STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

AT&T Communications of Illinois, Inc., TCG Illinois and TCG Chicago	)	
Petition for Arbitration of Interconnection Rates, Terms and Conditions and Related Arrangements With Illinois Bell Telephone Company d/b/a SBC Illinois Pursuant to Section 252(b) of the Telecommunications Act of 1996	)	**Docket No. 03-0239**

DIRECT TESTIMONY
OF
MARC NOVACK
On Behalf of
SBC ILLINOIS
EXHIBIT 8.0

Dated: May 20, 2003

ISSUES
Interconnection 10
UNE 16, 23, 24, 25, 26, 32

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Marc Novack. My business address is Three SBC Plaza, Room 710, Dallas, Texas, 75202.

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

A. I am employed by SBC Management Services, Inc. (SBC-MSI) as an Area Manager - Network Regulatory.

II. EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE

Q. PLEASE DESCRIBE YOUR TELECOMMUNICATIONS EXPERIENCE, RELEVANT WORK HISTORY AND JOB RESPONSIBILITIES.

A. I have been an SBC employee for twenty-seven years. I have received formal technical training at Bellcore, Telecordia, Lucent, Nortel, SBC's Center For Learning, and miscellaneous vendor schools. The scope of my training includes switching and transport engineering, maintenance, installation and translations. Past job responsibilities have included all aspects of telephony equipment installation and maintenance, engineering, project management, and new product testing and integration into SBC's network. I am currently responsible for network interconnection issues and contract negotiation support in the Network Regulatory organization. My responsibilities include the presentation, explanation and justification of the Company's network interconnection positions before regulatory and legislative authorities. I also provide technical support to SBC Network, Legal, Industry Markets and External Affairs Departments.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN STATE COMMISSION PROCEEDINGS?

A. Yes, I have testified on behalf of SBC incumbent carriers in Indiana Cause No. 42001-INT-01, Illinois Docket 01-0609, and Illinois Docket 00-0769.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on behalf of SBC Illinois.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to explain and support SBC Illinois' position on the following issues:

Interconnection Issue 10

UNE Issues 16, 23, 24, 25, 26 and 32

ISSUE 10: SHOULD THE CHARGES FOR THE USE OF EACH PARTIES SS7 NETWORK BE RECIPROCAL?

Q. WHAT IS YOUR UNDERSTANDING OF THE DISAGREEMENT BETWEEN SBC ILLINOIS AND AT&T OVER THE LANGUAGE IN THE INTERCONNECTION AGREEMENT REGARDING CHARGES FOR THE USE OF EACH PARTIES SS7 NETWORK?

