Exhibit No:
Issue: Cost
Witness: Flappan
Type of Exhibit : Testimony
Sponsoring Party: AT&T Communications of the Southwest, Inc.
Case No: TO-98-115

IN THE MATTER OF AT&T COMMUNICATIONS OF THE SOUTHWEST, INC.'S PETITION FOR SECOND COMPULSORY ARTIBRATION PURSUANT TO SECTION 252(B) OF THE TELECOMMUNICATIONS ACT OF 1996 TO ESTABLISH AN INTERCONNECTION AGREEMENT WITH SOUTHWESTERN BELL TELEPHONE COMPANY

TESTIMONY

OF

ROBERT P. FLAPPAN

Jefferson City, Missouri
August 24, 1998

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of AT&T Communications of the Southwest, Inc's Petition for Second Compulsory Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Southwestern Bell Telephone Company	))))))	**Case No. TO-98-115**

AFFIDAVIT OF ROBERT P. FLAPPAN

STATE OF KANSAS)

COUNTY OF)

I, Robert P Flappan, of lawful age, being first duly sworn deposes and states:

1. My name is Robert P. Flappan. I am a District Manager for AT&T Communications of the Southwest, Inc. in its Law & Government Affairs organization.

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

Robert P. Flappan

Subscribed and sworn to this 21st day of August, 1998

Notary Public

My Commission Expires: 10/22/2000

RENE' MARTINEZ
Notary Public • Notary Seal
STATE OF MISSOURI
Jackson County
My Commission Expires: Oct. 22, 2000

TABLE OF CONTENTS

MISSOURI CASE NO. 98-115

DIRECT TESTIMONY OF ROBERT P. FLAPPAN

ON BEHALF OF AT&T COMMUNICATIONS OF THE SOUTHWEST, INC.

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Robert P. Flappan. My business address is 11020 W. 122nd Street, Overland Park, Kansas, 66213.

Q. BY WHOM ARE YOU EMPLOYED?

A. I am employed by AT&T as District Manager of Pricing and Cost. My responsibilities currently include developing and presenting AT&T's positions on local exchange carrier pricing and costing issues. My territory includes the state of Missouri, as well as the states of Arkansas, Kansas, Oklahoma and Texas.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I received a Bachelor of Science Degree in Business Administration, with honors, from the University of Missouri-Kansas City in 1981. I received a Master of Science Degree in Business Administration (MBA), with honors, from the University of Missouri-Kansas City in 1983. Since receiving my MBA, I have continued my education by attending USTA Separations Training, the Brookings Institution course on Business and Public Policy, Bellcore courses on the Switching Cost Information System, the Common

Channel Signaling Cost Information System and various other technical, financial and managerial courses. In the eleven years that I have been directly involved with telecommunications regulation, I have studied numerous books, articles, pieces of testimony, testimony attachments and other documents relating to the pricing and costing of telecommunications products and services. I have also spent many hours engaged in economic, costing and pricing, and technical discussions with a variety of professionals with expertise in those areas.

Q. WOULD YOU DESCRIBE YOUR RELEVANT WORK EXPERIENCE?

A. I was employed by AT&T in 1982 at the Bell System Sales Center as a Telemarketing Supervisor where I sold AT&T products and network services. In 1984, I accepted a position with AT&T's Network Organization, where I held positions in Access Management, as a Switched Access Engineer and as a Methods and Procedures Supervisor, and on the Network Services Division Staff. In 1987, I transferred into what is now AT&T's Government Affairs Organization, where I have had interstate and intrastate regulatory responsibilities, and where I have represented and testified for AT&T on technical, economic and policy issues. In April of 1996, I was named District Manager of Pricing and Cost.

Q. HAVE YOU TESTIFIED IN OTHER REGULATORY PROCEEDINGS?

A. Yes. Over the last eleven years, I have testified before the Public Utility Commissions in Missouri, Arkansas, Kansas, Oklahoma and Texas. Much of my testimony has dealt with economic and costing and pricing issues related to local exchange competition. Schedule

1 to my testimony displays other regulatory proceedings in which I have provided testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide comments on the rates and costing model proposed by the Arbitration Advisory Staff (AAS). My primary focus will be on non-recurring rates. Mr. Rhinehart's testimony will focus primarily on the proposed recurring rates.

II. GENERAL COMMENTS

Q. DO YOU HAVE ANY GENERAL COMMENTS ON THE WORK PERFORMED BY THE AAS.

A. Yes. AT&T commends the hard work and dedication put forth by the AAS. The issues that remain to be settled are highly important and will determine the extent to which Missouri consumers will have choices in the local exchange marketplace. The issues that are the focus of this phase of the proceeding are not simple ones – they demand an understanding of difficult economic concepts as well as complex technical issues.

Q. PLEASE EXPLAIN HOW THESE FEW REMAINING ISSUES CAN HAVE A SIZEABLE IMPACT ON THE AMOUNT OF COMPETITION THAT DEVELOPS IN MISSOURI.

A. Economics tells us that, all other things such as quality, distribution, packaging, etc. being equal, the low cost producer of a product or service will be able to charge less for that product or service and will win the customer. In fact, if the other producers are not

able to replicate the low cost economic production of the product or service, the low cost producer will win all the customers in the marketplace.

Southwestern Bell ("SWBT") begins the contest for Missouri customers with nearly 100% of the customers. This means that SWBT has about 2.25 million customers that it will have no transition costs to serve. SWBT's proposed rates would impose a non-recurring charge of $186.46 for every customer that converts from SWBT to AT&T.[1] This means that AT&T would have to incur $466 million in non-recurring charges just to put itself into the position in which SWBT starts, by virtue only of SWBT having the advantage of having been guaranteed a monopoly in Missouri for many many decades.[2] A $466 million disadvantage is tremendously significant. It is very unlikely that AT&T would ever offer a widespread alternative to SWBT if placed at such a disadvantage.

This illustration uses a simple conversion of plain old telephone service ("POTS") customer to illustrate the importance of the Missouri Public Service Commission ("MPSC") setting appropriate non-recurring rates. However, the exact same principle applies in the setting of non-recurring rates for more technologically sophisticated and more complex arrangements. Although such rates will be charged by SWBT to AT&T much more rarely than will POTS conversion rates, they can have equally as chilling an effect on competition.

[1] The charges would be as follows: service order $60, loop $26.07, port $39.37, cross connect $56.55 and two vertical features $4.54. .

[2] The conversion contemplated is from SWBT existing service to AT&T service at the same location using unbundled network elements (UNE). For the sake of simplicity, I am not factoring in lower non-recurring charges for additional lines in the cases where a customer has more than one line. It is unnecessary to recognize normal customer churn, which would be faced by and effect all carriers equally.

Q. DOES THE ANNOUNCED AT&T MERGER WITH TCI LESSEN THE NEED TO SET PROCOMPETITIVE PRICES FOR UNBUNDLED NETWORK ELEMENTS ("UNES")?

A. Absolutely not. The technology to deliver widespread telecommunications services over cable facilities is not yet available and may be years away according to a Wall Street Journal article which appeared on June 25th, 1998, the day after the announced merger.[3] Furthermore, not all Missourians are served by TCI and it will be necessary to have alternative platforms such as UNEs to offer choices to those Missourians that do not have cable or are not served by TCI. Pro-competition cost based UNE prices, as required by the Telecommunications Act of 1996 ("Federal Act"), are vital for competition to take root in Missouri in the immediate future and beyond.

PRICES MUST REFLECT FORWARD LOOKING LONG RUN COMPETITIVE MARKET CONDITIONS

Q. WHAT STANDARD HAS THE MPSC ADOPTED FOR DETERMINING UNE PRICES THAT MEET THE REQUIREMENT OF THE FEDERAL ACT?

A. In its Final Arbitration Order in Case No TO-97-40/67, issued on July 31, 1997, the Commission adopted a standard proposed by Staff which is commonly described as total element long run incremental cost ("TELRIC"). That order states on page 3 of Attachment C:

> Staff believes the most appropriate cost standard is the use of forward-looking economic costs assuming the existing network were being rebuilt today to meet

[3] AT&T Faces Hurdles in Plan to Use TCI As Platform for Communications Network, by Stephanie N. Mehta.

forward-looking levels of demand. ... Staff believes this costing standard will most closely resemble the costs that an efficient competitor would face if entering the market today.

Q. ARE THERE OTHER REASONS WHY TELRIC IS THE APPROPRIATE STANDARD FOR SETTING RATES?

A. Yes. The Federal Courts have recently ruled on a number of occasions (see Schedule 2) that forward looking costs, not historical embedded costs, are required by the Federal Act. They have also ruled that the Federal Communications Commission's ("FCC") 1st Report and Order[4], although not jurisdictionally authoritative, is valid and instructive in principle. See Schedule 3 for more detail on the FCC's interpretation of the Federal Act's pricing and costing requirements (i.e., the TELRIC methodology is required).

Q. IS SWBT'S COST STUDY METHODOLOGY TELRIC?

A. No. Although SWBT calls its method TELRIC, its studies do not adhere to true TELRIC principles. SWBT bases its proposed prices in Missouri on the same costing methodology it used in Kansas. SWBT recently admitted in Kansas that its studies make no pretense to represent long run competitive market conditions. SWBT witness Dr. Dale Lehman filed testimony (see Schedule 4) on June 17, 1998 stating, "SWBT cost studies make no pretense to represent ... long run perfectly competitive market conditions."[5] (One can ignore his use of the word "perfectly", since all experts in economics know that perfect competition is not a realistic concept.)

[4] CC Docket No. 96-98, August 1, 1998.
[5] Kansas Docket Number 97-SCCC-149-GIT, Direct Testimony of Dale E. Lehman, page 31, lines 13 and 14. The purpose of the docket was to determine the permanent UNE rates for Kansas.

SWBT's position is that prices need not reflect long run competitive conditions. The Commission should not sanction SWBT's pricing approach based on embedded costs. Basing UNE prices on SWBT's embedded rate-of-return costs merely maintains the monopoly tribute payments that SWBT has had the privilege to receive in Missouri in the non-competitive era. The idea of the Federal Act is not to continue SWBT's monopoly rents into perpetuity.

Neither should the Commission accept one-half of the prices that SWBT proposes. One half of a wrong number does not yield a right number. AT&T's proposed prices are based on true long run incremental costs in accordance with the requirements of the Federal Act and the MPSCs previous arbitration decisions. The Commission should adopt the rates proposed by AT&T.

I urge the Commission to closely read Dr. Lehman's statement that I cited above. SWBT has not provided the MPSC with prices based on true long run incremental cost studies that reflect competitive market conditions. Therefore, SWBT's studies do not conform with the Federal Act or the Courts' judgements regarding the proper interpretation of the Federal Act, nor do they conform with the MPSC's own previously adopted costing standards. The Commission should adopt the prices provided by AT&T.

Q. ARE YOU PROVIDING A MORE IN-DEPTH EXPLANATION OF THE RELEVENT ECONOMIC TERMS THAT ARE NECESSARY FOR THE MPSC

TO UNDERSTAND IN MAKING ITS DETERMINATION OF RATES THAT COMPLY WITH THE REQUIREMENTS OF THE FEDERAL ACT?

A. Yes. Schedule 5 explains the important economic concepts such as incremental cost, long run, marginal cost, TELRIC, forward looking actual booked costs ("FLAB"), backward looking actual booked costs ("BLAB"), etc. in more depth.

Q. ARE YOU PROVIDING AN EXPLANATION OF THE MAJOR ACRONYMS USED IN YOUR TESTIMONY?

A. Yes. Schedule 6 contains an explanation of the acronyms.

NON-RECURRING COSTS

Q. FOR WHAT SPECIFIC FUNCTIONS RELATED TO PROCESSING AND FULFILLING ORDERS DO NON-RECURRING CHARGES ("NRC") APPLY?

A. Non-recurring charges cover the wholesale functions of pre-ordering, ordering, and executing orders for unbundled network elements, interconnection services and total service resale. It is important to recognize that the cost of physically placing SWBT's network in the ground is capitalized and is recovered through recurring charges. If facilities are put in place and will remain there at the location in spite of one or more customer changes, the cost should be captured as a recurring cost. SWBT must not be allowed to double recover these costs.

Q. WHAT ARE PRE-ORDERING, ORDERING, AND EXECUTING?

A. In the pre-ordering phase, the new entrant obtains information that is necessary to process the order. This is typically handled by the new entrant's service order representative. The representative will gather customer information (such as name, address, telephone number, etc.) that will be used when the order is placed. Once the representative has gathered all of the necessary information, the order is ready to be placed with SWBT via an electronic gateway and provisioned. A valid order is one that will be accepted by the incumbent and filled. Ordering is the actual placement of the order. Executing is the act of making the facilities available to fill the order. It can be thought of as electronic assignment of facilities.

Q. HOW DOES TELRIC APPLY TO NON-RECURRING CHARGES?

A. Non-recurring charges should also meet the standards of Section 252(d)(1) of the Federal Act. They must be non-discriminatory and they must be forward looking, efficiently employed and not restrained by the current embedded technology.

Q. WHY ARE NON-RECURRING CHARGES IMPORTANT?

A. Non-recurring charges are important because they are, in effect, tickets to get into the show (i.e. the market). They are paid before the entrant can offer service to an end user, supposedly for the purpose of processing and fulfilling orders. Such up-front charges inherently create barriers to entry, and incumbent local exchange carriers have the incentive to make those barriers to entry higher than they appropriately should be. Non-recurring charges apply to the activities necessary to attract and serve end-users -- for instance, when a network element is initially obtained, reconfigured or modified to offer

a new service. Because NRCs are imposed when change occurs, they fundamentally protect the status quo. As I explained above, SWBT could be given an insurmountable advantage, that would preclude choices for Missouri consumers, if NRCs are not set based on TELRIC. Each non-recurring cost, if not determined based on TELRIC, becomes a brick in a competitive barrier -- either by discouraging a rival from entering altogether, or by discouraging a customer from using another provider's services.

Q. WILL THE PRE-ORDERING AND ORDERING FUNCTIONS BE HANDLED MANUALLY?

A. No. For both Pre-Ordering and Ordering, AT&T and other new entrants will establish an electronic interface with SWBT.[6] The fact that an electronic interface is used has a significant impact on the non-recurring charges applicable in this docket. With an electronic interface, the new entrant's service order representative will interact with the customer, obtain all of the background information, enter all of that information into the computer system and process the order. The completed order will then flow into SWBT's Operational Support Systems ("OSS") and, for the vast majority of orders, will be processed electronically without any work on the part of SWBT.

Q. WHO ORDINARILY DOES THE PRE-ORDERING AND ORDERING WORK FOR NEW ENTRANT SERVICE REQUESTS IN A FORWARD-LOOKING OSS ENVIRONMENT?

[6] The FCC recognized the need for SWBT to provide such an electronic interface to new entrants. 1st Report and Order, ¶525 .

