIT No. _____

RESPONSIVE DIRECT

TESTIMONY OF

BARBARA J. BROHL

ON BEHALF OF

U S WEST COMMUNICATIONS

JANUARY 18, 2000

IDENTIFICATION OF WITNESS

1

2

3 Please state your name and business address.

1 My name is Barbara J. Brohl. My business address is 1999 Broadway, 10th Floor, Denver,
2 Colorado 80202.

3
4 **By whom are you employed and in what capacity?**

5 I am employed by U S WEST Communications, Inc. (U S WEST) as a Director in the
6 Information Technologies Wholesale Systems Regulatory Support Group.

7
8 **PLEASE DESCRIBE YOUR WORK EXPERIENCE AND EDUCATION.**

9 Currently, my responsibilities include identifying and managing regulatory issues involving
10 U S WEST's operational support systems (OSS) as a result of the Telecommunications
11 Act of 1996, FCC orders, state commission decisions, and other legal and regulatory
12 matters. Prior to my current assignment, I was involved in application development
13 projects for 15 years in a variety of roles: programming and systems development,
14 systems architecture, and project management. Each role is an essential step in
15 traditional software development life cycle. In addition, I managed the Information
16 Technologies department's compliance with the restrictions of the Modification of Final
17 Judgment and the requirements of Open Network Architecture. During that time, I
18 became certified by the Institute for Certification of Computing Professionals (ICCP) as
19 a Certified Computing Professional (CCP), and then received a Bachelor of Science
20 Degree in Business / Computer Science from Regis University in 1991. In 1995, I
21 received a Juris Doctorate Degree from the University of Denver, School of Law. I then
22 left U S WEST for approximately two years to work as a judicial law clerk for the

1 Colorado Supreme Court. Since my return to U S WEST, I have worked in the
2 Wholesale Systems Regulatory Support group in the Information Technologies
3 organization.

4

5

PURPOSE OF TESTIMONY

6 **WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 The purpose of my testimony is to discuss the systems development and cost implications
8 of the wholesale deaveraging scheme proposed by Mr. Spinks of the Washington
9 Commission staff. I will explain that while the proposal is technically feasible, it is not
10 practical. In addition, it would require a significant development effort to accomplish,
11 which would come at a very high cost. It would also impact the order-taking process
12 overall.

13

14

RESPONSE TO MR. SPINKS' DEAVERAGING PROPOSAL

15 **WHAT IS MR. SPINKS PROPOSING?**

16 Mr. Spinks proposes deaveraging rates for the loop on the basis of density zones, using the
17 HAI cost model, in combination with a calculation of loop distance, which is based on
18 the distance of the customer in a census block from a wire center. Mr. Spinks also
19 proposes deaveraging rates for the switch on the basis of density zones.

20

21 **HAS UNE DEAVERAGING BEEN ORDERED IN OTHER STATES? IF SO,**

1 WHICH ONES?

2 Yes. Deaveraging has been ordered in Colorado, New Mexico, Utah, and Wyoming.

3

4 HAVE ANY OF THESE STATES ORDERED DEAVERAGING USING A

5 PROPOSAL THAT INCORPORATES LOOP LENGTH LIKE THE ONE

6 PROPOSED BY STAFF?

7 No. All of the states have ordered deaveraging on the basis of retail zones or MSAs. None

8 have incorporated loop length by kilofeet into their pricing.

9

10 IS THE RATE PLAN OFFERED BY MR. SPINKS TECHNICALLY FEASIBLE?

11 Yes. However, although the Washington Staff proposal may be technically feasible, it is not

12 practical. To implement this proposal would require a significant amount of

13 development at considerable cost. The estimates provided here are at a very high level

14 and are based on experience with U S WEST systems, and costs of implementing similar

15 complex change requests. A more precise estimate is not possible without more time to

16 refine the requirements and prepare a more complete and accurate development request.

17 Such an estimate must follow the Capability Maturity Model (CMM) for systems

18 development, currently in place at U S WEST. An idea assessment and a statement of

19 work would have to be completed before it would be possible to prepare a budget for

20 labor and other expenses as well as time required to implement such a change.

21 DOES U S WEST CURRENTLY MAINTAIN LOOP LENGTH DATA IN ITS OSS

1 IN A FORM SUITABLE FOR PRE-ORDERING, ORDERING AND BILLING?

2 No. It would be an absolute requirement to maintain very precise loop lengths to each
3 service address in order to facilitate the ability to use loop lengths for billing purposes.
4 LFACS (Loop Facilities Assignment and Control System) is the system that contains a
5 mechanized inventory of outside plant facilities (e.g. facility addresses, cables, cable
6 pairs, serving terminals, cross connection devices, loops, etc.). LFACS also contains
7 loop lengths, however, not to the precision needed to support the staff's proposal.
8 LFACS was designed for engineering only, therefore its data was not intended for pre-
9 ordering, ordering or billing purposes. Because the data is not as precise as would be
10 necessary for billing, the use of this data for that purpose would likely result in a number
11 of billing disputes.

