Exhibit No:

Issues:	Outside Plant
Witness:	Dave S. Borders
Type of Exhibit:	Surrebuttal Testimony
Sponsoring Party:	Southwestern Bell Telephone Company
Case No:	TO-2000-322

SOUTHWESTERN BELL TELEPHONE COMPANY

CASE NO. TO-2000-322

Surrebuttal Testimony

of

Dave S. Borders

February 2000

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

FILED[3]
FEB 10 2000
Missouri Public Service Commission

In the Matter of the Petition of	)	
DIECA Communications, Inc	)	
D/B/A Covad Communications Company	)	TO-2000-322
for Arbitration of Interconnection	)	
Rates, Terms, Conditions and Related	)	
Arrangements with Southwestern	)	
Bell Telephone Company	)	

AFFIDAVIT OF DAVE S. BORDERS

STATE OF TEXAS)
) SS
CITY OF DALLAS)

I, Dave S. Borders, of lawful age, being duly sworn, depose and state:

1. My name is Dave S. Borders. I am presently Director – Planning and Engineering for Southwestern Bell Telephone Company.

2. Attached hereto and made a part hereof for all purposes is my surrebuttal 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.

Dave S. Borders

Subscribed and sworn to before me on this 1st day of February 2000.

HATTIE C. WYATT
NOTARY PUBLIC
State of Texas
Comm. Exp. 09-17-2000

Notary Public

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Dave S. Borders and my business address is One Bell Plaza, Room 2312.04, Dallas, Texas 75212.

Q. ARE YOU THE SAME DAVE S. BORDERS WHO FILED REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to certain portions of the rebuttal testimony of Myron E. Couch and Shawnee Claiborn-Pinto that was filed on behalf of the Staff of the Missouri Public Service Commission ("Staff"). Specifically, I will respond to the quantity of time that the Staff estimates that it takes a cable splicing technician to remove load coils, bridged tap, and repeaters.

REMOVAL OF A LOAD COIL

Q. WITH REGARD TO THE REMOVAL OF A LOAD COIL, STAFF ESTIMATES THAT, ON AVERAGE, A CABLE SPLICING TECHNICIAN WILL BE ABLE TO TRAVEL TO A SPECIFIED LOCATION, SECURE THE LOCATION, OPEN THE TERMINAL, LOCATE THE SPECIFIC CABLE PAIR, CUT OUT THE LOAD COIL, RESPLICE THE CABLE PAIR, RESTORE THE BINDERS AND

CLOSE UP THE TERMINAL IN ABOUT 120 MINUTES. DO YOU AGREE WITH THIS ESTIMATION?

A. No. Staff's estimate regarding the amount of time that it takes to remove a load coil is wholly inadequate. The estimated time for the cable splicing technician to remove one load coil is 4 hours. However, there are usually three load coils at three different locations on the loop which must be removed in order to condition an xDSL capable loop. This requires the cable splicing technician to physically move to three different locations. Thus, on average, the estimated time for the cable splicing technician to remove all three load coils is 12 hours. This includes, per load coil:

- Accessing the cable: two hours [this includes travel time, traffic and work area protection, air pressure, set up safety (pumping the manhole and ventilating the manhole), and accessing the cable].
- Splicing time: one hour [this includes opening the splice case, accessing and identifying the cable pairs, detaching the load coil, re-splicing the pair and closing the splice case].
- Close down time: one hour [includes reloading equipment on the truck, removing safety, traffic, work area protection, air pressure, and travel time].

Q. DOES MR. COUCH AGREE THAT STAFF'S ESTIMATE OF THE AMOUNT OF TIME THAT IT TAKES TO REMOVE A LOAD COIL FROM AN XDSL CAPABLE LOOP IS UNDERSTATED WITH REGARD TO MANHOLE WORK?

A. Yes. On page 5 of Mr. Couch's rebuttal testimony, Mr. Couch specifically states that in situations involving manholes it will take longer than 120 minutes to remove load coils from an xDSL capable loop.

