

Exhibit No:
Issues: Network Issues
Witness: Richard T. Scharfenberg
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Southwestern Bell Telephone Company
Case No: TO-99-593

FILED²
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Missouri Public
Service Commission

IN THE MATTER OF THE INVESTIGATION
INTO SIGNALING PROTOCOLS, CALL RECORDS,
TRUNKING ARRANGEMENTS, AND TRAFFIC MEASUREMENT

CASE NO. TO-99-593

REBUTTAL TESTIMONY
OF
RICHARD T. SCHARFENBERG

ON BEHALF OF
SOUTHWESTERN BELL TELEPHONE

Exhibit No. 15
Date 1-24-01 Case No. TO-99-593
Reporter TRC

Little Rock, Arkansas
December 2000

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Investigation)
into Signaling Protocols, Call)
Records, Trunking Arrangements,)
and Traffic Measurement)

Case No. TO-99-593

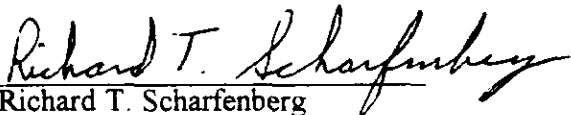
AFFIDAVIT OF RICHARD T. SCHARFENBERG

STATE OF ARKANSAS)
)
COUNTY OF PULASKI)

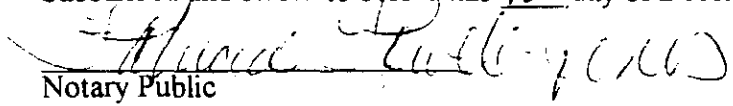
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I, Richard T. Scharfenberg, of lawful age, being duly sworn, depose and state:

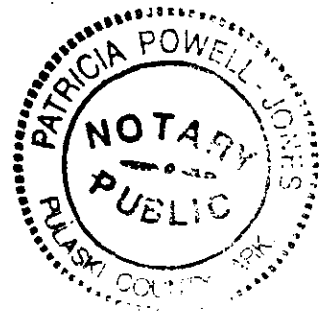
1. My name is Richard T. Scharfenberg. I am presently Vice President of R & A Consulting, Inc.
2. Attached hereto and made part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief.


Richard T. Scharfenberg

Subscribed and sworn to before this 15th day of December, 2000.


Notary Public

My Commission Expires: 3-1-2006



1 **REBUTTAL TESTIMONY OF RICHARD T. SCHARFENBERG**

2 **ON BEHALF OF**

3 **SOUTHWESTERN BELL TELEPHONE COMPANY**

4 **CASE NO. TO-99-593**

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

6 **A. I am Richard T. Scharfenberg. My business address is 2805 Timber Creek**
7 **Court, North Little Rock, Arkansas.**

8 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?**

9 **A. I am an independent engineering consultant hired by Southwestern Bell**
10 **Telephone Company (SWBT) for the purpose of providing testimony in this case.**

11 **Q. ARE YOU THE SAME RICHARD SCHARFENBERG THAT FILED DIRECT**
12 **TESTIMONY IN THIS CASE?**

13 **A. Yes.**

14 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

15 **A. I will be responding to portions of the direct testimony of Mr. David Jones who**
16 **filed on behalf of the Missouri Independent Telephone Group (MITG) and Mr.**
17 **Robert C. Schoonmaker who filed on behalf of the Small Telephone Company**
18 **Group (STCG).**

19 **Q. BOTH MR. JONES, ON PAGE 5 OF HIS DIRECT TESTIMONY, AND MR.**
20 **SCHOONMAKER, ON PAGE 23 OF HIS DIRECT TESTIMONY, APPEAR TO**
21 **CONCLUDE THAT THE EXISTING FEATURE GROUP C (FGC) SIGNALING**
22 **PROTOCOL USED FOR THE LEC-TO-LEC NETWORK SHOULD BE LEFT IN**
23 **PLACE. DO YOU CONCUR WITH THIS CONCLUSION?**

1 A. Yes. It is truly the only reasonably feasible approach. FGC is the national
2 standard for handling LEC-to-LEC intraLATA traffic. There are no plans by the
3 standards organizations to discontinue the use of FGC in the national network
4 and it continues to be used by telephone companies throughout the country.