A. As stated above, it is the *new entrant's* representative who does the work. The new entrant's service representative first acquires the information needed to complete a Local Service Request ("LSR") from both the end-user customer and, on an electronic basis, from the ILEC's existing databases. Once the new entrant service representative has input the required information on the LSR, the order is transmitted electronically to the ILEC's computerized Service Order Processor ("SOP") system, which electronically performs edits and sends the order to the Service Order Activation Control ("SOAC") system, where any additional information needed from the ILEC's databases is automatically acquired. Unless the order "falls out" of the normal process, no manual assistance is required of the ILEC's service representatives; there is simply no reason or opportunity for an ILEC to interface or "negotiate" with either the end-user customer, or the new entrant's own service representative who prepared and transmitted the service order. This should be the case whether the order is a request for TSR or UNEs.

Q. WHAT HAPPENS IF THE ORDER FALLS OUT?

A. If the order is rejected by SOP or SOAC, one of two things will happen. The LSR may be electronically returned to the new entrant for its service representative to identify and correct any errors in the order, in which case the corrected order is again transmitted electronically to the ILEC's SOP system, which treats the corrected LSR just like a new order. Or it falls out and is directed by SOP to a service representative in the ILEC's service center. Only in this latter case, when fall-out actually occurs due to errors or discrepancies that the ILEC's automated processes cannot resolve, should a service representative in the ILEC's service center *actually* become involved in either the pre-

ordering or ordering phase of either a TSR or UNE. Since the use of electronic interfaces and forward looking processes are assumed, a 1% - 2% fall-out rate is more than an adequate rate of fall-out in a forward looking environment.

Q. HOW DO THE FALL-OUT RATES THAT YOU ARE PROPOSING COMPARE WITH THE FALL-OUT RATES THAT SWBT EXPERIENCES TODAY?

A. In public proceedings before the Texas Public Utility Commission, (see my Schedule 13 where SWBT witness Ham testified to this percentage for residential customers) SWBT stated that 99% of all orders entered into its proprietary EASE system flow-through to its back-end operating system. This correlates to a 1% fall-out rate. Since the operating systems in Missouri are exactly the same as the systems in Texas (indeed SWBT uses the same systems in all 5 states), it is reasonable to assume that SWBT achieves this level of efficiency in Missouri. While there is in the current environment no flow-through from a new entrant's systems to SWBT's EASE system, under Section 251 of the Federal Telecommunications Act, SWBT has an obligation to provide parity. Therefore, SWBT must establish an interface that provides new entrants with 99% flow-through efficiency. Moreover, a SWBT representative has testified that SWBT will develop the same level of efficiency for UNE orders as it currently achieves for orders it places itself – i.e. 99% flow-through. (See Schedule 7)[7] In light of these admissions from SWBT, I believe that the AT&T NRC model which was provided to the AAS, which uses the higher fall-out rate of 2%, is quite reasonable.

[7] Deposition of Jackie Richardson, dated July 30, 1997, pp. 41-42.

Q. WHAT IS THE KEY COST DRIVER FOR TELRIC-BASED NON-RECURRING CHARGES?

A. The key cost driver for TELRIC-based non-recurring charges is labor cost. A typical non-recurring charge cost study would determine any tasks that will not be performed electronically, the amount of time it takes to perform the task, the frequency with which the task must be performed, and the cost per hour of the personnel who perform the task. Assuming, as TELRIC requires, that forward-looking OSS is operating optimally, manual activities for preordering, ordering, and provisioning should be minimal or non-existent.

Q. WHAT COSTS SHOULD BE INCLUDED IN TELRIC-BASED NON-RECURRING CHARGES?

A. To perform the three transactional functions of pre-ordering, ordering, and executing, aside from labor when there is fall-out, incumbent local exchange carriers use software, computers, and power. All of these are accounted for in recurring costs for UNEs. (See the testimony of Mr. Dan Rhinehart.) The Commission should not allow these software, computer and power assets to be doubly charged for – once in recurring rates through the use of factors and again in the non-recurring rates.

Q. MUST SWBT'S RATES FOR NRCS BE NON-DISCRIMINATORY?

A. Yes. The non-recurring charges applicable to transactional activities must reflect the use of non-discriminatory systems that provide entrants the same access and use of the local network that SWBT provides itself in the long run.

This translates to a requirement for non-recurring cost studies that consider systems and technologies:

- developed for routine commercial-scale operation, with no (or very little reliance) on systems designed for specialized, design applications;
- equivalent to -- if not the exact same -- systems that SWBT uses to provision its own services in the long run;
- designed for machine-to-machine operability, without manual intervention; and
- intended to achieve the very high levels of flow-through needed to satisfy the core principle of non-discrimination.

Non-recurring cost study inputs and assumptions should reflect the costs of the most efficient forward-looking technologies -- technologies that SWBT is obligated to implement to satisfy the non-discrimination provisions of the Federal Act.

Q. IF AT&T'S MODELLING APPROACH IS USED TO SET NRCS FOR SWBT IN THIS PROCEEDING, WILL JUST, REASONABLE, AND NONDISCRIMINATORY RATES RESULT?

A. Yes. Based on forward looking technology, such as use of an electronic gateway, along with supporting OSSs and efficient use of labor, just, reasonable and nondiscriminatory rates will result.

In the purest sense, the TELRIC cost of the three transactional functions (pre-ordering, ordering and provisioning) is zero, because:

- The cost of the OSS themselves and the equipment used to run them is recovered in recurring rates as discussed in Mr. Rhinehart's testimony;

- The cost of the power required for that equipment also is recovered in recurring rates as discussed in Mr. Rhinehart's testimony; and

- The decision to have fall-out is an overall network management decision where investments and maintenance of OSS and associated databases have been deferred and the resulting extra labor should be recovered in recurring rates.

In deference to the long-standing practice of charging for these functions in an up-front charge, however, AT&T does not assign the transactional costs to recurring rates, although it would be theoretically correct to do so.

One or two percent fall-out can be achieved with legacy OSS when there is a will to optimize all of a system's capabilities and there is implementation of effective and sustained system management processes.

Q. CAN YOU PROVIDE AN EXAMPLE OF WHAT MIGHT CAUSE FALL-OUT?

A. As an example of what might cause fall-out, assume, as is the case with the SWBT's legacy OSS platform, that several OSS are electronically linked to create a flow-through electronic provisioning process. If one of the OSS receives erroneous or incompatible information from another OSS, the order will fall-out of the electronic process and will require manual intervention to correct or complete the order.[8] However, fall-out is not

[8] Consistent with the assumption that efficient companies employ system administration practices that include database synchronization and system release administration procedures, it is important to note that it would be inappropriate to allow the incumbent local exchange carriers ("ILEC") to pass along costs to competitive local exchange carriers ("CLEC") for all cases in which fall-out is caused by erroneous or incompatible information. To a significant degree the quality of a service order issued by a CLEC will be driven by the quality of information that the CLEC obtains from the ILEC. For example, most of the information on a CLEC order to convert an existing customer will be obtained in the pre-ordering directly from the ILEC's database. If the

simply a manual process, *per se*. Fall-out can be resolved via electronic means that streamline and eliminate many of the manual steps now required to manage exceptions or fall-out. The Provisioning Activity Work Station system ("PAWS") is one such OSS which works in a provisioning flow-through environment, communicating easily with service request controllers and other operations systems. We recognize that systems are evolving to assist in resolving fall-out, (e.g., PAWS) and would expect greater improvements in this area in the future.

In general, SWBT's proposed prices utilize network and OSS technology assumptions, and cost history information, which are not forward looking as directed by the FCC and the MPSC. Typically, assumptions by SWBT lead to fall-out, and the need for costly manual intervention to permit service orders to continue towards completion. This leads to cost outputs which will not support competitive pricing and a competitive marketplace for customers.

Q. ARE OSS RAPIDLY EVOLVING TO TAKE ADVANTAGE OF POWERFUL ADVANCES IN COMPUTING TECHNOLOGY?

A. We are at the turning point for major efficiency changes in the OSS as a result of new database architectures and process communication links. The Bellcore prescribed Telecommunications Management Network ("TMN") architecture is taking hold and will deliver further performance improvements that are necessary in a competitive environment. As stated in Bellcore's GR 2869 CORE:

ILEC provides incorrect or un-synchronized data to the CLEC during the pre-ordering phase, the CLEC should not be accountable for any subsequent fall-out caused by that incorrect data.

> Telecommunications service providers are facing increased competition for market share. To be competitive and provide quality service they need high-quality operations capabilities to support their service offerings and they need to design their operations architecture to be efficient, cost effective and rapidly deployable.

Once the electronic interfaces to the system components throughout the processes are in place, and the new entrant's personnel have the same (parity) access, read/write as required, as SWBT attendants, fall-out levels of 1-2% are reasonable. The only real impediments to this, beyond poorly managed SWBT databases, are the placement of ineffective interfaces and the use of network elements that are not forward looking and capable of intelligent communications with network OSS. Database maintenance is clearly a shareholder expense that has not been undertaken as it should have been. All databases should be maintained current and synchronized at all times as a matter of good business. Not paying to maintain these databases is a decision resulting from expense funding availability in past years. SWBT should not be allowed to use costs in their models that reflect embedded technology and inefficient operational systems and processes -- high levels of fall-out are synonymous with inefficient systems and processes. The impediments should not drive costs to new entrants. Moreover, the primary means to ensure that SWBT does not purposely deploy such inefficiencies to create service quality barriers to entry is to ensure that the ILEC bears the costs of all inefficient processes that it does maintain.

Instead, SWBT should build and pay for this work, and should demonstrate excellent performance to ensure that effective interfaces are constructed. Otherwise, there is no motivation to have a least cost and effective interface in place. Likewise, AT&T and

other CLECs will have to build and pay for their side of the electronic interface.

Q. WHAT ARE THE PRIMARY CAUSES OF FALL-OUT?

A. There are four major categories of electronic flow-through provisioning fall-out.

1. Database synchronization errors;
2. Network element denial;
3. Communication errors; and
4. Synchronization errors.

There are also 5 other possible OSS related problems that can cause provisioning fall-out.

1. New software release incompatibility (OSS/OSS or OSS/INE);
2. Hardware platform failures;
3. Operating System failures;
4. User application layer failures; and
5. Other (held orders, network exhaustion, etc. - related to element denial).

Database synchronization errors occur when databases that contain identical data do not match, or they disagree as to the availability or status of a needed resource. Typical database synchronization errors that fall-out include street names that exist in one database that are not duplicated in other databases. Another example is when facilities marked as 'spare' (i.e., available for assignment) in one database are not reflected as available in another database.

Network element denial is a second type of fall-out. It can happen when an Intelligent Network Element (INE), such as a Local Digital Switch, responds that it cannot perform a task requested by another component of the network for whatever reason. For example, the Element Management System (EMS) might believe that a certain version of software is available to activate certain features, when in reality the installation of this software has not yet been completed.

Communication errors represent the failure of the communications links between OSS, the EMS, and/or the INE. These errors take place because a valid communication path cannot be found between the elements.

Synchronization errors occur when two separate components (OSS to OSS or OSS to EMS & INE) attempt to communicate, but fail to establish the necessary communications protocols, even though the link is functioning.

New software release incompatibility is where a software release residing on an OSS or network element is not compatible with the software residing on another OSS or network element.

Hardware platform failures are where the OSS operating hardware, (workstation, mini-computer, mainframe) experiences an equipment failure that prevents all or part of the operations to be performed in an automated flow-through manner.

Operating System and Applications level failure are failures related to the software residing on the hardware that prevents all or part of the operations from being performed in an automated flow-through matter.

Q. WHAT IS THE MOST FREQUENT CAUSE OF FALL-OUT?

A. Of the nine categories of fall-out, the error that occurs most often is database synchronization error. Thus the degree of fall-out from these four categories can and should be minimized by properly maintaining the OSS databases and the telecommunications network.

OSS processes that allow for direct or immediate activation can significantly reduce fall-out because the service order generator learns immediately if an order cannot be made effective. Thereby, the order generator has the opportunity to obtain additional information and ensure that the order can be processed within the context of the original customer contact.

SWBT tells us that its OSS for residential and business applications provides the new entrant's service representative command of the same legacy systems as SWBT. This system typically handles 65,000-103,000 orders per day with 1% of the orders falling out of the system. SWBT has indicated that its expectation for this electronic solution for the new entrants will also have a 1% fall-out. If the order falls out of the system the new entrant has the ability to correct the problem. HELPDESK assistance will be available from the ILEC on an as-required basis.

Q. CAN YOU PROVIDE AN ILLUSTRATION SHOWING HOW FORWARD LOOKING OSS IN A COMPETITIVE ENVIRONMENT WOULD DIFFER FROM EMBEDDED MANUAL PROCESSES?

A. A excellent analogy is that which has recently developed due to competition in the stock brokerage industry. Recall that not too many years ago, brokerage houses' prices were regulated. If one wanted to buy a stock on the New York Stock Exchange, one had a choice of brokers (e.g. Merrill Lynch, E.F. Hutton, etc.) but the prices paid were the same at all the brokers. The only option was a full service one. One would provide all trading information to the broker, and the broker would be responsible for placing the trade and providing the customer with the confirmation information. With deregulation, along came companies such as Charles Schwab that provided limited amounts of service, but offered a discount price. Still further along the competitive curve, with the advent of the Internet, came companies such as E Trade and ScottTrade, offering state-of-the-art direct access to ordering systems. Competition has driven customer service to the point that customers, through the Internet, can actually take command of the brokers' ordering systems and place their own electronic trades on the exchanges, and receive instantaneous electronic confirmation of orders. This technology only came about due to competitive brokerage houses striving to offer better services to end users. Manual intervention by an employee of the brokerage house is no longer required, except in the rare instance when something goes wrong and the system cannot right itself. In addition, with the elimination of manual intervention, prices for trades are a mere fraction of what

they were under regulation and are even significantly below discount brokers' rates for manual service.

Q. IS IT REASONABLE TO ASSUME THAT THIS SAME PROCESS WILL TAKE PLACE IN THE LONG RUN IN THE NOW MONOPOLISTIC LOCAL EXCHANGE MARKETPLACE?

A. Yes. Bellcore has already developed standards and interfaces for OSS using intelligent network elements[9] that will provide the same type of flow-through functionality as is found in the brokerage industry. The deployment of these capabilities has not been as rapid as in the brokerage industry, **only because the monopolist incumbent local exchange carriers have not had, and do not have today, the market incentives to deploy the latest and most advanced technologies.** Incumbent LECs can delay deployment, hoping to continue to charge competitive LECs higher manually based rates, which will retard the ability of the competitive local exchange companies to compete. Without competition, or the Commission imposing regulation that would simulate the effects of competition, the ILECs maximize their self-interest by not deploying advanced state-of-the-art OSS.

MINIMAL FALLOUT ASSUMPTIONS ARE APPROPRIATE FOR ALL UNE ORDERS

[9] The AT&T non-recurring cost model which has been provided to the AAS references many of these Bellcore specifications, such as: TR-NWT-000057, TSGR, FR-440, GR-199, LSSGR; FR-64,TR-NWT-000170, GR-253-CORE, TR-TSY-000303, GR-303-CORE, TR-TSY-000174, GR-2869-CORE, TR-57 and FR-439.

