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Issues: Network Issues
Witness: Mark J. Welch
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Southwestern Bell Telephone Company
Case No: TC-2000-225, et al.

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SOUTHWESTERN BELL TELEPHONE COMPANY

CASE NO. TC-2000-225, et al.

Rebuttal Testimony
of

Mark J. Welch

Dallas, Texas
May 2000

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Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Mark J. Welch. My office is located at Three Bell Plaza, Room 730, Dallas, Texas 75202.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?

A. I am employed by SBC – Management Service, Inc. My title is General Manager – Network Regulatory. I am providing testimony based on my position as Area Manager – Network Regulatory, Southwestern Bell Telephone Company.

Q. WHAT WERE YOUR RESPONSIBILITIES IN THIS POSITION?

A. As Area Manager – Network Regulatory, I was responsible for negotiating with certain Competitive Local Exchange Carriers (CLECs) the network architecture for interconnection agreements to meet the requirements of the Federal Telecommunication Act (FTA). I was specifically responsible for negotiating the contractual language addressing network issues, including network interconnection methods, trunking requirements, and central office code (NXX) requirements.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I have a Bachelor of Science in Industrial Engineering degree from the University of Oklahoma, Norman, Oklahoma. I have a Masters of Administrative Studies from Southeastern Oklahoma State University, Durant, Oklahoma. I have also begun pursuing a Masters of Science in Telecommunications from Oklahoma State University.

1 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

2 A. I obtained full-time employment from Southwestern Bell Telephone in 1992. Prior to that
3 time, I participated in university-sponsored work study programs. Since 1992, I have held
4 management positions in many different capacities. Specific assignments which relate to the
5 credibility of this testimony include: Long Range Technical Planning – Facility
6 Interconnection, Trunk Engineering and Planning, Current Planning – Transport Systems,
7 Network Regulatory – Interconnection, Network Regulatory – Numbering, and Network
8 Operations – Central Office Switching and Transport Equipment. During the 1996 – 1997
9 timeframe, I also served as one of the subject matter experts for network issues in
10 negotiations between SWBT and numerous CLECs relating to interconnection agreements
11 under the Telecommunications Act of 1996 (Act).

12

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

14 A. My testimony will address the Missouri interconnection negotiations with Brooks Fiber,
15 specifically the network issues for which I was responsible in these negotiations, and the lack
16 of any connection between the network issues negotiated with Brooks and Brooks' claim that
17 SWBT agreed to compensate Brooks for Internet Service Provider (ISP) traffic routed to
18 Brooks' network. I will also respond to the claim that because Internet traffic may be carried
19 over "local trunks", it should somehow be considered "local traffic" for compensation
20 purposes.

21

22 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS COMMISSION?**

23 A. No.

Q. WHAT ROLE DID YOU PLAY IN NEGOTIATING COMPENSATION RATES IN THE SWBT/BROOKS FIBER INTERCONNECTION NEGOTIATIONS?

A. I did not play any role in negotiating compensation rates with Brooks Fiber or any CLEC. As a network negotiator, my primary role in the Brooks Fiber Missouri negotiations was limited to addressing SWBT's requirement for CLECs to obtain a separate Central Office Code (NXX) for each end office that it desired to pass traffic to SWBT. This requirement was to allow SWBT to route traffic utilizing 6-digit analysis (NPA-NXX). The ability to route utilizing 6-digit analysis was important to allow SWBT to maximize the efficiency of its trunking network by allowing SWBT to direct-trunk to each Brooks office that had sufficient terminating traffic.

Q. HOW DOES THE ABILITY TO PERFORM 6-DIGIT ANALYSIS EFFECT THE ROUTING EFFICIENCY OF THE TRUNKING NETWORK?

A. When sufficient traffic is being passed between two end office switches, sufficient being at least 24 trunks worth of traffic, it is more efficient to dedicate a trunking facility between the two end office switches, rather than routing the call through the tandem switch. Provided a separate NPA-NXX is allocated to every end office switch, then the originating switch could route this traffic over a direct trunk group, thereby bypassing unnecessary switching that would be performed in the tandem switch.

Q. WERE THERE SPECIFIC ISSUES ASSOCIATED TO BROOKS' IMPLEMENTATION OF CENTRAL OFFICE CODES (NXXs) THAT IMPACTED SWBT'S ABILITY TO DIRECT TRUNK?