5 As outlined in my direct testimony at pp. 15 – 16, to change signaling protocols
6 to Feature Group D (FGD) would require tandem companies like SWBT to
7 deploy additional switches and would entail major network reconfigurations. The
8 cost would be tremendous.

9 And as most of the smaller companies in this proceeding have recognized,
10 conversion to FGD signaling protocol would not provide them the capabilities
11 they seek at the terminating end office. Mr. Schoonmaker's observation at p. 12
12 of his direct testimony is correct when he stated on behalf of his group: ". . . that
13 changing to FGD signaling for terminating traffic would not address the
14 billing/compensation issues that we are most concerned with."

15 **Q. IS THIS A NEW POSITION FOR THE SMALL COMPANIES?**

16 A. No. Ever since this issue was first investigated by the parties in the technical
17 workshops following the Commission's first order eliminating the Primary Toll
18 Carrier (PTC) Plan in Case No. TO-97-217, the STCG has consistently
19 recognized and acknowledged that a conversion to FGD signaling protocol would
20 not be appropriate. In the July 15, 1998 Final Report of the PTC Technical
21 Committee, the STCG stated:

1 3. What signaling protocol (FGC or FGD) should be used for signaling
2 LEC-to-LEC intraLATA traffic?

3 **STCG:** While LEC access tariffs have provided (and continue to
4 provide) that when FGD and presubscription become available in an
5 end office that FGC will no longer be offered, those provisions are
6 inconsistent with the current capabilities built into the network as
7 described above. The STCG agrees that current network capabilities
8 essentially require that FGC signaling be used at the present time for
9 LEC-to-LEC intraLATA traffic (LEC traffic that originates on, transits,
10 and terminates solely on the LEC-owned network) in spite of what all
11 LECs current access tariffs state. The STCG believes that all LECs
12 should change their provisions regarding FGC and FGD in their
13 access tariffs to specifically identify that FGC will continue to be used
14 for LEC-to-LEC intraLATA traffic even after implementation of ILP until
15 such time as network technology evolves with more capabilities.

16 While the STCG agrees that FGC may continue to be used for the
17 present time because of the current state of technology, it believes that
18 this should be done for a temporary time frame until standards can be
19 changed to achieve the recording capabilities outlined in the response
20 to Issue #II.A.2. All LECs should be required to change to the new
21 standard, when it is developed and available, whether it be a
22 modification to FGC or FGD, or some other protocol.

23 (Final Report of the PTC Technical Committee, filed July 15, 1998, in Case No.
24 TO-97-217, at p. 21.)

25 **Q. MR. JONES AT PAGE 7 OF HIS DIRECT TESTIMONY CLAIMS THAT IT**
26 **WOULD BE "APPROPRIATE TO TREAT THE FORMER PTCs AS IXCs TO**
27 **ENSURE FAIR COMPETITION BETWEEN THEM . . . " IS THE LEC's**
28 **CONTINUED USE OF FGC SIGNALING DISCRIMINATORY?**

29 **A.** No. As I explained at pp. 10 – 12 of my direct testimony, the quality of the
30 access services being provided with FGC and FGD are essentially the same. To
31 my knowledge, no IXC has proposed the elimination of FGC. In fact, AT&T's
32 position on this very issue in the Final Report of the PTC Technical Committee,
33 p. 21, in Case No. TO-97-217 was: "At this point in time, it appears that FGC is

1 an acceptable solution." In Case No. TO-99-254 (the second PTC case), AT&T
2 took no position on this issue. And I understand that AT&T has recently
3 withdrawn from this case. If any IXCs perceived the LECs' continued use of
4 FGC signaling to be discriminatory, I would have expected them to be actively
5 opposing it.