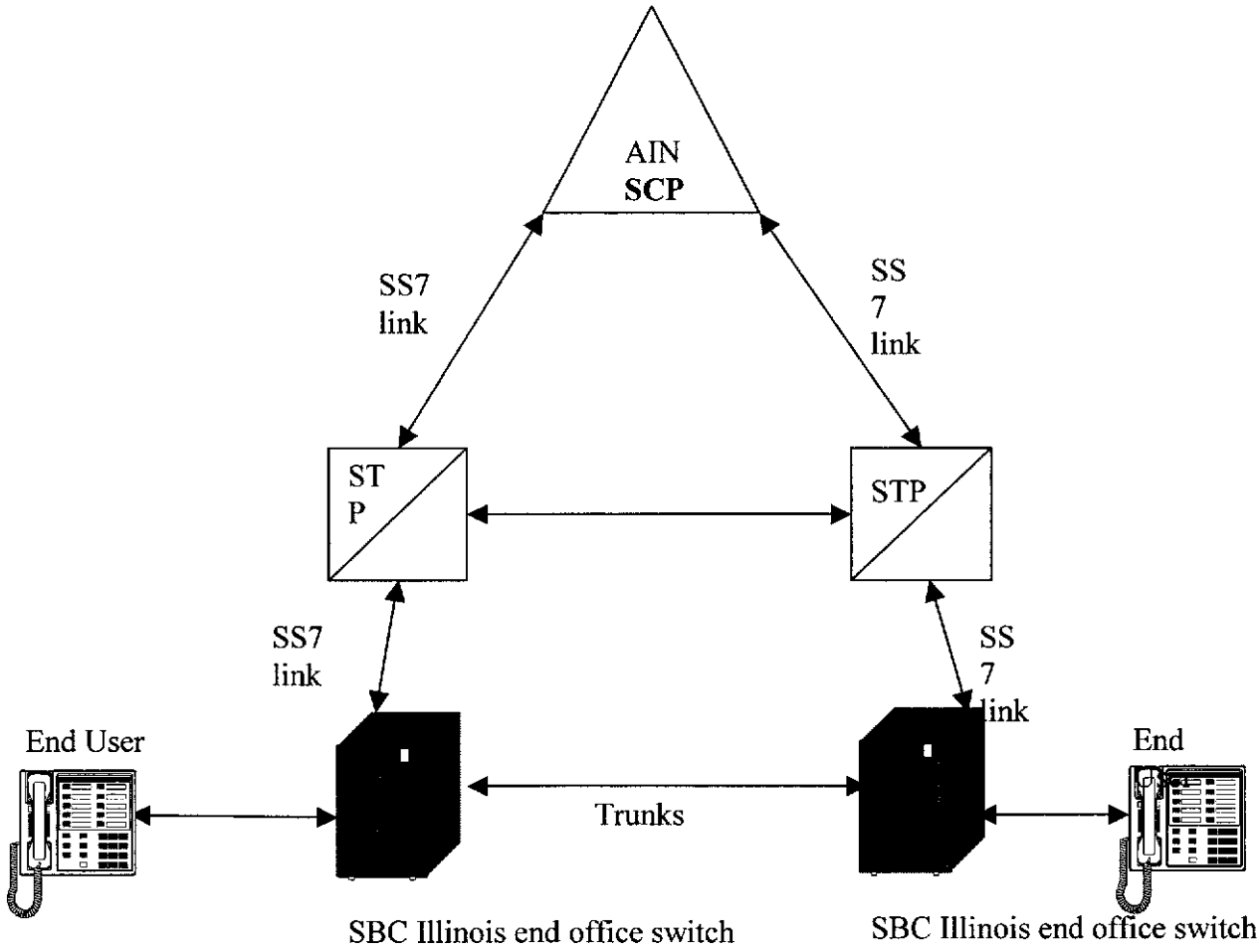
A. This dispute involves the compensation arrangements that are appropriate for SS7 networks. Ms. Chapman addresses this issue for SBC Illinois. My testimony on this topic will be limited to a description of the SS7 network.

Q. WHAT ARE SOME OF THE ELEMENTS THAT COMPRISE THE PHYSICAL SS7 INFRASTRUCTURE ARCHITECTURE OF A CARRIER?

A. Some of the elements that comprise the physical SS7 infrastructure architecture of a carrier are the Signal Transfer Points (STPs) and the SS7 Transport Links. The STPs contain operating system software that serves as the 'intelligence' of the SS7 network. STPs communicate with one another using SS7 signaling messages that are transported via SS7 Links that connect to a hierarchy of STPs. STPs are equipped in identical pairs for redundancy. The Links that connect an end office switch to an STP are called "A Links". The Links that connect to STP pairs are called "B and/or D Links". There is also significant capital investment for STP software that provides SS7 switching instructions for STPs.

Q. PLEASE PROVIDE A SIMPLE DRAWING THAT IDENTIFIES THE COMPONENTS OF THE SS7 NETWORK.

A. Below is a simple diagram of the SS7 network:



67

68 **Q. PLEASE DESCRIBE THE SIGNALING SYSTEM 7 (SS7) NETWORK IN MORE**
69 **DETAIL.**

70 A. STP operating software, combined with other SS7 functionality, is used in the setting up
71 and tearing down of a call. Thus, while not part of the voice network, STPs are digital
72 devices that assist the voice network to establish calling paths. For example, assume that
73 Ms. Smith in Chicago is calling her daughter in Los Angles. When Ms. Smith dials the
74 10 digit number of her daughter, the end office switch sends a signaling message over its
75 A-Link to the STP that serves that end office switch. SS7 messaging is sent over the SS7

network to the end office that serves her daughter to check on whether the line is available (i.e., not "busy" or out of service). A signal is sent back through the SS7 network from Los Angeles to Chicago, which tells the Chicago switch whether or not the line is available. If it is available, the Chicago switch starts a process whereby sections of voice paths between Chicago and Los Angeles are established and combined that will serve that call, and the phone rings in Los Angeles. If the line is not available, the Chicago switch gives Ms. Smith a busy signal that is generated from the Chicago switch, not the Los Angels switch. This sophisticated SS7 network allows all carriers to avoid the expense of actually bringing into play all the resources that are necessary in order for successful call completion all the way to Los Angeles when the called party's line is not available. It prevents the called switch resources from being brought into play simply to return a busy signal, and from needlessly dedicating call path resources across the country when they will not be used to successfully complete a call. The SS7 performs many other functions, such as access to remote call databases like CNAM and LIDB.