Q. HAS THE TEXAS COMMISSION RECENTLY TAKEN ACTION WHICH THE MISSOURI COMMISSION SHOULD BE AWARE OF, WHICH WILL HELP THE MPSC DETERMINE THE APPROPRIATE INPUTS FOR NRC STUDIES?

A. Yes. The Texas Commission recently issued an order, June 1, 1998, in the SWBT 271 case in Texas.[10] In that order SWBT is required by the Texas Commission to bring its OSS systems to parity with its internal systems and to provide flow-through ordering of UNEs if SWBT is to be granted interLATA relief in Texas. The entire recommendation regarding OSS can be found in Schedule 8 to this testimony. The following are two key requirements:

> SWBT shall establish that all of its OSS systems for pre-ordering, ordering, provisioning, maintenance and repair, and billing are at parity;
>
> SWBT shall establish that all of its electronic OSS systems for pre-ordering, ordering, provisioning, maintenance and repair, and billing are at parity and provide flow-through without the necessity of manual intervention;

When SWBT makes these improvements to its systems for Texas, its Missouri OSS will also be improved. There is no legitimate reason for SWBT to have different OSS in its various states. CLECs that serve multiple states in SWBT territory should not have to go to the expense of developing a different interface for every state. SWBT should be expected to migrate its best OSS to all its states. Furthermore, the MPSC must not allow Missouri to fall behind SWBT's other states in readiness for local competition. In order to meet the Section 252(d)(1) requirements of the Federal Act, the non-recurring rates that the MPSC is arbitrating in the instant case should reflect the decision on OSS made

[10] PUC Project No. 16251.

by the Texas Commission. It is important to note that the Texas decision makes no exception for complex orders or complex UNEs.

Q. ONE OF THE KEY UNDERLYING PRINCIPLES OF STAFF'S RECOMMENDATIONS IS THAT ALL COMPLEX ORDERS WILL REQUIRE MANUAL INTERVENTION. DO YOU HAVE FACTUAL EVIDENCE THAT SUCH IS NOT APPROPRIATE IN A LONG RUN, TELRIC, ANALYSIS?

A. Yes. Just recently on August 5, 1998, SWBT witness Leonard Ellis filed responses to questions from the Kansas Corporation Commission in the permanent UNE costing case.

Mr. Ellis states on page 3 of his responses (Schedule 9) that SWBT's current objective flow-through rate for Special Service circuits is 64%.[11] While Staff's recommendation correctly recognized that simple orders can flow-through without manual intervention, it should also be recognized that forward looking OSS also should be capable of flow-through on complex orders. Here, SWBT is stating that its embedded objective flow-through on complex orders, if it does things in a quality manner, is already 64%. In addition, the Texas decision requires complex orders to flow-through.

We know that SWBT is making improvements in its OSS. Schedule 10 is an article from the July 20, 1998 issue of Telephony that describes a new OSS just recently implemented by SWBT that SWBT says "will save more than $1 million a year by eliminating the manual intervention previously required." Also attached, Schedule 11, is another article

[11] Response to Questions Assigned to Leonard Ellis, Kansas Docket Number 97-SCCC-149-GIT, page 3, August 5, 1998.

"SBC Serves End Users With Ease", this one from the August 3, 1998 issue of Telephony. The article states,

> SBC has built a service negotiation system called EASE that had become an important component of the consolidation activities between SBC and Pacific Telesis. With customer service as its hub, the system transforms manual order-taking into a computerized sales process. Under the old system customer service representatives logged in and out of several operational applications to get information to complete an order. Now CSRs input order information directly into the EASE application, and the system automatically handles all connection and communications with the company's downstream operations support systems (OSS). This saves time and money and improves customer service.

Based on Mr. Ellis' statements and other publicly available information, a *minimum* of 64% of complex orders should be treated as flow-through orders in the cost studies. At a minimum, Staff should reduce SWBT's labor driven complex non-recurring charges by 64%. With complete implementation of all the available forward looking OSS, as would occur in a competitive environment in the long run, as is required of SWBT by the Texas decision, where customers will be lost if quality is not excellent, SWBT should be able to achieve a 99% flow-through rate, even for complex orders. An arbitrary 50% reduction in SWBT's proposed rates provides an unjustified windfall to SWBT and does not meet the pricing requirements contained in the Federal Act.

Q. DO YOU HAVE OTHER EVIDENCE FROM THE RECENTLY COMPLETED KANSAS PROCEEDING THAT FURTHER PROVES TO THE MPSC THAT AN ARBITRARY 50% OF SWBT'S PROPOSED RATES IS INAPPROPRIATE?

A. Yes. In the same sworn statement filed by Mr. Ellis in Kansas, this time on page 3 and 4, Mr. Ellis was asked to provide the guidelines used by SWBT in developing the time

estimates for its UNE nonrecurring cost studies. Mr. Ellis' response shows that SWBT did not use any scientific guidelines for determining the times. Nothing was done by SWBT to eliminate any sources of bias from the data. There was nothing done by SWBT to ensure that the data or the data collection process was statistically valid. SWBT's time estimates cannot be relied upon as being valid representations of the true times required for performing job functions even today, much less in a forward looking OSS environment.

This same question was asked by the KCC of three other SWBT witnesses and their responses contain the same glaring weaknesses as the response of Mr. Ellis.[12]

On the other hand, the AT&T non-recurring cost model was designed specifically to represent the processing of orders in a forward looking OSS environment. This model develops costs from the ground up, as would be faced by new entrants, as required by the FCC and the MPSC's previous arbitration orders.

Q. DO SWBT'S WORK TIMES FOR COMPLEX SERVICE ORDERING SEEM REASONABLE?

A. No, they do not. The "complex" services which SWBT finds difficult and time-consuming to "negotiate" are really quite commonly ordered. In fact, DS1 and Dedicated Transport have been locally provisioned for many years. For this reason, RBOCs and IXCs long ago implemented electronic gateways for automated ordering of these

[12] See Responses to Questions assigned to James White, Sharon Sadlon and Barbara McCrary-Bazzle, Kansas Docket Number 97-SCCC-149-GIT, August 5, 1998.

services. These types of service orders normally flow-through an RBOC's or IXC's own OSSs on a routine basis. The huge discrepancy between the many hours of labor estimated by SWBT for the ordering process simply cannot be justified with the realities of the industry's experience with access orders for these same elements. With sound capacity planning, along with clean OSS databases, plant exhaustion problems would rarely occur, thus eliminating a major source of potential fall-out.

In Kansas SWBT tried to compare work times contained in a 1989 AT&T Task Oriented Costing ("TOC") study to SWBT's current work times in its studies.[13] This comparison is meaningless. Think back to 1989 when for about $3000 dollars one could buy a personal computer with 4 megabytes of RAM, a 20 megabyte hard drive, a CPU speed of maybe 30 MHZ, and a modem at 2400 kbps. Compare that to today's computers where for $1000 one can buy 64 megabytes of RAM, a 6 gigabyte hard drive, a CPU speed of 300 MHZ and a modem that operates at 56,000 kbps. If anything, SWBT's use of a 1989 AT&T study shows the extent that SWBT may have been dragging its feet in implementing forward looking OSS in its network. This would not be possible in a competitive market. OSS are simply sophisticated computers. Advances in computing technology since 1989 have been tremendous, making 1989 work time estimates totally irrelevant.

ICB PRICING IS PROBLEMATIC AND WILL HARM COMPETITION

Q. WHAT IS THE PROBLEM WITH PERMITTING ICB PRICING?

A. ICB pricing may be appropriate for cases where SWBT wants to sell a product in a competitive market, because ICB pricing allows SWBT to price a product as close as possible to long run incremental cost. In the case of unbundled network elements, however, ICB pricing would, in the absence of extensive MPSC oversight, allow market abuses to occur, since SWBT does not want to sell unbundled network elements to AT&T, and therefore SWBT will not price UNEs close to long run incremental costs. Instead, SWBT will price UNEs as high as possible to extract the maximum amount of resources from AT&T to keep AT&T from being a viable competitor to SWBT. The only remedy AT&T would have to challenge this activity would be to file a complaint with the Commission. As a result, ICB pricing would add uncertainty and delay to a CLEC's plans for serving Missouri.

The Commission should only permit ICB pricing when there is absolutely no alternative – when it is absolutely impossible to produce a cost study. ICB pricing provides SWBT with a future opportunity to shut down or forestall competitive entry by proposing unreasonable prices in response to a request for UNEs. Quite simply, if SWBT is permitted to engage in ICB pricing, it will have the clear opportunity to propose outrageously high prices leaving AT&T in the quandary of either paying those prices (significantly increasing its costs while at the same time providing SWBT with a windfall) or not offering the services.

[13] The TOC study's only real value is in contrasting the scientific sampling methodology it describes with the unscientific methodology used by SWBT in its gathering of work time estimates.

Indeed, SWBT has previously demonstrated its propensity to use ICB-type pricing to preclude competition. In Texas, SWBT initially proposed a price of more than $135 million to provide customized routing, while the Commission in that state ordered a price of $300 thousand. Another example of SWBT's behavior in an ICB situation is in the area of collocation. In Texas, when SWBT had ICB authority prior to the Commission in that state establishing permanent rates, SWBT proposed to charge $500,000 - $1 million for a given collocation arrangement. When the Commission set cost based rates, the price of the collocation arrangement was set at approximately $28,000.

The only way to defuse this situation and preclude a future bottleneck between SWBT and CLECs is for this Commission to reduce ICB pricing to the bare minimum. It is only through the Commission's regulatory oversight that SWBT can be made to offer just and reasonable prices to competitors for bottleneck facilities. ICB pricing will lead to slow, arduous and tedious price arbitration in the future.

In the future, when AT&T will actually order ICB priced elements from SWBT, SWBT will have no greater incentive to provide AT&T with cost based prices than it has today. In fact, if SWBT has already been allowed into the interLATA market at that time, SWBT will have no incentive to provide a just and reasonable price to AT&T. SWBT will also have no incentive to quickly resolve the question of what the price should be.

The higher the level of uncertainty facing AT&T, the less able AT&T will be to quickly enter local markets and provide choices to Missouri consumers. Only when consumers

have true choices will the local services market bring lower prices, higher quality and greater innovations.

NON-DISCRIMINATORY REQUIREMENTS OF THE FEDERAL ACT

Q. WOULD YOU PLEASE EXPLAIN THE NON-DISCRIMINATORY REQUIREMENT OF SECTION 252(d)(1) OF THE FEDERAL ACT?

A. The non-discriminatory provision of Section 252(d)(1) tells us that AT&T must be able to obtain interconnection and UNEs at the same rates, and under the same terms and conditions which SWBT provides such elements or services to itself in the long run. SWBT insists that it doesn't provides UNEs to itself. SWBT's position is an inartful play on words – there is no substance to it. Non-discrimination and parity of access to UNEs are fundamental constructs of Section 251, 252 and 271 of the Federal Act. If SWBT does not provide UNEs to itself then there can be no parity or non-discrimination between the incumbent and new entrants. SWBT's position that it doesn't provide UNEs to itself would make nonsense out of these important constructs.

If the rates, terms, and conditions offered to competitors are less favorable than those SWBT offers to itself in the long run, then the non-discriminatory pricing rule is violated. This provision also means that SWBT cannot base its prices to competitors on a provisioning scheme that is different from how it provisions those services to itself. SWBT's internal OSS, which facilitate extremely high levels of flow-through and are constantly being improved, must also be made available to new entrants. These high levels of flow-through must be reflected in all of SWBT's non-recurring UNE rates.

III. SPECIFIC RESPONSES TO RECOMMENDATIONS OF STAFF

CROSS CONNECTS

Q. WHAT IS STAFF'S RECOMMENDATION ON CROSSCONNECTS?

A. Staff has recommended:

Crossconnects

Unbundled 4-wire DS-1 Loop Cross-Connect to Multiplexer

- Global modifications

Unbundled Crossconnects to DCS and Switch Ports

- Global modifications.

CLEC to SS7 STP

- Global modifications.

Q. WHAT COMMENTS DO YOU HAVE ON STAFF'S RECOMMENDATION ON CROSS CONNECTS?

A. Staff's proposal wrongly supports SWBT's assumption that manual intervention is required for all these types of cross connects. This is not the case. The only one that could properly include manual intervention is the cross connect from the CLEC to the SS7 STP. The other cross connects go between two pieces of equipment that are owned by SWBT. The connections between the SWBT owned pieces of equipment can and should be left in place indefinitely by SWBT. If one CLEC deactivates, suspends or terminates service, the connection is ready to be used again by the next CLEC that utilizes those same pieces of equipment owned by SWBT, or by SWBT itself in providing retail services.

As labor costs rise and equipment costs decline, it is typically most efficient to leave connections in place for future reuse, thereby avoiding the labor costs involved in dismantling and subsequently reconnecting the facilities to the same customer premises. Once a cross-connect is in place, dedicated inside plant ("DIP") is created and will normally remain undisturbed. Thus, the cost of initially creating DIP is part of the initial investment in the network, and is correctly recovered through recurring charges.

Mr. Rhinehart's testimony covers the global modifications. The labor rates are overstated by about one-third, which directly impacts the non-recurring studies.

Q. EVEN IF DIP IS THE EFFICIENT FORWARD-LOOKING PRACTICE, THERE WILL THERE BE CIRCUMSTANCES IN WHICH DIP IS NOT IN PLACE AND CROSS-CONNECT WORK IS STILL REQUIRED IN ORDER TO COMPLETE A PARTICULAR CUSTOMER ORDER. UNDER THOSE CIRCUMSTANCES IS THE ASSOCIATED EXPENDITURE CORRECTLY TREATED AS A NON-RECURRING RATHER THAN AS A RECURRING COST?

A. No. Cross-connect work may be required for "first time" provision of service at a particular premises or where (for whatever reason) the facilities dedicated to those premises are not sufficient to meet the specific inward service requirement. Once completed, however, the DIP that is created as a result of that cross-connect work will (or can) remain in place even after the initial customer leaves, and so is (like preexisting

DIP) recoverable over the location life rather than over the service life for the original customer.

The fact that work may happen to be triggered by the arrival of a service order does not necessarily imply that the cost was caused by the service order. A new hotel might open for business before all of its furniture has been delivered. During the initial ramp-up period, it will need to make sure that furniture is in place in a specific room the first time that room is to be rented. However, merely because the furniture is acquired and moved into the room just before the first guest arrives (the triggering event) does not mean that this guest should be expected to pay the entire cost of the furniture.

Q. DO YOU HAVE ANY CONCERNS ABOUT STAFF'S RECOMMENDATION ON THE CLEC TO SS7 STP CROSS CONNECT?

A. My experience with SWBT's non-recurring cost models, and the responses to the questions from the Kansas Commission that I have cited above, indicate to me that SWBT's time estimates are not scientifically determined, are completely based on embedded processes, and are highly subject to bias. As Dr. Lehman clearly stated, SWBT makes no attempt to model forward looking competitive conditions. AT&T's NRC model utilizes forward looking assumptions about the percentage of unstaffed offices, the number of work functions performed by a technician per trip, and the average trip time between offices. SWBT is migrating to advanced, more efficient equipment such as global positioning equipment (i.e., satellite dishes) on each technician's truck so that dispatching can be done to the nearest truck. Such improvements in efficiency are available with current technology and should be recognized in the long run cost study.