12
13 **WHAT WOULD U S WEST HAVE TO DO TO IMPLEMENT MR. SPINKS'**

14 **PROPOSAL/RATE PLAN?**

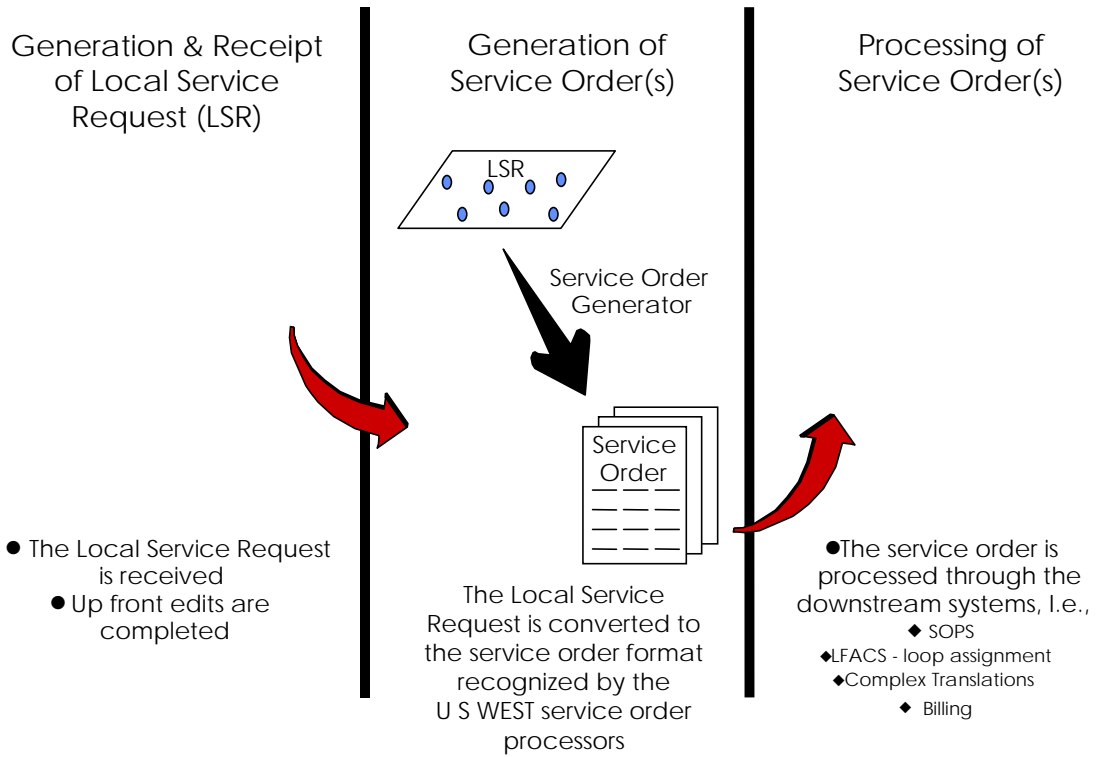
15 It would be necessary to incorporate loop length into the pre-order, order and billing
16 processes.

17 To incorporate loop length into the pre-order process, every loop in LFACS would
18 have to be populated with the precise length. This would require a validation of
19 every loop in the state of Washington¹ through an MLT (metallic loop test) or some
20 other means. An MLT is used to test and analyze the condition of customer loops

¹ This analysis is limited to Washington because no other state has ordered UNE loop deaveraging to occur using the scheme proposed by staff.

1 and can also be used to derive a theoretical loop length when the actual loop length
2 is not available. Once each loop has been validated, then a manual correction must
3 be made to the LFACS database reflecting the corrected data. This would be a very
4 large, manually intensive effort.

5
6 To incorporate loop length into the service order process, the process would have to
7 account for some variation of USOCs (universal service order codes) driven by
8 kilofoot ranges. In other words, different USOCs would be needed for different loop
9 lengths because the loop lengths would drive the billing rates. To understand the
10 magnitude of this statement, a little background may be helpful. Once a request for
11 service is submitted to U S WEST, the LSR (local service request – the CLEC’s
12 request to U S WEST to add new service or change existing service) must be
13 processed through all of the systems necessary to deliver service to a customer. The
14 service ordering process is the component that takes the CLEC’s LSR and converts
15 it to the service order format required to process the request through U S WEST
16 service order systems. The ordering process is comprised of three major functions
17 depicted in the following picture and explained below.