The basic SS7 network is composed of: 1) SBC Illinois switches - which utilize the SS7 network to retrieve additional information from the SCP (e.g., call set-up information, 800 number information, caller name and address information), 2) Signal Transfer Points (STPs) - which direct the flow of SS7 messaging, 3) Service Control Databases (SCPs) - databases which contain information such as AIN software developed by SBC Illinois, and 4) digital links which are used to deliver messages between the components, as indicated by the arrows in the above diagram.

ISSUE 16: DOES THE UNBUNDLED NETWORK ELEMENT PLATFORM (UNE-P) INCLUDE OPERATOR SERVICES AND DIRECTORY ASSISTANCE (OS/DA), TANDEM SWITCHING, AND CALL RELATED DATABASES?

Q. WHAT IS YOUR UNDERSTANDING OF THIS ISSUE?

A. The issue I address is whether AT&T's proposed language describing the UNE-Platform should be included in the agreement. SBC Illinois maintains that the use of UNE-Platform elements by AT&T should be limited to those elements that are used in the course of normal call processing. AT&T's proposed language attempts to broaden the definition to go beyond the physical elements strictly associated with the UNE-Platform. Ms. Fuentes discusses the policy aspects of this issue. My testimony focuses on the network and operational concerns with AT&T's proposal.

Q. WHAT ARE THE PHYSICAL ELEMENTS THAT MAKE UP THE UNE-PLATFORM?

A. The FCC defines a UNE-Platform to include a loop, a switch port, and transport. [1] I interpret this to include an end user loop that terminates to a CLEC end user, a Network Interface Device (NID), a local switching port and associated local switch functionality, and shared transport required to allow the CLEC UNE-Platform end user access to the public switched telephone network (PSTN). I also understand that in Illinois, the Commission in Docket 01-0614 included an existing splitter in the definition of a UNE-P.

Q. FROM A TECHNICAL PERSPECTIVE, DOES THE UNE-PLATFORM ALSO INCLUDE OS/DA SERVICES?

A. No. Including operator services ("OS") and directory assistance ("DA") services into the UNE-Platform would imply that all calls from AT&T UNE-P end user will terminate at a

[1] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, Third Report and Order CC Docket No. 96-98 (rel. Sept. 15, 1999) ("Third Local Competition Order"), ¶12.

SBC Illinois' OS/DA Host switch. Of course, not every call from an AT&T UNE-P line terminates at an SBC Illinois' OS/DA Host switch.

Q. WHAT IS THE RELATIONSHIP BETWEEN A UNE-PLATFORM AND THE PHYSICAL ELEMENTS OF THE SBC ILLINOIS OS/DA PRODUCT?

A. There is no direct association between the physical elements of an SBC Illinois UNE-Platform and the physical elements of the SBC Illinois OS/DA product. Each time an AT&T UNE-P end user places a call to an SBC Illinois OS/DA service, the end user is dynamically routed over a new path to a different operator. Most often, a different group operator in a different location may be used for each end user call. Since access to SBC Illinois OS/DA services is at the discretion of the AT&T end user, and since it is true that all calls from AT&T UNE-P end users will not utilize SBC Illinois OS/DA services, it is not reasonable to associate or combine the SBC Illinois OS/DA service with the SBC Illinois basic UNE-Platform product.

Q. FROM A TECHNICAL PERSPECTIVE, DOES A UNE-PLATFORM INCLUDE CALL-RELATED DATABASES SUCH AS LINE INFORMATION DATABASE ("LIDB") AND THE CALLING NAME AND ADDRESS ("CNAM") DATABASE?

A. No. Once again, there is no direct association between the physical elements of the SBC Illinois UNE-Platform and SBC Illinois call-related databases that may be accessed during normal call processing. During normal UNE-P call processing, access to SBC Illinois' call related databases is performed on a query and response basis. Each time an AT&T UNE-P end user places a call, resources for SBC Illinois' call-related databases are dynamically assigned to assist the call as necessary. Such resources are not dedicated to a specific UNE-P end user and therefore are not part of the UNE Platform itself. I prefer to think of call-related databases as UNEs to which CLECs have access in order to provide local telecommunications services, and which they can access in several ways, such as through a UNE-Platform, thorough a dedicated facility, or though an SBC Illinois UNE switch port that the CLEC uses in conjunction with its own loop. Just because they

can be accessed via a UNE-platform, however, does not make them part of the UNE-platform, as AT&T suggests.