Merely making the global changes, as proposed by Staff, fails to recognize the long run efficiencies, fails to recognize that SWBT's times are upwardly biased, and provides an unjust windfall to SWBT.

LOCAL SWITCHING FEATURES – ANALOG AND ISDN

Q. WHAT IS STAFF'S PROPOSAL ON LOCAL SWITCHING FEATURES?

A. Staff proposes the following:

- SWBT has proposed a $5.00 per order service charge for every order that generates a service order on a mechanized basis, which is inconsistent with the Final Arbitration Order in TO-97-40/67. Staff believes the $5.00 service order charge applies to as is conversion for resale or UNEs, not for other services or features. Staff's position is also supported in section 3.6 of Appendix Pricing-UNE of the AT&T/SWBT interconnection agreement.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. AT&T agrees with Staff that the $5.00 service order charge does not apply to local switching features. The order in TO-97-40/67 applied a $5.00 one time service order charge that more than compensated SWBT for subsequent service orders. When a service order study is properly conducted, using forward looking electronic interfaces, the cost to SWBT is about $.21. The $5.00 service order charge to convert a customer, which merely mimics the $5.00 primary interexchange carrier change rate and is not cost based, exceeds SWBT's forward looking costs of converting the customer by $4.79. In other words, SWBT recovers its forward looking costs over 23 times when it charges AT&T for the first $5.00 service order. It is doubtful that the average customer will make more than 23 service changes before moving his/her premises.

Q. WOULD SWBT EVER BE JUSTIFIED IN APPLYING A SERVICE ORDER CHARGE TO FEATURE CHANGES?

A. Yes. If the service order charge were to be changed to reflect the true economic costs (i.e. $0.21) it would be justifiable to place the charge on AT&T anytime a service change was made. In fact, this would be preferable to AT&T since AT&T does not believe that the average customer will make more than 23 service changes before vacating the premises.

Q. WHAT ELSE HAS STAFF PROPOSED ON FEATURE CHANGES?

A. Staff has also proposed:

- 5 minutes per feature or combination of features. Hunting arrangements should include ½ of the currently proposed Recent Change Memory Administration Center (RCMAC) time. Neither side has presented solid evidence to suggest other labor times. Staff believes that there should be a different rate for hunting features since a little extra labor effort is required to program the number sequence.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. Using forward looking OSS architecture, there should be no time required for SWBT technicians except for orders which fall-out of the system, which should be minimal. This should apply to features, combination of features and hunting arrangements. It would be discriminatory to assume that AT&T will have to type in orders and then AT&T will have to pay SWBT to type the same information into its systems. AT&T should have parity access to SWBT's pre-ordering, ordering and provisioning systems.

Staff's proposal on hunting arrangements taking more time is not totally accurate. Again, AT&T will have non-discriminatory access to the OSS and will program in the recent changes. It is AT&T's people that will be required to take more time for hunting

arrangements. SWBT's RCMAC will only be involved in cases of fall-out where a problem has arisen that the OSS could not resolve. It does not follow that the hunting arrangement fall-out orders will take significantly longer to resolve than will other feature change fall-out orders.

Q. WHAT ELSE HAS STAFF PROPOSED ON FEATURE CHANGES?

A. Staff has also proposed:

- Use 0.05 fall-out factor on all features. This factor is to account for automation of feature activation requests and is based on current flow-through estimates from SWBT officials during OSS demonstrations. This factor also represents the need for manual intervention on orders that are normally automated. Staff assumes five percent of orders will need correction or clarification through manual intervention. In other words, the factor represents the percentage of orders that require manual intervention when all others flow-through electronically with no problems. Thus, 5 percent of all orders will require manual intervention and 95 percent will flow-through with no problems.
- All other applicable global modifications.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. Staff's proposal correctly captures that fact that manual work will only be required in the case of fall-out. SWBT's OSS will be automated and orders will normally flow-through without manual intervention.

SWBT has filed sworn testimony[14], see Schedule 12, that describes its provisioning process. SWBT describes itself as being a national leader in its use of OSS. SWBT's systems are automated and the only manual work designed into the system is the interface

[14] Rebuttal Testimony of Randal Vest dated February 25, 1998. Oklahoma Cause No. PUD 970000213 and PUD 970000442, pages 5–6.

with the retail customer. SWBT has also filed sworn testimony[15] (see Schedule 13) that its own internal residential retail fall-out rate is only 1%, and for retail business service it is 10%. AAS reports, from SWBT OSS demonstrations, current SWBT fall-out rates of 4.4% for EASE to SORD distribution, 7.3% for EASE to completion and 15.1% for EASE to posting. This would include errors made by the customer service reps who would have to retype information. Of course for CLECs, this retyping would be done by the CLEC representative and should not appear in the SWBT cost study. This means the comparable fall-out factors which should appear in the cost studies for UNEs provided to CLECs should be lower than SWBT's reported internal figures if parity access is to be reflected.

SWBT's current fall-out rates should be viewed as a ceiling for the lower level of fall-out that will be achievable when advanced OSS are in place ubiquitously. Since the great majority of feature change fall-outs will be residential, a maximum 1% - 2% fall-out rate would be more appropriate than the 5% rate that Staff has proposed.

Mr. Rhinehart's testimony contains AT&T's response to the global modifications. The costs which Staff includes for MARCH central processing unit (i.e., computers) should be excluded from the study. SWBT includes all of its general processing computers in the development of its factors which are applied to investments to determine recurring rates. To include computer costs in the non-recurring rates allows SWBT to recover

[15] Rebuttal Testimony of Elizabeth A. Ham, filed February 25, 1998. Oklahoma Cause No. PUD 970000231 and *PUD 970000442*, pages 4-5.

these costs twice. Furthermore, Mr. Rhinehart's testimony explains changes that should be made to SWBT's labor rates, which are overstated by about one-third.

UNBUNDLED CALL TRACE PER ACTIVATION

Q. WHAT HAS STAFF PROPOSED ON UNBUNDLED CALL TRACE PER ACTIVATION?

A. Staff has proposed:

- The rate of other analog port features should apply here. Staff does not believe there is a need for different port feature charges. For an explanation see the recommendation under **Local Switching Features – Analog and ISDN**. The rate should apply per port and per successful trace.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. AT&T has the same comments that AT&T has for the Staff's proposal for local switching features. The fall-out rate should be 1% - 2%. The labor rates should be revised as per the recommendations of Mr. Rhinehart.

UNBUNDLED PRI PORT FEATURES

Q. WHAT HAS STAFF PROPOSED ON UNBUNDLED PRI PORT FEATURES?

A. Staff has proposed:

- Neither side presented an adequate argument since their inputs are based on SME estimates. Staff believes that port feature activation for PRI is more involved than analog or BRI port features, so more time will be spent activating the features. However, neither side has evidence to support its claims. Therefore, Staff recommends implementing global modifications and that SWBT's rates be cut in half.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. The Commission should recognize forward looking OSS architecture. Forward looking OSS systems are sophisticated and will allow CLECs to input orders that will flow-through into SWBT's provisioning systems. SWBT has admitted that, even today, 64% of its complex special access orders should flow-through. Inclusion of manual processes sanctions non-parity access and would be discriminatory. SWBT should be ordered to rerun its studies eliminating manual processes except for 1% - 2% fall-out. SWBT's labor rates should be adjusted downward as per Mr. Rhinehart's testimony.

UNBUNDLED BRI CSV/CSD & UNBUNDLED BRI PORT FEATURES & UNBUNDLED CENTREX-LIKE FEATURES – ANALOG/ISDN

Q. WHAT HAS STAFF PROPOSED ON UNBUNDLED BRI CSV/CSD, UNBUNDLED BRI PORT FEATURES AND UNBUNDLED CENTREX-LIKE FEATURES – ANALOG/ISDN?

A. Staff has proposed:

- See local switching feature modifications. Staff believes there is no difference between activating these features and activating other local switching features, therefore the same rates for local switching features should apply to these features.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. AT&T has the same comments that AT&T has for the Staff's proposal for local switching features. The fall-out rate should be 1% - 2%. The labor rates should be revised as per the recommendations of Mr. Rhinehart.

UNBUNDLED DEDICATED TRANSPORT

Q. WHAT HAS STAFF PROPOSED ON UNBUNDLED DEDICATED TRANSPORT NON-RECURRING?

A. Staff has proposed:

- NRCs should be cut in half to be consistent with the treatment of other UNEs in TO-97-40/67. Furthermore, Staff proposes that OC-X transport should be ICB priced and one assumes that would also apply to OC-X non-recurring rates.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL?

A. The Commission should recognize forward looking OSS architecture. Forward looking OSS systems are sophisticated and will allow CLECs to input orders that will flow-through into SWBT's provisioning systems. Inclusion of manual processes sanctions non-parity access and would be discriminatory. Section 252(d)(1) requires rates be based on forward looking economic costs. SWBT should be ordered to rerun its studies eliminating manual processes except for 1% - 2% fall-out. Furthermore, the labor rates contained in Mr. Rhinehart's testimony should be used in place of SWBT's overstated labor rates.

ICB pricing is inappropriate as I have stated in my general comments above.

LIDB

Q. WHAT HAS STAFF PROPOSED ON NON-RECURRING RATES FOR LIDB?

A. Staff's proposal states:

- Neither AT&T nor SWBT offer solid evidence to support the labor times for the LIDB service order charge. Since LIDB is most likely a complex service, the orders will require manual intervention. Therefore, staff recommends global modifications and cutting the service order charge in half to be consistent with other service orders.

This service order charge should apply to only new LIDB service orders. The as is conversion charge will apply to current LIDB service conversions.

Q. WHAT IS AT&T'S RESPONSE TO THIS PROPOSAL BY STAFF?

A. AT&T agrees that SWBT has not presented any evidence that even purports to represent forward looking long run costs. As I discussed above, Staff's postulation that all complex orders will be worked manually does not recognize that SWBT already has objectives that complex special access orders will flow-through 64% of the time. With full implementation of advanced forward looking OSS, the non-discriminatory flow-through percentage should be closer to 100%. SWBT should be required to redo its studies using a 1% - 2% fall-out factor and the labor rates developed by Mr. Rhinehart.

AT&T agrees with Staff that the $5.00 conversion charge more than recovers any LIDB costs incurred by SWBT in a conversion. In fact, AT&T is unaware of any efficient LIDB costs that would be incurred by SWBT in a conversion. As stated earlier, the $5.00 charge is not cost based and is too high. The cost based rate should be closer to $0.21.

ACCESS TO DIRECTORY ASSISTANCE DATABASE

Q. WHAT IS STAFF'S PROPOSAL ON ACCESS TO DIRECTORY ASSISTANCE DATABASE?

A. Staff proposes that access to directory assistance database be priced ICB. As stated above in my general comments, ICB pricing can create real barriers to competitive entry. There is no compelling reason for this element to be priced on an ICB basis.

BRANDING/RATING

Q. WHAT IS STAFF'S PROPOSAL ON BRANDING/RATING?

A. Staff recommends use of the lowest intercompany compensation arrangement currently in effect between SWBT and the 37 independent companies in Missouri.

Q. WHAT IS AT&T'S RESPONSE TO STAFF'S PROPOSAL ON NON-RECURRING RATES FOR BRANDING/RATING?

A. AT&T is not aware of the basis for the intercompany compensation arrangements currently in effect, however, AT&T knows that there is no competitive market for branding and rating. According to proper interpretations of the requirements of Section 252 (d)(1) of the Federal Act, rates should be set to reflect where they would be in a vigorously competitive environment. Non-recurring rates should reflect forward looking operations support systems, not manual processes. To the extent the existing rates were designed to cover manual processes, they have been established at levels that are too high. The underlying studies, if there are any, should eliminate manual labor except for 1% - 2% fall-out. Mr. Rhinehart's labor rates should be used in the studies.

SIMPLE SERVICE CONVERSIONS

Q. WHAT IS STAFF'S PROPOSAL ON THE SIMPLE SERVICE CONVERSION RATE?

A. Staff proposes that the simple service conversion charge for resale be $5.00, for UNEs Staff proposes a fall-out factor of 5%.

Q. WHAT IS AT&T'S RESPONSE TO STAFF'S PROPOSAL?

A. With forward looking OSS, simple conversions will flow-through SWBT's systems all the way to posting. With non-discriminatory access, AT&T personnel will be performing the labor tasks necessary to input the conversion information into the OSS. No manual intervention by SWBT will be required, except for fall-out. As stated above, a 1% - 2% fall-out factor should be used. Computer system time should also be eliminated, as per Mr. Rhinehart's testimony, since SWBT has already included all of its computer costs in its recurring rates. Mr. Rhinehart's labor rates should also be used. The $5.00 charge is not cost based, is too high and will overcompensate SWBT. A more accurate rate would be in the neighborhood of $0.21 per simple conversion order for resale.

COMPLEX SERVICE CONVERSIONS

Q. WHAT IS STAFF'S PROPOSAL ON COMPLEX CONVERSION RATES?

A. Staff assumes that all complex conversions will require manual intervention. For complex resale orders, Staff cuts the SWBT labor costs in half and removes inflation. For complex UNE orders, Staff cuts negotiation costs in half, cuts typing costs by 75%, cuts computer costs in half and makes all other global modifications.

Q. WHAT IS AT&T'S RESPONSE TO STAFF'S PROPOSAL?

A. As I have stated earlier, Staff's assumption that all complex orders will require manual labor by SWBT fails to recognize the sophistication of forward looking state of the art OSS. The complex work will be performed by AT&T and other competitors. In a competitive environment, the SWBT functions would be automated and the manual labor would only be required in the case of fall-out orders. SWBT will only be required to type

orders when there is fall-out from its OSS. Staff's proposal effectively assumes a 25% fall-out rate for the typing, which would be very poor quality and would not be acceptable in a competitive environment.

The Staff report on page 56 and 57 states "The LSPSC component consists of the service representative's labor expense while negotiating SWBT customer requirements to convert to a CLEC". SWBT's negotiation costs should be totally removed from the studies, not cut in half. AT&T will negotiate with its customers and input the relevant information into the non-discriminatory OSS. SWBT's cost of disconnecting its customer are already recovered in SWBT's retail rates charged to the customer. SWBT must not be allowed to recover those costs a second time, from its competition. As Mr. Rhinehart explains in his testimony, the computer costs are fully recovered in SWBT's recurring rates. SWBT should not be allowed to anti-competitively double recover these costs.

AT&T proposes that complex orders also use a 1% - 2% fall-out. However, if the Commission cannot support a 1% - 2% rate, some higher rate, perhaps twice the simple conversion rate, would be appropriate. The labor rates contained in Mr. Rhinehart's testimony should also be used. The effect will be to significantly reduce Staff's proposed non-recurring charges and provide a more equitable competitive environment – remembering that SWBT's forward looking non-recurring cost to serve all its current complex customers is $0.00.