Q. HOW OFTEN ARE LOAD COIL LOCATED IN MANHOLES?

A. The majority of the time the first two load coils on an xDSL capable loop will be located in manholes. SWBT uses a H88 loading design for transmission of voice telephone service as described in Mr. Lube's Direct Testimony on page 10. This loading design places the first load coil 3,000 feet from a central office, the second load coil 9,000 feet from a central office, and the third load coil at 15,000 feet from a central office. The majority of the time the load coils that are located 3,000 feet and 9,000 feet from a central office will be in manholes. Moreover, in a metropolitan area, the third load coil, which is located 15,000 feet from a central office can also be located in a manhole. Specifically, in urban and suburban wire centers, it is my experience that depending on the size of the cable runs, the third load coil will be in a manhole approximately 75 per cent of the time. It can be more or it could be less depending on the service demands and projected growth of that cable run.

Q. DOES COVAD DISPUTE THE FACT THAT MOST LOAD COILS ARE LOCATED IN MANHOLES?

A. No. On page 24 of Covad witness John C. Donovan's testimony he states that he assumes that the first two load coils locations will involve underground cable at manhole

locations. Further, as stated above, in metropolitan areas the first three load coils can be located in manholes.

Q. WHY DOES WORK IN AN UNDERGROUND ENVIRONMENT (MANHOLE) REQUIRE MORE TIME THAN WORK IN A BURIED ENVIRONMENT AND/OR AERIAL ENVIRONMENT?

A. The time that is required to ventilate a manhole and pump water out of it is a significant factor in the additional time involved in a manhole. The amount of time that is required to ventilate a manhole is based on its size and the capacity of the air blower being used. As indicated on Schedule 1, which is attached hereto, the least amount of time required to ventilate a manhole is 5 minutes. This assumes a manhole of a 1000 cubic feet and an air blower that has an effective blower capacity of at least 1400 cubic feet per minute. The largest amount of time required to ventilate a manhole is 120 minutes. This assumes a manhole of 10,000 cubic feet and an air blower that has an effective blower capacity of 300 cubic feet per minute. Moreover, if the technician smells earth gases when removing the manhole cover, the ventilating time is tripled.

Additionally, the cable splicing technician must pump water from the manhole. The time required to perform this task is determined by the amount of water and the capacity of the pump. It may also be necessary to do work site preparation and to pump water from adjacent manholes to clear the water in the manhole where the conditioning is to be performed.

REMOVAL OF BRIDGED TAP

Q. WITH REGARD TO THE REMOVAL OF BRIDGED TAP, STAFF ESTIMATES THAT, ON AVERAGE, A CABLE SPLICING TECHNICIAN WILL BE ABLE TO TRAVEL TO A SPECIFIED LOCATION, SECURE THE LOCATION, OPEN THE TERMINAL OR CLOSURE, LOCATE THE CORRECT CABLE PAIR, VERIFY THE PAIR, CUT OUT THE BRIDGED TAP, REPLACE THE BINDERS AND CLOSE THE TERMINAL IN ABOUT 120 MINUTES. DO YOU AGREE WITH THIS ESTIMATION?

A. Yes. As Myron E. Couch states on page 6 of his Rebuttal Testimony, Staff estimates that a cable splicing technician would need about two hours (120 minutes), on average, to accomplish the above-referenced tasks. Further, as is reflected on Schedule 2, Staff's Estimated Conditioning Costs, which is attached to the Rebuttal Testimony of Shawnee Claiborne-Pinto, Staff appropriately estimates that a cable splicing technician will need to remove bridged tap at two locations for a total of 240 minutes (120 minutes x two locations = 240 minutes).

REMOVAL OF A REPEATER

Q. WITH REGARD TO THE REMOVAL OF A REPEATER, STAFF ESTIMATE THAT, ON AVERAGE, A CABLE SPLICING TECHNICIAN WILL BE ABLE TO COMPLETE THIS ASSIGNMENT IN ABOUT 120 MINUTES. DO YOU AGREE WITH THIS ESTIMATIMATION?

A. No. Staff's estimate of the amount of time that it takes to remove a repeater is wholly inadequate. The estimated time for the cable splicing technician to remove a repeater is four hours. This includes:

- Accessing the cable: two hours [this includes travel time, traffic and work area protection , air pressure, set up safety (pumping the manhole and ventilating the manhole), and accessing the cable].
- Splicing time: one hour [this includes opening the splice case, accessing and identifying the cable pairs, detaching the load coil, re-splicing the pair and closing the splice case].
- Close down time: one hour [this includes reloading equipment on the truck, removing safety, traffic, work area protection, air pressure and travel time].

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes, it does.