Q. FROM A TECHNICAL PERSPECTIVE, DOES A UNE-PLATFORM INCLUDE TANDEM SWITCHING?

A. No. Calls from a UNE-P end user are not always routed through an SBC Illinois tandem switch. For example, if there is direct trunking between the originating SBC Illinois end office switch that serves the AT&T UNE-P end user and the terminating end office switch that serves the called end user, SBC Illinois' tandem switching will not be used. Use of Tandem switching is dependant upon what the originating UNE-P end users dials and upon the SBC Illinois network configuration in each LATA.

Q. IF AT&T'S POSITION WERE TO PREVAIL, MIGHT THAT INTERFERE WITH THE WELL-ESTABLISHED RECIPROCAL COMPENSATION ARRANGEMENT?

A. Yes. SBC Illinois has no dispute with the use of its tandem switch as a UNE and with charging for that use at TELRIC rates. This is done today through reciprocal compensation arrangements in which tandem switching is a distinct rate element that is used when SBC Illinois terminates a local call from AT&T. In other words, reciprocal Compensation allows for compensation for physical elements that are separate and distinct from the physical elements associated with the SBC Illinois UNE-Platform. AT&T's proposed language could interfere with Reciprocal Compensation because AT&T could (incorrectly) argue that it no longer has to pay SBC Illinois for the tandem switching element that is part of Reciprocal Compensation. This, of course, would be wrong because when SBC Illinois provides tandem switching it is providing a real service to CLECs and is incurring real costs. The need for that cost recovery cannot be assumed away just by rearranging a legal definition.

Q. ISN'T IT TRUE THAT SBC ILLINOIS' OS AND DA, ACCESS TO CALL-RELATED DATABASES AND TANDEM SWITCHING ARE ALL AVAILABLE TO AT&T AS UNES.

A. Yes.

Q. HOW SHOULD THE COMMISSION RESOLVE THIS ISSUE?

A. The Commission should reject AT&T's proposed language for Article 9, sections 9.3.1.1 and 9.3.1.3.4.

ISSUE 23: SHOULD AT&T BE ALLOWED TO COMMINGLE LOCAL AND TOLL OS/DA TRAFFIC ON EXISTING FEATURE GROUP D (FGD) TRUNKS?

ISSUE 24A: SHOULD SBC ILLINOIS BE REQUIRED TO DEPLOY CUSTOMIZED ROUTING FOR AT&T, BASED UPON AT&T'S PROPOSED SCHEDULE. OR, MUST AT&T ORDER CUSTOMIZED ROUTING VIA THE BFR PROCESS?

ISSUE 24B: IN WHAT MANNER SHOULD SBC ILLINOIS BE REQUIRED TO PROVIDE CUSTOMIZED ROUTING ASSOCIATED WITH UNES?

Q. CAN YOU PLEASE EXPLAIN THESE ISSUES?

A. Presently, when an SBC Illinois customer dials a "0", the switch must route that call onto dedicated facilities that will carry the call to an SBC Illinois operator served by an OS/DA Host switch. When AT&T purchases a UNE platform from SBC Illinois, the switch continues to route those "0"-dialed calls to an SBC Illinois operator. AT&T, at its option, may request a feature known as "custom routing" – which will route those "0" dialed calls to an AT&T operator over its dedicated facilities. There is no dispute that SBC Illinois provides custom routing of operator services ("OS") and directory assistance

("DA") calls to AT&T, as set forth in the agreed-upon language of Schedule 9.2.6.1.6.2 SBC Illinois offers two kinds of custom routing – one which routes calls to AT&T's operators through the use of line class codes, and another which routes calls to AT&T's operators through use of the advanced intelligent network ("AIN") capabilities of the network. The dispute in UNE Issues 23 and 24 concerns AT&T's demand that SBC Illinois develop a third type that is called "custom routing over Feature Group D". UNE Issues 23, 24(a) and 24(b) involve slightly different aspects of this dispute, so I deal with all three issues together.

Q. WHAT IS SBC ILLINOIS POSITION ON THIS REQUEST?

A. Presently, custom routing over Feature Group D Is not deployed in the SBC network and cannot be deployed in certain switch types because it is not technically feasible, and for that reason SBC Illinois opposes AT&T's language that would unconditionally obligate SBC Illinois to engage in a full scale research and development effort to deploy this capability. SBC Illinois is willing to work with AT&T to develop a technically feasible solution, but AT&T should pay for this development work. This is already provided for in Schedule 9.2.6.1.7, where the parties have agreed that "SBC Ameritech will evaluate additional methods of customized routing of local and/or OS/DA traffic (including, but not limited to existing Feature Group D) trunks on a BFR basis". Under the BFR process, AT&T would pay for the evaluation and development of new capability that it requests (subject to the ability of switch vendors to develop the switch functionality to support the request).