1 A. Yes. Due to their inability to obtain separate NXXs for each remote switch, Brooks intended
2 to share telephone numbers within the same NXX across multiple remote switches. This
3 would be accomplished by Brooks' switching equipment performing 7-digit analysis (NPA-
4 NXX-X) and routing the call accordingly. This architecture combined with the deployment
5 of a single NXX code negatively affected SWBT's ability to determine on which remote
6 Brooks' customer was being served. Brooks' telephone number allocation resulted in
7 SWBT's inability to utilize the direct end office trunking it had deployed, which was
8 deployed for the sole purpose of routing the traffic to the appropriate end office. Brooks
9 argued that even though Brooks caused SWBT's inability to route traffic to the appropriate
10 remote, SWBT should nevertheless be charged "tandem-based" compensation for all SWBT
11 traffic routed to Brooks. Because SWBT preferred direct trunking to each remote switch and
12 Brooks' deployment of NXXs hindered SWBT ability to direct traffic to the appropriate
13 office, both parties agreed that despite Brooks unusual network configuration, SWBT would
14 compensate Brooks utilizing a ratio of 90% "end office" and 10% "tandem" for all local
15 traffic terminating on Brooks' network.

16
17 **Q. WERE THERE SPECIFIC REQUIREMENTS AGREED TO BY BOTH PARTIES**
18 **RELATING TO DETERMINING WHICH TRAFFIC WAS TO BE ROUTED OVER**
19 **WHICH TRUNK GROUP?**

20 A. Yes. In order to plan and engineer its trunking network on common terms, SWBT developed
21 guidelines for determining when traffic should be delivered over "inter-LATA" trunk groups,
22 versus "intra-LATA" trunk groups versus "local" trunk groups, as described in Appendix ITR
23 (Interconnection Trunking Requirements). Appendix ITR did not address any compensation

1 issues, but did address the rules for routing traffic between companies. These routing rules
2 were based on the rate centers assigned to the NPA-NXX of the originating number and the
3 terminating number. In the negotiations, SWBT referenced the Local Exchange Tariff,
4 which outlined the "Metropolitan Exchange Area" and all the exchanges/rate centers included
5 in that area. The language agreed to by both parties in Appendix ITR outlined the following
6 routing scenarios:

- 7 1) Calls originating from NXXs assigned outside the LATA and routing to a CLEC
8 NXX assigned within the "Metropolitan Exchange" should be delivered over the
9 "inter-LATA" trunk group. Calls originating with CLEC NXXs assigned inside the
10 "Metropolitan Exchange" routing to NXXs assigned outside the LATA should be
11 routed over the "inter-LATA" trunk group.
- 12 2) Calls originating from NXXs assigned outside the "Metropolitan Exchange", but
13 within the LATA, and routing to a CLEC NXX assigned within the Metropolitan
14 Exchange should be delivered over the "intra-LATA" trunk group. Calls originating
15 with CLEC NXXs assigned within the "Metropolitan Exchange" routing to NXXs
16 assigned outside the "Metropolitan Exchange", but within the LATA, should be
17 routed over the "intra-LATA" trunk group.
- 18 3) Calls originating with SWBT NXXs assigned within the "Metropolitan Exchange"
19 and routing to a CLEC NXX assigned within the "Metropolitan Exchange" should be
20 delivered over the "local" trunk group. Calls originating with CLEC NXXs assigned
21 within the "Metropolitan Exchange" and routing to a SWBT NXX assigned within the
22 "Metropolitan Exchange" should be routed over the "local" trunk group.

1 **Q. DO YOU AGREE WITH THE TESTIMONY OF THE CLECs IN THIS CASE THAT**
2 **BECAUSE INTERNET TRAFFIC MAY BE ROUTED TO BROOKS ON “LOCAL**
3 **TRUNKS”, THAT THIS DETERMINES WHETHER RECIPROCAL LOCAL**
4 **COMPENSATION SHOULD APPLY TO THIS TRAFFIC?**

5 A. No. These witnesses are misconstruing the language in Appendix ITR, and confusing trunking
6 requirements with unrelated compensation issues. As explained above, Appendix ITR describes the
7 routing of traffic, which is solely dependent on the originating and terminating NPA-NXX and what
8 rate center is assigned to those NPA-NXXs. This appendix in no way attempts to define traffic for
9 compensation purposes. In fact, there are scenarios whereby a SWBT customer may place a “local”
10 call to a Brooks end user, where the call is routed over the intraLATA trunk group and vice-versa.

11
12 For example, a SWBT end user in St. Charles may purchase Extended Area Service, which allows
13 that end user to make calls to the St. Louis exchange without any additional per minute charge (a
14 local call). Although considered local, that call originates from an SWBT NXX assigned outside
15 the Metropolitan Exchange and is routed to an NXX assigned within the Metropolitan Exchange,
16 which is therefore routed over the intraLATA trunk group – not the local trunk group. In addition,
17 the Local Exchange Tariff identifies that SWBT calls originating from an NXX assigned to
18 Chesterfield rate center have extended area service (EAS) if routing to the Creve Coeur zone of the
19 St. Louis Metropolitan Exchange. The calls, although local from a billing perspective, may also
20 route over the intra-LATA trunk group. In summary, routing of traffic is not necessarily related to
21 the charges to the end user for the call, nor for inter-company compensation purposes.

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

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3 A. Yes, at this time.

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