6 **Q. AS PART OF MITG'S TERMINATING COMPENSATION PROPOSAL, MR.**
7 **JONES AT PAGE 5 OF HIS DIRECT TESTIMONY MAKES AN ALTERNATIVE**
8 **RECOMMENDATION THAT MCA TRAFFIC BE ROUTED ON SEPARATE**
9 **TRUNK GROUPS. DO YOU AGREE WITH THIS PROPOSAL?**

10 **A.** No. As covered in detail in my direct testimony, the deployment of small trunk
11 groups is inefficient, costly and could have a negative impact on customer
12 service. Tandem companies like SWBT should not be required to split trunk
13 groups as proposed by Mr. Jones.

14 **Q. MR. JONES ON PAGE 4 OF HIS DIRECT TESTIMONY, PROPOSES THE**
15 **IMPLEMENTATION OF NETWORK TRANSLATIONS TO BLOCK**
16 **NONPAYING WIRELESS CARRIER TRAFFIC. DO YOU AGREE WITH THIS**
17 **PROPOSAL?**

18 **A.** No. Mr. Hughes of SWBT indicates in his rebuttal testimony that implementation
19 of translations to block CLEC, Wireless, or any other carrier's traffic is generally
20 inappropriate. From a network perspective, making translations changes to
21 implement blocking should be a last resort. Network translations involve the
22 construction of many tables that denote how each type of call should be routed
23 as well as other instructions for call processing and switch maintenance. These

1 translations are complicated and vary between each switch type. The use of
2 switch translations to block calls from nonpaying carriers would introduce many
3 additional translations to an already complex system. The potential for
4 translations errors would be unnecessarily introduced into the network.
5 Modifying the network is not the appropriate method to resolving billing disputes.

6 **Q. IN THEIR DIRECT TESTIMONY, MR. JONES ON PAGE 7 AND MR.**
7 **SCHOONMAKER ON PAGE 7, CLAIM THAT THE FORMER PTCs DO NOT**
8 **HAVE THE CORRECT INCENTIVES TO MEASURE AND AUDIT THEIR**
9 **PROCESSES TO ASSURE ACCURATE TERMINATING COMPENSATION. DO**
10 **YOU AGREE WITH THEIR CLAIMS?**

11 **A.** No. The Call Code 006 records made for FGC calls are used for end-user billing
12 of SWBT customers, billing to the companies represented by the MITG and
13 STCG and other independent companies and billing to other former Primary Toll
14 Carriers (PTCs). Since most of the billing for intraLATA calls depend on these
15 records, every effort is made to insure their accuracy. The switching and AMA
16 recording systems used in the network do not distinguish between calls
17 completed to SWBT end-users and independent company end-users and
18 therefore our technicians do not treat calls to MITG and STCG customers any
19 differently than calls to SWBT customers. The recording of all intraLATA toll
20 calls is important and every effort is made to accurately record these calls.

21 **Q. DOES SWBT HAVE A SYSTEM IN PLACE THAT CAN BE USED TO**
22 **MONITOR THE ACCURACY OF THE RECORDING OF FGC CALLS?**

1 A. Yes. As discussed in my direct testimony, the AcceSS7 Business Intelligence
2 System can be used to identify calls being terminated to an end office that may
3 not have been recorded in the originating office. The source of the missing
4 billing data can be identified and the appropriate action taken to correct any
5 billing problems found. Periodic studies of the data contained in the SS7
6 signaling system as compared to the AMA data during the same period of time
7 can be made to insure the future accuracy of the AMA recording system. The
8 use of the AcceSS7 Business Intelligence system that has already been
9 deployed is much preferred to the deployment of a new terminating recording
10 system proposed by Mr. Jones.

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

12 A. Yes.