DARK FIBER

Q. WHAT IS STAFF'S PROPOSAL FOR DARK FIBER?

A. Staff's proposal is that NRCs be cut in half and global modifications be made.

Q. WHAT IS AT&T'S RESPONSE TO STAFF'S RECOMMENDATION?

A. SWBT describes the functions that it includes in its dark fiber study. SWBT's proposed rates include recovery of manual time to do records research of company plant location records, take inventory of existing fiber cables, create cable schematics, issue a transport document, activate the dark fiber and record the dark fiber data in TIRKS.

The time spent doing records research and taking inventory of existing fiber cables would be done by AT&T who must, according to the Federal Act, have non-discriminatory access to SWBT's OSS for pre-ordering. Creating cable schematics, issuing a transport document, activating the dark fiber and recording the dark fiber data in TIRKS would all be done electronically using forward looking OSS, except for the exceptional times when fall-out occurred.

Manual time should be eliminated from the study, except for a minimal amount of fall-out. Labor rates should be adjusted as per Mr. Rhinehart's testimony. The labor rate adjustment alone will reduce the rate by about one-third. Staff's proposal of a 50% reduction would provide a windfall to SWBT and would create an entry barrier for AT&T and other new entrants who desire to compete.

PLEXAR CUSTOM

Q. WHAT IS STAFF'S PROPOSAL FOR PLEXAR CUSTOM?

A. Staff recommends that since SWBT offers Plexar Custom on a retail basis to its end users, which makes it eligible for resale, SWBT should offer Plexar Custom just like any other retail service that is eligible for resale. Therefore, Staff recommends SWBT offer Plexar Custom to AT&T at a 19.2 percent wholesale discount off the rates at which SWBT offers the service.

Q. WHAT IS AT&T'S REPSONSE TO STAFF'S RECOMMENDATION?

A. AT&T agrees with Staff's conclusion. Furthermore, to the extent that a reseller wishes to assume responsibility for a Plexar Custom contract, SWBT must be enjoined from imposing termination liabilities on the original customer.

NXX MIGRATION

Q. WHAT IS STAFF'S PROPOSAL FOR NXX MIGRATION?

A. Staff recommends making any applicable global modifications and cutting the rate in half.

Q. WHAT IS AT&T'S RESPONSE TO STAFF'S RECOMMENDATION?

A. The administrative costs of migrating an NXX are very similar to administrative costs incurred each time a new NXX is created. SWBT has stated in Texas that over 800 new NXXs have been assigned to alternative carriers in its five state region. The migration of NXXs will occur rarely, especially compared to the incidences of new NXXs being created. The administrative costs of work to incorporate a new NXX is included in

SWBT's maintenance factors. To add the cost of migrating NXXs to the development of the maintenance factor would not cause a change in the factors in the significant digits. From a macro perspective, no additional personnel would need to be hired; no additional hours will be worked. A separate charge would be an over recovery.

All carriers will have a need to add and migrate NXXs in a competitive marketplace. In requiring each carrier to bear its own costs associated with such changes, no rate would need to be established.

Staff's recommendation would provide a double recovery to SWBT. NXX migration is part of the costs of doing ordinary every day business and such costs are, properly, recovered in recurring rates.

IV. SUMMARY AND CONCLUSION

Q. WOULD YOU PLEASE SUMMARIZE YOUR TESTIMONY?

A. The general formula for determining non-recurring prices is simple: labor rate X fall-out percentage X task time.

Regarding the labor rates, the labor rates proposed by SWBT are overstated. They should be reduced by approximately one-third, as per the testimony of Mr. Rhinehart.

Regarding the fall-out percentage, forward looking OSS are capable of handling complex as well as simple orders. SWBT has stated that its current objective is for 64% of its special access orders to flow-through – that is an embedded number that would surely be much higher if SWBT stood in danger of losing customers to competitors. The Texas Commission has ordered SWBT to provide flow-through of all orders – not just simple ones – as a precondition for SWBT interLATA entry in Texas. A minimal amount of fall-out, 1% or 2%, should be used in determining SWBT's long run forward looking costs of providing non-simple UNEs.

Regarding the task times, AT&T has taken little issue in this case with the amount of time Staff's recommendation says it will take SWBT to perform a particular task. Again, it is the frequency of performing the task (i.e., the fall-out percentage) and the labor rate that drives most of the difference between AT&T's proposal and Staff's.

Overall, Staff has done a commendable job in making its recommendations to settle the remaining arbitration non-recurring pricing issues. In only a modest number of instances did Staff not completely grasp the more difficult aspects of these remaining issues and therefore decided to "split the baby". It is my hope that these comments filed by AT&T will clarify for the Commissioners that forward looking OSS must be assumed in all these long run incremental costing studies and that orders for UNEs will flow through at higher levels than those proposed by the AAS.

AT&T thanks the Commission for providing us another opportunity to explain AT&T's position on the proper implementation of the Federal Act in order to foster vigorous competition in Missouri local markets.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, except for the schedules which follow.

TESTIMONY HISTORY

STATE	PROCEEDING NUMBER	SUBJECT OF PROCEEDING
Arkansas	Docket 91-204	Inquiry into Alternatives to Rate of Return Regulation for SWB
Arkansas	Docket 96-395-U	In the Matter of AT&T Communications of the Southwest, Inc.'s Petition for Arbitration of Unresolved Issues with Southwestern Bell Telephone Company Pursuant to §252(b) of the Telecommunications Act of 1996
Arkansas	Docket 98-048-U	In the Matter of the Application of Southwestern Bell Telephone Company Seeking Verification That It Has Fully Complied With and Satisfied The Requirements of Sec. 271(C) of the Telecommunications Act of 1996
Kansas	Docket 190,492-U Phase I	General Investigation into Competition within the Telecommunications Industry in the State of Kansas
Kansas	Docket 190,492-U Phase II	General Investigation into Competition within the Telecommunications Industry in the State of Kansas
Kansas	Docket No. 95-SWBT-142-TAR	SWBT Filing LDMTS Tariff to Introduce Lower Community of Interest Standards to Qualify for OCCS
Kansas	Docket 97-AT&T-290-ARB	In the Matter of the Petition by AT&T Communications of the Southwest, Inc., for Compulsory Arbitration of Unresolved Issues with Southwestern Bell Telephone Company pursuant to 252(b) of the Telecommunications Act of 1996.
Kansas	Docket 97-SWBT-411-GIT	In the Matter of Southwestern Bell Telephone Company – Kansas' Compliance With Section 271 of the Federal Telecommunications Act of 1996
Kansas	Docket 97-SCCC-149-GIT	In the Matter of the Joint Application of Sprint Communications Company, L.P., United Telephone Company of Kansas, *United Telephone Company of Eastern* Kansas, United Telephone Company of South Central Kansas, and United Telephone Company of Southeastern Kansas for the Commission to Open a Generic Proceeding on Southwestern Bell Telephone Company's Rates for Interconnection, Unbundled Elements, Transport and Termination, and Resale

Missouri	Case No. TO-93-116	SWBT Petition to Classify Certain Services as Transitionally Competitive and Competitive
Missouri	Case No. TO-93-192	Proposals to Establish an Alternate Regulation Plan for SWBT (Consolidated with TO-93-116)
Missouri	Case No. TC-93-224	Staff Complaint Regarding Current Rates and Charges of SWBT
Missouri	Case No. TC-94-86	Office of Public Counsel vs. AT&T Regarding Continuing the Transitionally Competitive Status of Measured Toll Service (MTS) Offered by AT&T for Two More Years
Missouri	Case No. TC-97-40	In the Matter of AT&T Communications of the Southwest, Inc.'s Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act Of 1996 to Establish An Interconnection Agreement with Southwestern Bell Telephone Company
Missouri	Case No. TC-97-63	In the Matter of AT&T Communications of the Southwest, Inc.'s Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with GTE Midwest Incorporated
Missouri	Case No. TO-98-115	In the Matter of AT&T Communications of the Southwest, Inc.'s Petition for Second Compulsory Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Southwestern Bell Telephone Company
Oklahoma	Cause No. 000662	Application of Howard W. Motley, Jr., for an Inquiry into the Rates and Charges of SWBT
Oklahoma	Cause No. 000837	Application of SWBT for Approval of Telestate/21, a Proposal for Rate Stability, Network Modernization, and Price Regulation (Consolidated with Oklahoma Cause 000662)
Oklahoma	Cause No. 0001159	Inquiry of Oklahoma Corporation Commission Concerning the Provision and Regulation of Competitive IntraLATA Telecommunication Services
Oklahoma	Cause No. 940000486	Application of Metropolitan Fiber Systems of Oklahoma, Inc. for a Certificate of Convenience and Necessity to Provide Intrastate, Interexchange Private Line Telecommunications Service.

Oklahoma	Cause No. 960000218	Application of AT&T Communications of the Southwest, Inc., for Compulsory Arbitration of Unresolved Issues with Southwestern Bell Telephone Company Pursuant to Section 252(b) of the Telecommunications Act of 1996
Oklahoma	Cause No. 960000242	Application of AT&T Communications of the Southwest, Inc. for Compulsory Arbitration of Unresolved Issues with GTE Southwest Incorporated Pursuant to Section 252(b) of the Telecommunications Act
Oklahoma	Cause No. 970000213	Application of Cox Oklahoma Telecom, Inc., For a Determination of the Costs of, and Permanent Rates for the Unbundled Network Elements of Southwestern Bell Telephone Company
Oklahoma	Cause No. 970000442	In the Matter of the Joint Application of Southwestern Bell Telephone Company and AT&T Communications of the Southwest, Inc. for a Determination of Costs and Permanent Rates For Certain Southwestern Bell Telephone Company Services
Oklahoma	Cause No. PUD 970000560	Application of the Attorney General of the State of Oklahoma, AT&T Communications of the Southwest, Inc., Brooks Fiber Communications of Oklahoma, Brooks Fiber of Tulsa, Inc., Cox Oklahoma Telecom, Inc., MCI Telecommunications Corporation, and Sprint Communications, L.P. To Explore Southwestern Bell Telephone Company's Compliance with Section 271(c) of the Telecommunications Act of 1996.
Texas	Docket No. 8672	Application of SWBT to Revise 3M Plexar Tariff
Texas	Docket No. 9251	Application of GTE to Revise Section 47 of General Exchange Tariff to Establish Specific Rates for Centranet Service Involving 101-400 Lines
Texas	Docket No. 12784	SWBT Filing to Restructure Local Transport and Directory Transport Categories in Switched Access Services Tariff (Consolidated with Texas Docket Nos. 12865 & 12866)
Texas	Project No. 9075	SWB Cost Allocation Rule Approved 8-18-93 with Effective Date of 9-10-93

Texas	Docket No. 13282	Application of MFSI-TX Intelenet of Texas, Inc. For A Certificate of Convenience and Necessity To Operate As A Local Exchange Company In The Areas Served By Southwestern Bell Telephone Company And GTE Southwest, Inc. In Harris, Dallas, Collin, Tarrant, Bexar, Travis, and El Paso Counties
Texas	Docket No. 16226	Petition of AT&T Communications of the Southwest, Inc. For Compulsory Arbitration to Establish An Interconnection Agreement Between AT&T and Southwestern Bell Telephone Company
Texas	Docket No. 16300	Application of AT&T Communications of the Southwest, Inc. For Compulsory Arbitration to Establish An Interconnection Agreement Between AT&T and GTE Southwest Incorporated and Contel of Texas, Inc.
Texas	SOAH Docket No. 473-96-1803 PUC Docket No. 16495	Application of GTE Card Services, Inc. For a Certificate of Operating Authority
Texas	Docket No. 18515	Compliance Proceeding For Implementation of the Texas High Cost Universal Service Plan
Texas	Project No. 16251	Investigation of Southwestern Bell Telephone Company's Entry Into the InterLATA Telecommunications Market

REQUIREMENTS OF SECTION 252(D)(1) OF THE FEDERAL ACT

Q. WHAT ARE THE REQUIREMENTS OF THE FEDERAL ACT FOR PRICING OF UNBUNDLED NETWORK ELEMENTS AND INTERCONNECTION?

A. Section 252(d)(1) states:

> (d) PRICING STANDARDS.--
>
> (1) INTERCONNECTION AND NETWORK ELEMENT CHARGES.--Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section--
>
> (A) shall be--
>
> (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element (whichever is applicable), and
>
> (ii) nondiscriminatory, and
>
> (B) may include a reasonable profit.

Q. HAVE THERE BEEN ANY RECENT UNITED STATES CIRCUIT COURT DECISIONS THAT SHED LIGHT ON THE MEANING OF THE COST BASED REQUIREMENTS OF SECTION 252(D)(1) OF THE FEDERAL ACT AND THE MISSOURI COMMISSION'S OBLIGATIONS UNDER THE ACT?

A. Yes, there have been three recent Federal Court judgments handed down which are germane to determining the proper inputs to the cost studies being addressed in this case. The first demonstrates why the Missouri Commission should give deference to the FCC's interpretation of the pricing requirements of the Federal Act.

The *U.S. West Communications, Inc. v. MFS Intelinet, Inc.*[16] decision stated, at page 19:

> [S]tate commissions, while having experience in regulating local exchange carriers in intrastate matters, have little or no experience in implementing federal laws and policies and do not have the nationwide perspective characteristic of a federal agency. ...Further, ... state commissions do not have extensive experience or expertise in the specific mandate of the Act – promoting competition in the local exchange market.

Of course, the FCC does has the nationwide perspective referenced in this statement, and the MPSC should give the FCC's determinations tremendous weight.

The Northern District Court of California recently issued a judgment on May 11, 1998 that sheds additional light on the MPSC's role in establishing the proper costing standard.[17] (See Schedule 15.) It further clarifies that, while the Federal Act leaves it to the state commissions to establish rates, the Federal Courts, will review *de novo* the state commissions' decisions, to ensure they satisfy the Courts' interpretation of the requirements of the Federal Act. It states:

> While the PUCs certainly have expertise in regulating telecommunications industries that this Court will not ignore, the PUCs do not have expertise in interpreting and applying federal law. The Court finds unconvincing the CPUC's [California Public Utility Commission] argument that federal courts should accord state agencies substantial deference ... (Page 6)
>
> It is true that the state commissions have exclusive jurisdiction to determine intrastate pricing. However, state commissions are still required to ensure that their decisions comply with the Act, a matter that the Court will review de novo. (Page 14)

[16] No. C 97-222WD (W.D. Wash. Jan. 7, 1998).

[17] No. C 97-0080 SI.

The third recent decision that is germane to this cost proceeding comes from the United States District Court for the Eastern District of Virginia, in Civil Action Number 3:97CV493. This final order was issued May 19, 1998. (See Schedule 16.) In this decision, on page 16, the Court holds that the Federal Act does not grant incumbent local exchange carriers such as SWBT, a license to recover any cost it seeks to recover. Instead, the Court finds that relevant costs are those that will promote competition.

> As discussed above, Section 252(d)(1) directs rates for network elements and interconnection agreements based on cost and possibly including a reasonable profit. Besides its provision that costs be "determined without reference to a rate-of-return or other rate-based proceeding," section 252 places no qualifiers on the term "cost." However, the absence of a qualifier does not grant a license to include any cost the ILEC seeks to recover. Instead, relevant costs are those which are consistent with the goal of the 1996 Act to increase competition in local markets.