1

2

Local Service Request Generation and Receipt. A CLEC generates an LSR, as

1 defined by the OBF, and transmits it to U S WEST either via an electronic
2 interface or facsimile.

3 Service Order Generation. U S WEST must take the information from the LSR and
4 create one or more service orders. A service order contains product codes
5 (USOCs - Universal Service Order Codes) and Field Identifiers (FIDs - additional
6 information required to provide the product). U S WEST's OSSs only
7 understand information contained on service orders, not LSRs.

8 Service Order Processing. Service orders are processed by many downstream systems
9 until service is provisioned and customer accounts are updated.

10

11 As can be seen, many systems would have to be changed not only to recognize the new
12 USOCs, but also to understand the kilofeet sensitivity of those USOCs with respect to
13 billing. In addition to the work described above, the USOCs and their associated rates
14 would have to be loaded into the billing system in order to incorporate loop length into
15 the billing process.

16

17 **WHAT ADDITIONAL IMPACT WILL MR. SPINKS' PROPOSAL HAVE ON**
18 **PRE-ORDER AND ORDER PROCESSING?**

19 First, this proposal places a burden on service representatives to perform a facility query into
20 LFACS on all pre-order and order transactions, in order to determine the loop length. It
21 may be possible to automate this process, however, this option would require additional

1 systems development costs. At this time it is not possible to determine the feasibility or
2 prepare an estimate without further investigation. Also, such automation would only be
3 possible for POTS-type orders. Other, more complex orders would have to be handled
4 manually by the service representatives.

5
6 Second, there would likely be an impact to flow-through. Flow-through involves: 1) the
7 electronic translation of the information on the LSR into service orders recognized by
8 U S WEST's OSSs; and 2) the electronic creation of the service order in the appropriate
9 format. There are different formats and systems that support U S WEST's Western
10 Region, Central Region, and Eastern Region. Because it would be absolutely necessary
11 to assign the appropriate kilofeet-sensitive USOC for each order in Washington, until the
12 internal systems can be modified to support the LFACS database look-up within the
13 order creation phase of order processing, the USOC would have to be determined manually.
14 This is regardless of whether those LSRs were received via the Electronic Data
15 Interchange (EDI), or via the Interconnect Mediated Access (IMA) GUI Interface.

16

17 **IN HIS TESTIMONY, JERROLD THOMPSON OF U S WEST ALSO PROPOSES**
18 **THAT RATES BE DEAVERAGED FOR RETAIL CUSTOMERS. WILL THERE**
19 **BE COSTS ASSOCIATED WITH USING MR. SPINKS' RATE PLAN FOR**
20 **RETAIL LINES?**

21 Yes. There are approximately 2 1/2 million lines in the state of Washington that would have

1 to be converted to the scheme. This would involve paying service representatives
2 overtime to convert existing retail lines. It might be possible to convert up to 60% of
3 loops with an automated process instead of by hand. That is the approximate percentage
4 of loops with full or partial flow-through. But more complex accounts such as designed
5 services would have to be converted by hand.

6

7 **WHAT IS THE TOTAL APPROXIMATE COST OF IMPLEMENTING MR.**

8 **SPINKS' PROPOSAL?**

9 The total systems development and conversion costs to implement the Washington staff
10 proposal range from \$7.5 to \$12.5 million for those costs that are known. These are
11 broken down by:

12 Modification of the pre-order, order, and billing systems - approximately \$2 million.

13 Functionality to allow flow through for these kilofeet-sensitive orders - approximately
14 \$500,000.

15 Conversion of the retail lines - approximately \$5 to \$10 million.

16 In addition to these known cost estimates, there would also be significant costs associated
17 with changes to the LFACS application to make it capable of maintaining precise loop
18 lengths in that system. These costs are not known at this time, as it will be necessary to
19 develop specific requirements, and request an estimate from Telcordia to make these
20 changes. In addition, LFACS database conversion costs have not been estimated.

21 All of these costs would be incurred for development of systems to accommodate the

1 state of Washington only. No other state has requested such a scheme for loop
2 deaveraging.

3

4 **WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?**

5 Rather than use the loop length in kilofeet to accomplish deaveraging, it is much more
6 practical to make system changes for pre-ordering, ordering and billing based on
7 Metropolitan Service Areas (MSAs) as U S WEST proposes. MSAs fall on wire center
8 boundaries, and billing on this basis just requires maintenance of tables. This is why
9 U S WEST has recommended developing three MSA based regions for Washington pre-
10 ordering, ordering and billing in order to comply with the FCC order.

11

12

13 **DOES THIS CONCLUDE YOUR TESTIMONY?**

14 Yes it does.