The same order by the Court sheds yet additional light on the correct interpretation of the pricing standards of the Federal Act. It plainly clarifies that recovery of historical costs is not allowed. It also clarifies that the Eighth Circuit did not invalidate the FCC pricing rules on the basis of merit, but only on the basis of jurisdiction. Therefore, the FCC's underlying pricing method remains valid and instructive.

> Nevertheless Section 252(d)(1)(A) is best read as not allowing historical costs. First, Section 252(d)(1) does not provide for recovery of historical cost but excludes it. Costs shall be "determined without reference to a rate-of-return or other rate-based proceeding" Section 252(d)(1)(A). Historical costs are determined in a rate-of-return or other rate based proceeding. ... Therefore, they are excluded by Section 252(d)(1)(A). (Page 19.)
>
> Historical costs are not relevant because they are "sunk", unavoidable and bear little relation to current pricing decisions. ... The Eighth Circuit declined to

review the pricing rules on their merits[.] The circuit court vacated the FCC pricing rules on jurisdictional grounds. Consequently, the underlying pricing methodology remains valid and instructive. (Page 20.) [Citations omitted.]

THE FCC INTERPRETATION OF THE ACT

Q. HOW HAS THE FCC INTERPRETED SECTION 252(D)(1) OF THE FEDERAL ACT?

A. The FCC's First Report and Order in CC Docket 96-98 ("Order") provided the FCC interpretation of how prices for interconnection and unbundled elements should be set under the Federal Act. The FCC coined the term "TELRIC" or Total Element Long Run Incremental Cost, to describe the appropriate costing methodology. TELRIC determines prices based on the cost an efficient new entrant would face if it were to enter the market and serve the same volumes served by the incumbent LEC.

Paragraph 620 of the FCC's order illustrates this point.

> If market prices exceed forward-looking economic costs, new competitors will enter the market. ... Prices for unbundled elements under section 251 must be based on cost under the law, and that should be read as requiring that prices be based on forward-looking economic costs. (Emphasis added.)

In other words, if market prices exceed the new entrants' forward looking costs, they will enter.

Q. WHAT ELSE DID THE FCC'S ORDER STATE ABOUT PRICES?

A. In paragraph 679 of the Order, the FCC states that the prices should be set to emulate what the price would be in a competitive market: "Pricing methodology based on forward-looking, economic costs best replicates, to the extent possible, the conditions of

a competitive market." Of course the current local exchange market in Missouri is not competitive, making prices based on current incumbent LEC cost structures different and inappropriate. Incumbent local exchange carriers will have to operate more efficiently when there are competitors seeking to take their customers away from them.

In paragraph 685 of the Order, the FCC adopted a "scorched node" costing methodology. This is opposed to a "scorched earth" methodology which would allow Incumbent Local Exchange Carrier (ILEC) switch locations to be optimized.

> We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that wire centers will be placed at the incumbent LEC's current wire center locations, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements.

The FCC also clearly stated that the costs to be recovered should be forward looking and long run. Long run costs are based on the assumption that all costs are treated as variable. The difference between long run and short run studies is that in a short run study at least one input is assumed to be invariable.[18] In the long run, there are no costs which are embedded or operations that must be accepted as given. In the long run one can assume efficient technology and efficient operation and maintenance of that technology. SWBT's proposed prices are based on inputs and assumptions that do not include only efficient technology and they assume that current levels of efficiency are as optimal as they could get, even in the long run.

[18] A short run study can cover a very long time horizon. As long as even one input is forced to remain constant at its current value, the short run continues.

The FCC stated in paragraph 705 that prices based on an embedded cost methodology would not be pro-competition, instead they would favor the incumbent LEC. And furthermore, in paragraph 706, the FCC recognized that the TELRIC methodology does not and should not guarantee that the incumbent LECs would recover their embedded costs. If the LEC's embedded costs or forward looking actual booked ("FLAB") costs were higher than TELRIC, the incumbent LEC would have to improve its cost structure to generate an acceptable return to investors. That is how competitive markets operate.

SWBT's proposed inputs and assumptions fail to recognize the gains in efficiency that SWBT is making and will surely continue to make over the long run time frame. Many of SWBT's filed cost study inputs and assumptions do not meet the statutory TELRIC requirements because they assume investment, network placement, fill factors and expense ratios to be fixed at today's levels, or even at 1995 levels.

SWBT may argue that all transition costs necessary to get to an efficient network should be included in a TELRIC study. This is wrong. A TELRIC study does not protect the incumbent LEC's embedded investments. In a competitive market, this unforgiving concept is a fact of life for competitors. The dynamics of competitive markets form the appropriate framework in which to set prices based on TELRIC. Inefficient costs must be written off, not included in forward looking costs.

Furthermore, it would be disingenuous for SWBT to argue that such transition costs belong in a properly conducted cost study. SWBT's own cost studies, for all their flaws, do assume that some, but by no means all, outdated technology is replaced by forward looking technology. They do replace analog switches with digital switches. They do assume more fiber in the feeder than in SWBT's embedded network. They do assume a higher level of IDLC than currently they have chosen to install in their embedded network. In none of these cases do they ever attempt to include any of the cost of the old technology that has been replaced in the study. Neither do they attempt to include costs of removing the old technology. For SWBT to argue at the eleventh hour that such costs would have to be included in a properly conducted TELRIC study would be hypocritical and wrong.

REDACTED TESTIMONY

DALE LEHMAN

ON BEHALF OF

SOUTHWESTERN BELL TELEPHONE COMPANY

SCHEDULE 4

DIRECT TESTIMONY OF DALE E. LEHMAN

ON BEHALF OF

SOUTHWESTERN BELL TELEPHONE COMPANY

DOCKET NUMBER 97-SCCC-149-GIT

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

A. My name is Dale E. Lehman, and I am Associate Professor of Economics at Fort Lewis College in Durango, Colorado. My business address is 8960 County Road 250, Durango, CO 81301.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN THIS DOCKET?

A. Yes, I provided testimony on behalf of Southwestern Bell Telephone Company in the earlier phase of this docket. At that time I was Senior Economist at Southwestern Bell Telephone Company. I have since returned to my permanent teaching position at Fort Lewis College. My current curriculum vitae is Attachment 1 to this testimony.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I provide a template for how to choose between the competing "inputs" advocated in this proceeding. These "inputs" vary significantly among those proposed by SWBT, AT&T, BJA/BJA/Staff (I will refer to the Ben Johnson Associates and BJA/Staff positions as "BJA/Staff"), and CURB. My observations are intended to support why SWBT's proposal is consistent with efficient economic choices. In particular, I will show that SWBT's models and inputs are an appropriate basis for deriving forward-looking long-run incremental cost estimates, and that the conceptual basis for many of the other parties' proposed modifications to these models and inputs are not consistent with economic theory and/or sound public policy principle.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. The conceptual approach of SWBT's cost models/inputs has been questioned in terms of

The disparity between some retail prices and UNE prices might be a problem if that were the only entry means available to CLECs. But it is not. CLECs have two additional avenues for entry: resale and facilities-based entry. Indeed, the UNE price will not be competitive for customers with private lines (or similar targeted services) located close to central offices. This is precisely the segment of the market where facilities-based entry has been occurring and will continue to take place. To insist that UNEs should be competitive under such circumstances is to impose a loss on SWBT for virtually all other uses of UNEs.

Q. SHOULD UNE PRICES MIMIC THE PRICES THAT WOULD RESULT FROM LONG-RUN COMPETITIVE CONDITIONS?

A. This is potentially the most crucial underlying dispute in this proceeding. SWBT cost studies make no pretense to represent, or not to represent, long-run perfectly competitive market conditions. The cost studies attempt to answer the question, "what does it cost SWBT, on a going forward basis, to provide these network elements?" This is the correct price signal to send to potential and actual competitors, on which they can base their entry, investment and pricing decisions. That is how the market process works. The outcome will be that the most efficient providers will succeed.

The alternative is for this Commission to attempt to determine, not what SWBT's costs are, but what they might be under unspecified long-run competitive conditions. This task is futile - the information to make this judgement simply does not exist. To attempt to answer this question is to replace the market process with a regulatory process. The Telecommunications Act of 1996 called for market processes to deliver an advanced infrastructure. Unbundling, open entry, non-discrimination, and prices based on the costs that SWBT actually incurs, are the means to obtain this objective.

---

advantage of this is to reduce the problem of arbitrary allocation of common costs.

IMPORTANT ECONOMIC CONCEPTS

Q. WHAT ARE INCREMENTAL COSTS AND FORWARD LOOKING INCREMENTAL COSTS?

A. Incremental costs are the costs associated with an increment of output. Incremental costs are similar to marginal costs. For example, if it costs $10 to make the very next widget, the marginal cost of that widget is $10. If it costs $100 to make the next 20 widgets, the incremental cost per widget over the increment of 20 widgets is $5 per widget. Forward looking incremental costs are those additional costs that will be incurred by the provider in the future. What is in the past is in the past and cannot be changed. Markets are dynamic; they are not at rest. Backward looking costs are at rest. In competitive markets, competitors' costs/prices and/or changes in technology, and customers' future buying decisions, not one's own historic costs, are the controlling factors for prices. Future revenues and future costs, based on future customer decisions, control pricing decisions. While we may have emotional ties to costs incurred in the past, our decisions must be made based on options available to us, and to our customers, now and in the future.

Q. ARE THERE DIFFERENT TYPES OF FORWARD LOOKING INCREMENTAL COSTS?

A. Yes, there are short run incremental costs and long run incremental costs.

Q. WHAT ARE SHORT RUN INCREMENTAL COSTS?

A. Short run incremental costs are the changes in variable costs that occur when output changes but only in the short run. In the short run, the providing company is not able to take advantage of all opportunities for efficiency gains; and there are usually some fixed costs which will not change when output either increases or decreases.

Q. WHAT ARE LONG RUN INCREMENTAL COSTS (LRIC)?

A. Generic long run incremental costs are those incremental costs that would exist in the long run. Long run is the time period over which the providing company can take advantage of all available efficiency gain opportunities such that all costs are treated as variable. In the long run, all costs are variable by definition, thus there are no fixed or sunk costs in the long run.

Q. WHAT ARE THE IMPORTANT IMPLICATIONS OF A LONG RUN METHODOLOGY?

A. Since there are no fixed costs, the structure of the producer's assets and capital can be redesigned completely. All technology and production processes that are not state of the art can be eliminated. Thus, in examining a LRIC, one must assume that all old, antiquated equipment has been replaced by the most modern, technically efficient, least cost equipment. Moreover, because it is a long run study, one must assume that the provider is operating at optimal efficiency. This is the a critical economic concept which is integral to this proceeding. The Commission must pay special attention to the concept

of long run and ensure that it is captured correctly in the inputs, assumptions and prices which it sanctions in this proceeding.

Q. IS THE LONG RUN A THEORETICAL CONCEPT?

A. Long run costs are based on "the analysis of a set of facts in their relation to one another", which is the Webster's Ninth New Collegiate Dictionary definition of a theory. Therefore, in a sense it is, by its very nature, a theoretical examination. That it may be theoretical, however, in no way detracts from its usefulness. Economists agree that, in a competitive marketplace, prices will tend towards, if not approximate, long run incremental costs. Because the local exchange market in Missouri is transitioning into a competitive environment, it is imperative that this Commission set rates for UNEs based upon true TELRICs. Any rate that is not based upon true TELRIC and which does not incorporate all of the efficiency gains that will be achieved in the long run will have a significant chilling effect upon competition, thereby depriving Missouri consumers of the benefits of lower rates and better service. While TELRIC rates may be a dramatic departure from historic local exchange rates, rates in competitive markets can suddenly and dramatically be lowered, *to the benefit of consumers*, as illustrated by the Intel example provided at the end of this section.

Q. WHAT IS TELRIC (TOTAL ELEMENT LONG RUN INCREMENTAL COST)?

A. TELRIC is a form of generic long run incremental cost that looks at the total demand for each element used in the production process. It is a bottoms up costing approach that bases costs of complex combinations of elements on the costs of the fundamental basic

elements that are used in the combinations. TELRIC looks at utilization of elements not on an individual service basis, but on the basis of all usage of that element by all services.

Q. WHAT ARE "ACTUAL/HISTORIC" COSTS?

A. "Actual/historic" costs are those that a local exchange carrier has incurred in the past. These are the Backward Looking Actual Booked (BLAB) costs contained in SWBT's accounting records since its original founding. They are embedded costs. They contain both efficient and inefficient costs. They contain costs of providing services to end users as well as to new entrants. They include both state-of-the-art and obsolete technology. They contain whatever costs which have been booked by a firm in the past.

Because SWBT was subject to rate-of-return regulation in Missouri for many years, it has had an economic incentive to over-acquire and underutilize its assets. Indeed, low utilization rates that SWBT would sponsor in this docket are proof of the extent to which SWBT is underutilizing its assets. Since actual/historic costs do not represent the costs that an efficient provider would incur in the long run in a competitive market, they are not appropriate for a forward looking TELRIC study. Of course, SWBT's position is "They've gone about as fer as they can go" on utilization and efficiency. The Commission should reject that position and accept AT&T's inputs and assumptions which reflect gains which SWBT will have to make in a competitive environment in the long run.

Q. ARE "ACTUAL/HISTORIC" COSTS RELEVANT FOR PRICING PURPOSES?

A. "Actual/historic" costs are irrelevant from an economic/market perspective, unless they just happen to be equal to forward looking costs. As stated above, in a competitive market, prices are not based on a particular provider's "actual/historic" costs. When entry barriers are eliminated, new entrants will be able to provide alternatives and do so using the most efficient technology available. Customers will buy from the most efficient provider, all other things being equal, that can offer the best price. To the extent that "actual/historic" costs are higher than the forward looking costs incurred by a new entrant, the "actual/historic" costs must be ignored if the incumbent firm wants to maintain a customer base while getting its costs in line with those of the new entrant. To the extent that "actual/historic" costs are lower than forward looking costs incurred by a new entrant, the incumbent carrier can again price at forward looking costs, because that is where competitors will price, and this time reap a premium return on booked investments. In either event, however, "actual/historic" costs should be ignored for purposes of setting rates in this proceeding.

Q. SHOULD "ACTUAL/HISTORIC" COSTS BE USED AS A VALIDITY CHECK FOR THE UNBUNDLED ELEMENTS?

A. No. As shown above in Schedules 2 and 3, the price for unbundled elements is required by law to be based on TELRIC. If TELRIC diverges from "actual/historic" costs, the law does not allow for an adjustment to the TELRIC rates.

Q. WHAT ARE "ACTUAL/FUTURE" COSTS?

A. "Actual/Future" costs are theoretical costs that SWBT claims it will actually incur in the future. These could also be referred to as Forward Looking Actual Booked (FLAB) costs. These costs are derived from the actual/historical costs of providing service today and extrapolating those costs in the future. For example, if $10 was spent to make a widget in the past, and inflation is 2%, a FLAB cost would simply assume that it would cost $10.20 to make that widget in the future. A FLAB cost, however, does not examine the costs of making the widget in the long run. FLAB costs often include inefficient costs. Therefore, it is inappropriate to simply equate FLAB costs to TELRIC in a forward looking economic cost study. If prices based on FLAB costs result from SWBT engineering and operations decisions assuming that some inputs cannot be changed, or if SWBT in the future does not use current technology efficiently deployed, then SWBT's "actual/future" costs do not meet the requirements of the Federal Act, and it would violate the Federal Act to set UNE and interconnection prices on this basis.

Q. WOULD IT BE APPROPRIATE TO PRICE UNES BASED ON INCREMENTAL COSTS OVER THE NEXT THREE YEARS, THE LIFE OF THE INTERCONNECTION AGREEMENT?

A. Not if it would be inconsistent with the concept of long run. Many fixed costs may not be variable over the course of the next three years. For costing purposes, the appropriate time-frame/planning period for cost analysis is the long-run, and not three years. Indeed, SWBT uses a 99 year planning period for its cost studies to reflect the long run. It is inconsistent with the economic principles underlying a long run study only to model costs over a three year period.

Q. IF THE COMMISSION WERE TO ADOPT PRICES FOR UNBUNDLED ELEMENTS BASED ON SWBT'S "ACTUAL/HISTORIC" OR "ACTUAL/FUTURE" COSTS AS OPPOSED TO ITS TELRICS, WOULD THIS LEAD TO INEFFICIENCIES?

A. Yes. Any time that prices deviate from true economic costs, inefficient price signals are introduced in the market. Invariably, this will lead to inefficient entry decisions by competitors. Also, to the extent that prices are higher than they should be, Missouri would be saddled with high cost telecommunications providers; a disadvantage that could impair the competitive position of the Missouri economy. The bottom line is that Missouri consumers would pay too much for local telephone service.

Q. IS THERE ANOTHER REASON WHY "ACTUAL/HISTORIC" COSTS ARE IRRELEVANT?

A. Yes. To the extent actual/historic costs were incurred in a monopoly environment, they were matched against monopoly revenues. It would be discriminatory to require a new entrant to incur these same costs, when the new entrant must recover its costs in a competitive environment, and without the security enjoyed by a monopolist. In a monopoly environment, each time SWBT added a new asset, it created an opportunity to increase revenues through rate of return regulation.

Q. IS THIS AN IMPORTANT POLICY ISSUE?

A. Yes. SWBT's proposed prices do not meet the statutory requirement for TELRIC based prices because they assume investment, network placement, fill factors and expense ratios to be static at today's levels. AT&T's are based on true TELRIC and are in conformance with the statutory requirements.

Q. TO WHAT EXTENT MUST TELRIC STUDIES RECOGNIZE SWBT'S EXISTING NETWORK?

A. There is definitely no requirement in the Missouri rules or federal law that the cost studies recognize SWBT's existing network, or SWBT's current level of asset utilization. The FCC's definition of TELRIC states that, for purposes of a TELRIC study, one only assumes that the wire centers are contained in their existing locations. The remainder of the network should be determined according to what would be deployed in a forward looking least cost most efficient environment. [FCC's First Report and Order in CC Docket 96-98, August 1, 1996, Para. 685] To the degree that SWBT's existing network departs from a network that will exist in a forward looking competitive marketplace, such adjustments are necessary to comply with the Federal Act. SWBT's existing network was designed and built in a guaranteed monopoly environment, prior to the Federal Act. It was not designed and built subject to the tremendous market pressures and corresponding efficiency which accompany a competitive marketplace. The inputs and assumptions upon which UNE rates are set must be based on a network and operating practices which would present themselves in a competitive market. That is precisely why AT&T's proposed prices are appropriate and SWBT's are not.

Q. CAN YOU PROVIDE AN EXAMPLE OF WHERE EMBEDDED COSTS ARE IRRELEVANT AND WILL NOT BE RECOVERED IN PRICES?

A. A great illustration of this principle can be found in Schedule 14 to my testimony. This is an article from the January 6, 1998 issue of USA Today. Intel is slashing its prices by 33% due to pressure from competitors. Experts say the price will fall to about 25% of today's price by the end of the year. This has nothing to do with Intel's own cost structure and desired return on capital. The price reduction is due to other suppliers' ability to bring like products to consumers for a lower price. Intel has to respond to either competitors' costs/prices by lowering its price, or become irrelevant in the market. Intel will have to reengineer its cost structure to be able to make an acceptable profit at the new market price. Intel cannot raise its price to recover transition costs which the new entrants do not have.

ACRONYMS

AAS	Arbitration Advisory Staff
BLAB	Backward Looking Actual Booked
CLEC	Competitive Local Exchange Carrier
DIP	Dedicated Inside Plant
EMS	Element Management System
FCC	Federal Communications Commission
FCC	Federal Communications Commission
FLAB	Forward Looking Actual Booked
ILEC	Incumbent Local Exchange Carrier
INE	Intelligent Network Element
LEC	Local Exchange Carrier
LSPSC	Local Service Provider Service Center
LSR	Local Service Request
MPSC	Missouri Public Utilities Commission
NRC	Non-recurring Charge
OSS	Operations Support Systems
PAWS	Provisioning Activity Work Station
POTS	Plain Old Telephone Service
SOAC	Service Order Activation Control
SOP	Service Order Processor
SWBT	Southwestern Bell Telephone
TELRIC	Total Element Long Run Incremental Cost
TMN	Telecommunications Management Network
UNE	Unbundled Network Elements

DOCKET NO. 16189 PETITION OF MFS COMMUNICATIONS COMPANY, INC., FOR ARBITRATION OF PRICING OF UNBUNDLED LOOPS	PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 16196 PETITION OF TELEPORT COMMUNICATIONS GROUP, INC., FOR ARBITRATION TO ESTABLISH AN INTERCONNECTION AGREEMENT	
DOCKET NO. 16226 APPLICATION OF AT&T COMMUNICATIONS OF THE SOUTHWEST, INC., FOR COMPULSORY ARBITRATION TO ESTABLISH AN INTERCONNECTION AGREEMENT BETWEEN AT&T AND SOUTHWETERN BELL TELEPHONE COMPANY	
DOCKET NO. 16285 PETITION OF MCI TELECOMMUNICATIONS CORPORATION AND ITS AFFILIATE MCIMETRO ACCESS TRANSMISSION SERVICES, INC., FOR ARBITRATION AND REQUEST FOR MEDIATION UNDER THE FEDERAL TELECOMMUNICATIONS ACT OF 1996	
DOCKET NO. 16290 PETITION OF AMERICAN COMMUNICATIONS SERVICES, INC., AND ITS LOCAL EXCHANGE OPERATING SUBSIDIARIES FOR ARBITRATION WITH SOUTHWESTERN BELL TELEPHONE COMPANY PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996	

DEPOSITION OF JACKIE RICHARDSON
TAKEN BY J. ALAN HOLMAN, ESQ.
ON BEHALF OF THE PETITIONER MCI
July 30, 1997

REPORTED BY DEBRA M. MUSIELAK
CERTIFIED SHORTHAND REPORTER-REGISTERED DIPLOMATE REPORTER
REGISTERED PROFESSIONAL REPORTER

RANKIN REPORTING & LEGAL VIDEO
1015 Locust Street
St. Louis, Missouri 63101
(314) 231-2202

DOCKET NO. 16189 PETITION OF MFS COMMUNICATIONS COMPANY, INC., FOR ARBITRATION OF PRICING OF UNBUNDLED LOOPS	PUBLIC UTILITY COMMISSION OF TEXAS
DOCKET NO. 16196 PETITION OF TELEPORT COMMUNICATIONS GROUP, INC., FOR ARBITRATION TO ESTABLISH AN INTERCONNECTION AGREEMENT	
DOCKET NO. 16226 APPLICATION OF AT&T COMMUNICATIONS OF THE SOUTHWEST, INC., FOR COMPULSORY ARBITRATION TO ESTABLISH AN INTERCONNECTION AGREEMENT BETWEEN AT&T AND SOUTHWETERN BELL TELEPHONE COMPANY	
DOCKET NO. 16285 PETITION OF MCI TELECOMMUNICATIONS CORPORATION AND ITS AFFILIATE MCIMETRO ACCESS TRANSMISSION SERVICES, INC., FOR ARBITRATION AND REQUEST FOR MEDIATION UNDER THE FEDERAL TELECOMMUNICATIONS ACT OF 1996	
DOCKET NO. 16290 PETITION OF AMERICAN COMMUNICATIONS SERVICES, INC., AND ITS LOCAL EXCHANGE OPERATING SUBSIDIARIES FOR ARBITRATION WITH SOUTHWESTERN BELL TELEPHONE COMPANY PURSUANT TO THE TELECOMMUNICATIONS ACT OF 1996	

DEPOSITION OF JACKIE RICHARDSON, produced, sworn and examined on the 30th day of July, 1997, between the hours of nine o'clock in the forenoon and five o'clock in the afternoon of that day, at the offices of Southwestern Bell Telephone Company, One Bell Center, Room 5T, in the City of St. Louis, State of Missouri, before Debra M. Musielak, Certified Shorthand Reporter within and for the States of Missouri and Illinois, in a certain cause now pending before the Public Utility Commission of Texas.

Q. Okay. And, one other question on this issue and then I think I'm going to move on to finish up here. Does that mean -- what you just said, and assuming that that's what happens, does that mean that orders placed through an electronic interface will also have a 99 percent flow through rate?

A. The percentage level for those orders should be the same.

Q. As EASE?

A. As EASE. As what has been presented as EASE.

Q. Let me ask it this way, without accepting the 99 percent number, because I think that's perhaps what you're struggling with --

A. Yes.

Q. Will the flow through rate when all is said and done on the electronic orders processed through electronic interface for unbundled elements be the same as the flow through rate as currently exists on EASE?

A. My understanding is that level will be as high as possible based on everything being in a perfect world. And I mean perfect world by we are at the process of depending upon standards, and the process of developing these systems, and with all of that being the perfect world, and we have everything in place, we're going to offer you the same level of standards as we do with our resold services today.

Q. And, I think we're saying the same thing. Just to make sure we're clear, does that mean that assuming the system is developed and the bugs are worked out, that the flow through rate for electronic interface should be the same as it is for the EASE resold services?

A. Exactly.

Q. Okay. Now, I think you may have covered some of this with Mr. Holman, and I just want to make sure the proposed service order charges that are MCI Exhibit 1, those are based entirely on manual processing, correct?

A. That is correct.

Q. So, those are not being proposed for any LSP which has either an electronic interface with Southwestern Bell or places orders -- let me stop with electronic interface.

A. No, it is not. This is strictly manual rates.

Q. Okay. Now, off the record.

(Discussion held off the record.)

Q. Miss Honeyball -- you know Miss Honeyball, do you not?

A. Yes, I do.

Q. Does she work in your organization?

A. We're in the same organization.

Q. Okay. She testified last week that it was her understanding that Southwestern Bell had made the decision that it would charge $5 for service orders placed

PUC PROJECT NO. 16251

INVESTIGATION OF SOUTHWESTERN BELL TELEPHONE COMPANY'S ENTRY INTO THE TEXAS INTERLATA TELECOMMUNICATIONS MARKET	§ § § § §	PUBLIC UTILITY COMMISSION OF TEXAS

COMMISSION RECOMMENDATION

The Texas Public Utility Commission (the Commission) and the telecommunications industry have worked steadily since the passage of the federal Telecommunications Act of 1996[1] (FTA96) to negotiate and arbitrate interconnection agreements that will facilitate local competition in Texas. Pursuant to FTA96, new entrants have the legal authority to enter the local market in Texas through resale, unbundled network elements (UNEs), and interconnection. FTA96 § 251 (47 U.S.C. § 251).

In order to provide in-region interLATA services, Southwestern Bell Telephone Company (SWBT), a Bell Operating Company (BOC), must establish that the local telecommunications market is irreversibly open to competition.[2] Specifically, Section 271 of FTA96 requires SWBT to establish that

- it satisfies the requirements of either Section 271(c)(1)(A), known as "Track A," or Section 271(c)(1)(B), known as "Track B";
- it is providing the 14 checklist items listed in Section 271(c)(2)(B) pursuant to either a Track A state-approved interconnection agreement or a Track B statement of generally available terms (SGAT);
- the requested authorization will be carried out in accordance with the requirements of Section 272; and
- SWBT's entry into the in-region interLATA market is "consistent with the public interest, convenience, and necessity." Section 271(d)(3)(C).

Although the Federal Communications Commission (FCC) ultimately determines whether SWBT has established its entitlement to enter the interLATA market pursuant to Section 271, the statute directs the FCC to consult with state commissions. The FCC relies upon state commissions to develop a complete factual record.[3]

---

1 Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 15 and 47 U.S.C.) (FTA96).

2 *See e.g.*, Memorandum Opinion and Order, Docket No. 97-137, In the Matter of Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, as Amended, to Provide In-region, InterLATA Services in Michigan (August 19, 1997) (Ameritech Michigan Order).

3 Ameritech Michigan Order at ¶ 30.

SWBT filed its application to provide in-region interLATA service in Texas on March 2, 1998 with the Commission. On April 7, 1998, the Commission held an open meeting at SWBT's Local Service Center (LSC) in the Dallas-Ft. Worth area and on April 21st through the 25th, the Commission held an extensive hearing on SWBT's application. Many competitive local exchange companies (CLECs) and other parties participated in the Commission's 271 proceeding.

SWBT has done much in Texas to open the local market to competition. Notwithstanding that fact, if the Commission were asked to give a recommendation to the FCC today, it regrettably would be required on the record before it to say "not yet." The Commission files this Recommendation in an effort to provide SWBT with guidance on what the Commission believes SWBT will need to do in order for this Commission to say that the local market is irreversibly open and SWBT should be allowed to provide in-region interLATA service. The Commission files this Recommendation in the spirit of cooperation and in the hope that SWBT will work with the 271 participants and this Commission to get SWBT to "yes."

Participants presented evidence throughout this Section 271 proceeding that indicated their difficulty in working with SWBT to interconnect, purchase UNEs, and provide resale. Although the Commission believes the evidence may indicate that SWBT needs to change its corporate attitude and view the participants as wholesale customers, the Commission also believes many of the problems may be attributable to lack of communication within SWBT and between SWBT and the participants. The Commission believes that SWBT attempted to address many of the problems raised by the participants during the course of the 271 hearing itself. The Commission hopes that this response by SWBT indicates a willingness to address the issues that will get SWBT to "yes."

Public Interest

With regard to the public interest aspect of Section 271 (including the "ease of doing business with SWBT") the Commission makes the following recommendations:

1. The Commission shall establish a collaborative process whereby SWBT, Commission staff, and participants to this project establish a working system that addresses all of the issues raised in this recommendation;
2. SWBT needs to show this Commission and participants during the collaborative process by its actions that its corporate attitude has changed and that it has begun to treat CLECs like its customers;
3. SWBT needs to establish better communication between its upper management, including its policy group, and its account representatives. As a first step, SWBT shall develop policy manuals for its account representatives and put in place a system, such as email notifications, to communicate decisions by the policy group to account representatives and questions or comments back to the policy group;
4. SWBT needs to establish consistent policies used by all SWBT employees in responding to issues raised by CLECs. Toward that end, SWBT shall establish an

interdepartmental group whose responsibility is trouble-shooting for CLECs engaged in interconnection, purchase of UNEs, and resale. This group shall be headed by an executive of SWBT with the final decision making power;

5. SWBT needs to establish a system for providing financial or other incentives to LSC personnel based upon CLEC satisfaction;
6. SWBT needs to commit to resolving problem issues with CLECs in a manner that will give CLECs a meaningful opportunity to compete;
7. SWBT shall draft a comprehensive manual for CLECs to ensure the timely provision of all aspects of interconnection, provision of UNEs and resale. The manual shall be written in a fashion that clearly delineates parties' responsibilities, the procedures for obtaining technical and other practical information, and the timelines for accomplishing the various steps in interconnection, purchase of UNEs and resale. The manual should also set forth SWBT's policy with regard to a CLEC's ability to adopt an approved interconnection agreement pursuant to Section 252(i) (this process will be referred to as the "MFN" process);
8. SWBT needs to treat CLECs at parity with the way it treats itself or its unregulated affiliates;
9. SWBT needs to show proof that it has made all the changes it agreed to make during the process of the Commission's 271 hearing, all of which have been detailed in the record;
10. SWBT needs to establish that its interconnection agreements are binding and are available on a nondiscriminatory basis to all CLECs;
11. To the extent SWBT chooses to establish 271 requirements by relying upon interconnection agreements it has appealed, SWBT should consider adopting a statement of generally available terms and conditions;
12. SWBT needs to establish that it is following all Commission orders referenced in this recommendation and that it intends to follow future directives of the Commission;
13. SWBT needs to establish its commitment to offering the terms of current interconnection agreements during any period of renegotiation, even if the negotiations extend beyond the original term of the interconnection agreements;
14. Commission staff, SWBT, and the participants need to establish adequate performance monitoring (including performance standards, reporting requirements, and enforcement mechanisms) during the collaborative process that will allow self-policing of the interconnection agreements after SWBT has been allowed to enter the long distance market;
15. SWBT shall not use customer proprietary network information to "winback" customers lost to competitors.

Operations Support Systems (OSS)

RECOMMENDATIONS: In addition to the recommendations addressed above in the **public** interest, **checklist item**, and the **performance standard** sections above, the Commission recommends the following, the details of which could be established in the collaborative process. The Commission also includes a brief discussion relating to the relationship between interim and permanent interfaces to provide some context for the specific recommendations.

Relationship between interim and permanent interfaces:

There are a number of interim and permanent OSS interfaces discussed in these comments. In particular, at least for CLECs willing to move to an EDI (Electronic Data Interexchange solution), EASE (Easy Access Sales Environment) is an interim interface for resale and UNE switch/port combinations, LEX (Local Service Request Exchange System) is an interim solution for resale and UNE orders, VERIGATE (Verification Gateway) and DataGate are interim measures for preordering functions. SWBT's ultimate obligation is to develop a real-time, interactive, EDI gateway based on national standards.

As the final stages of EDI development are in progress, SWBT's § 271 relief should not be rejected on this issue if certain conditions are met indicating that the OSS systems in place meet the requirements set out by the Commission and the FCC. These conditions include the following:

1. SWBT's interim measures provide flow-through and are modified as discussed in the specific recommendations contained herein;

2. SWBT continues to develop its EDI interface in good faith; this issue should be explored in more detail during the collaborative process. (Some form of adjustment may be necessary to offset the necessity of CLECs to undertake dual entry prior to EDI development being completed to the Commission's satisfaction, if SWBT does not meet its implementation dates for EDI development. Potentially, an interim discount on SWBT's electronic service order charge may be appropriate.); and

3. Sufficient procedures are in place to transition from interim measures to permanent solutions.

Specific Recommendations:

1. OSS shall be addressed in the collaborative process. The Commission believes implementation of both the spirit and letter of these recommendations would lead to an affirmative answer on OSS:
2. SWBT shall establish that all of its OSS systems for pre-ordering, ordering, provisioning, maintenance and repair, and billing are at parity;
3. SWBT shall establish that all of its electronic OSS systems for pre-ordering, ordering, provisioning, maintenance and repair, and billing are at parity and provide flow-through without the necessity of manual intervention;
4. SWBT shall conform its technical documents to meet the LEX and EDI interfaces. SWBT's LEX and EDI interface, at the time of the hearing, did not sufficiently follow the technical documentation provided by SWBT to CLECs;
5. SWBT shall modify LEX to better integrate LEX with VERIGATE, a pre-ordering apparatus. SWBT should develop the capability necessary to allow more efficient order preparation, beyond "Cut and Paste" functionality, in order to prevent a CLEC's sales representative from re-keying certain information multiple times when it is not necessary. SWBT's LEX system, at the time of the hearing, could not be used in a manner reasonably comparable to the EASE interface used by SWBT for its retail operations;
6. SWBT shall undertake further development of LEX and EDI to achieve the flow through capabilities for both UNE and Resale orders. LEX and EDI's electronic flow through, at the time of the OSS demonstration, was not sufficiently comparable to that of SWBT's EASE system to provide nondiscriminatory access to CLECs. Further flow through capability is necessary. SWBT shall provide data on the rejection rate for orders processed to demonstrate the new flow through capability achieved through Phase I implementation;
7. SWBT shall demonstrate that improved flow through capability enables SWBT's OSS to handle commercial volumes;
8. SWBT shall provide further explanation regarding the disparity in EASE flow through rates in order to ascertain whether EASE is provided in a nondiscriminatory manner;
9. SWBT shall complete the development of EASE for UNE switch/port combinations;
10. Further review of SWBT's OSS training is necessary to determine whether SWBT is providing sufficient training for CLECs to effectively use the interfaces provided by SWBT;
11. Delays relating to LEX and EDI batch processes need to be reduced and transitioned to real time. SWBT shall demonstrate that such delays have been reduced;
12. SWBT needs to develop the procedures to provide timely, accurate information regarding order errors, jeopardies, and CLECs' access order status information;

13. SWBT needs to implement adequate safeguards to assure timely, efficient, parity performance for the manual orders processed by the LSC and CLEC questions directed to LSC. The Commission, therefore, recommends that this issue be explored in more detail during the collaborative process among SWBT, the participants, and Commission Staff. Further review of performance measures may be necessary to provide such a safeguard;

14. SWBT shall either improve the preordering interfaces available to CLECs to provide sufficient access to customer information and/or clarify the record to show that CLECs have parity access to customer service records, *e.g.*, ISDN, complex services and design services;

15. To the extent SWBT's access to the PREMIS database is at the customer service representative level, SWBT shall provide sufficient access to that database system's information and functionality in order to provide parity access;

16. SWBT shall provide access to SORD (Service Order Retrieval Distribution) and LFACS (Local Facilties Access System) at cost-based rates, terms, and conditions. As discussed previously, SWBT would have to provide training necessary to allow CLECs obtain parity access to SORD and LFACs;

17. SWBT shall be required to demonstrate, by providing at least three months of data, that it is providing CLECs with service that meets the performance standards established in this proceeding and in its interconnection agreements;

18. The Commission finds that SWBT does not make available the ability for a facilities-based CLEC to supplement pending service orders or receive timely jeopardy notifications, error notifications, or workflow confirmations. SWBT must either make this capability available to CLECs electronically or demonstrate that SWBT's customer service representatives do not have such access;

19. To provide necessary notifications, SWBT shall fully develop the jeopardy notification function into its EDI interface. This development should also be incorporated into the Order Status Toolbar function;

20. Although fax rejects may be appropriate when a CLEC provides its orders via fax, SWBT shall provide an electronic means for such notification when a CLEC uses an electronic means to place its orders with SWBT;

21. SWBT does not provide data as to the amount of time it takes SWBT to process and transmit reject notifications to CLECs. Moreover, SWBT could not provide specific goals and procedures in response to questioning from the Commissioners so actual performance could be measured against a benchmark. SWBT shall implement such goals and procedures so CLECs can regularly receive this information timely enough to correct such errors without affecting customer service. Such goals and procedures provide a CLEC with the ability to smoothly convert a customer to its service;

22. SWBT must make clear to CLECs the effect of the various stages of an order's "completion" to avoid confusion. To the extent this issue is one of communication, this issue can be addressed in the policy manual discussed in the public interest section of these comments;

23. The Commission, like the FCC, believes that actual commercial usage is the most probative evidence concerning a system's ability to handle large commercial volumes. The Commission recommends, to the extent there is no actual commercial usage or third party testing, alternative means for assessing system performance be developed in the collaborative process. For example, as greater flow-through is developed, commercial volume concerns may be eased as the representative hours necessary to input orders directly into SORD will be lessened. However, even after the potential manual "bottleneck" issue is resolved, there may remain a need to stress test SWBT's OSS systems before an affirmative recommendation is made on this issue;

24. A record on billing issues should be developed further during the collaborative process. The FCC determined that this information is necessary because "competing carriers that use the incumbent's resale services and unbundled network elements must rely on the incumbent LEC for billing and usage information. The incumbent's obligation to provide timely and accurate information is particularly important to a competing carrier's ability to serve its customers and compete effectively." A BOC must also provide detailed evidence to support its claim that it is providing billing on terms and conditions that are nondiscriminatory, just and reasonable. This information should include measures that compare the BOCs performance in delivering daily usage information for customer billing to both its own retail operation and that of competing carriers;

25. SWBT must resolve the double-billing and other billing issues raised during this proceeding and bring forth proof that such problems have been adequately addressed;

26. SWBT shall either limit requirement that a single CLEC obtain multiple OCNs (operating company numbers) or AECNs (alternate exchange company number) or demonstrate a necessity for such requirement;

27. SWBT shall provide CLECs with sufficient definition or information to decipher the downloads of information that a CLEC needs to validate addresses, determine calling scope, and determine feature availability without having to access SWBT's systems;

28. SWBT shall provide parity access to consolidated CSRs for business customers that have more than 30 lines or that have any design services such as Centrex. SWBT must enhance the ability of its interfaces to handle these order types or demonstrate that parity is provided at this time;

29. SWBT shall demonstrate that its back-end systems are operationally ready, to assure performance parity between CLECs and SWBT's retail operations for POTS (plain old telephone service) order completion, FOCs, installation intervals, trouble reports, design services, billing accuracy, or billing timeliness.

RESPONSE OF

LEONARD ELLIS

NONREDACTED

SCHEDULE 9

RESPONSE TO QUESTIONS ASSIGNED TO LEONARD ELLIS

SOUTHWESTERN BELL TELEPHONE COMPANY

DOCKET NUMBER 97-SCCC-149-GIT

Q1. On page 3, lines 4-5, you state that SWBT will process most UNE orders using its TIRKS system, rather than SWITCH. What will SWBT be using in Texas, Missouri, and Oklahoma? To your knowledge, what system will the other RBOC's be using?

A. SWBT uses its TIRKS system to process UNE orders in Texas, Missouri, and Oklahoma. I don't know what systems, if any, are used by other RBOCs.

Q2. On page 4, line 4, "with only one exception..." please clarify that exception?

A. SWBT uses TIRKS because it provides special functions needed in the provisioning of UNE requests. The special functions include inventory and assignment of facilities and equipment which is not used with regular retail telephone service. The exception mentioned in my testimony involves the combination of two individual UNEs that resemble regular retail telephone service. When the analog switch port UNE is combined with a standard analog loop UNE, as offered in various CLEC contracts, the resulting combination equates to the same physical arrangement as regular retail telephone service, and therefore can be provisioned via SWITCH, without the special functions TIRKS provides. TIRKS is used only for individual and combined UNEs that require the special provisioning functions it provides.

Q3. What are the disadvantages of using TIRKS?

A. There are no disadvantages of using TIRKS to provision UNEs. TIRKS is simply the only system capable of performing the functions required for UNE provisioning.

Q4. What are the advantages of using SWITCH?

A. There are no advantages of using SWITCH to provision UNEs. SWITCH is simply not capable of performing the provisioning functions needed.

Q5. On page 4, lines 19-20 you state that SWITCH is not capable of processing UNES without significant and costly alterations. Was a study performed comparing these two alternatives—using TIRKS versus altering and using SWITCH? Please describe the study and the results of that study. If no study was performed, how could such a decision be made without an economic study being performed? If you were not planning on passing on the cost to the CLECs, and this was an internal business decision, what alternative would have been selected? What is the cost per UNE order processed through TIRKS (including the labor classifications and costs of all involved labor) versus that same order processed through an altered switch (including the labor classifications and costs of all involved labor)?

A. The decision to use TIRKS instead of SWITCH was based on the available capabilities of each system. No economic study was needed for this decision because the TIRKS system is capable of these special functions and the SWITCH system is not. Since no economic study was performed, no

alternate selection was considered and the cost of processing UNEs in one system versus the other was not determined.

Q6. On page 5, lines 3-4, you state that TIRKS designed retail services do not flow through at that high rate. What is the current flow through rate for TIRKS designed retail services? What is your objective flow through rate for TIRKS designed retail services?

A. Flow through rates vary widely by type of service and provisioning center. Special Service circuit flow through rates for the state of Kansas varied from 19.2% in April 1998 to a high of 31.7% in May 1998. The current average rate is 23.7% for the year. Our objective is 64%, but many factors combine to limit our results.

Q7. What guidelines were used for the time estimates for UNE nonrecurring cost studies? Are these guidelines Bellcore, SWBT-wide, SWBT-Kansas specific, or local? Please summarize these guidelines for us, covering such areas as defining the work, gathering probability of occurrence data, performing the time estimates, and applying the data.

A. The guidelines used for the time estimates for UNE nonrecurring costs are defined by SWBT for our 5 state area. The guidelines for this study consisted of 12 function descriptions and a template with space for each for a time estimate for each function. Sixteen CPC managers who supervise the clerks that perform the 12 functions were asked to provide estimates of the time required to perform each function. The managers each received a copy of a

template and descriptions of the 12 tasks being studied. The managers were asked to provide their estimate of the average time required to perform each of the functions listed. The 12 functions were divided into two groups. Functions 1 through 4A were addressed by managers familiar with the order logging and loop input functions. Functions 5 through 12 were addressed by the managers familiar with the design function. Each group of managers discussed the tasks listed, considered the probability of occurrence, and arrived at a estimate for each function. The data collected was forwarded to the cost studies coordinator to be summarized. Attached is a sample of the CPC time estimate information provided to the cost studies organization. Each sheet gives a specific breakdown of the activity measured with specific starting and ending functions for each activity.

Q8. On pages 6-7, lines 23 and 1, you state that each group of managers discussed the tasks listed and arrived at an estimate for each function. After discussing the tasks did they independently estimate the time for each function, and then average their times in some manner, or did they also discuss their time estimates and as a group come up with one agreed upon number?

A. The managers discussed their time estimates as a group and produced one agreed upon number.