Q. WHAT IS AT&T'S POSITION ON THIS ISSUE?

A. AT&T does not address this issue in its testimony, so I cannot tell. Although Mr. Noorani's testimony lists UNE Issues 23 and 24 as being among the list of those he addresses in lines 1551-1648, in fact he does not say a single thing about custom routing over Feature Group D.

Q. HAS THE ILLINOIS COMMISSION ADDRESSED THIS ISSUE RECENTLY?

A. Yes. In connection with the recently-completed 271 proceeding in Docket 01-0662, the Commission considered this precise issue. In that case, WorldCom argued that it was technically feasible for SBC Illinois to provide custom routing over Feature Group D and that SBC Illinois should develop this capability at its own expense, without any promise that it would be compensated for these efforts. The Commission rejected WorldCom's arguments and found that SBC Illinois fully complied with federal requirement by offering custom routing via line class codes and AIN. Docket 01-0662, May 13, 2003 Order ¶¶ 1985-1986.

Q. WHY SHOULD THE COMMISSION REJECT AT&T'S PROPOSED LANGUAGE ON UNE ISSUE 23?

A. AT&T's language in Schedule 9.2.6.1.7 would allow AT&T to "commingle" OS/DA traffic on existing Feature Group D trunks. Presently, SBC Illinois does not commingle any OS/DA traffic that is originated from an SBC Illinois end office switch with FGD traffic that originates from an SBC Illinois end office switch. And presently, it is not

technically feasible, since SBC Illinois does not utilize Feature Group D signaling in Illinois (or in any other state) for signaling to OS/DA Host switches. Another signaling protocol, Feature Group C ("FGC"), is the only signaling protocol used by the SBC incumbent carriers when interfacing with OS/DA Host switches. Feature group D is a signaling protocol that is specific to calls that originate from an end office switch and routed through an access tandem switch for routing to an interexchange carrier ("IXC") network. It was developed to implement the "equal access" requirements of the 1984 break-up of AT&T, so that each end user can be assigned, or pre-subscribed, to a specific IXC. In short, AT&T's proposed language cannot be implemented in SBC Illinois' network today. If AT&T's language were included in the agreement, I am concerned that AT&T would construe it not merely to mean that AT&T could commingle such traffic on its own (which is not technically feasible), but that SBC Illinois was required to do it for AT&T. I discuss this in more detail in connection with UNE Issues 24(a) and (b), below.

Q. WHAT IS THE SPECIFIC ISSUE RAISED IN UNE ISSUES 24(A) AND 24(B)?

A. Taken in conjunction with AT&T's proposed language in Issue 23, above, AT&T's proposed language in Issue 24 would require SBC Illinois to deploy custom routing over Feature Group D within ten (10) business days. SBC Illinois maintains that AT&T should submit a Bona Fide Request ("BFR") pursuant to which AT&T would pay for the development of this capability, assuming that switch vendors can, in fact, make their switches work to support the concept. This is the commercially reasonable approach.

Q. YOU HAVE ALREADY EXPLAINED THAT SBC ILLINOIS' NETWORK CANNOT CURRENTLY ROUTE OS/DA CALLS OVER FEATURE GROUP D. WOULD IT BE POSSIBLE TO DEVELOP SUCH A CAPABILITY?

A. Development of new capabilities is dependent on each switch vendor. Pacific Bell has done some preliminary testing using a line class code arrangement in California. However, a WorldCom witness stated in a California regulatory proceeding that WorldCom has no proposed solution for Nortel switches to custom route WorldCom's OS traffic. He said, "We have been working on coming up with a proposed solution from Nortel although we don't have one at this point in time."[3] Therefore, WorldCom does not appear to have a technically feasible method of providing customized routing on FGD trunks for all switches. About 45% of SBC Illinois' switches are Nortel, so this appears to be a significant problem. SBC Illinois also uses Siemens central office switches and no test has been conducted on this type of switch. In addition, the test in California revealed problems in developing the records necessary for proper billing to occur, so even if it were feasible to resolve the routing issue, there would also be billing issues that must be overcome.

Based on discussions between AT&T and SBC Pacific Bell engineers and business managers, SBC experimented with switch software upgrades that would be necessary to use Feature Group D signaling for OS/DA on a state wide basis. I understand that SBC (and perhaps other ILECs) informed AT&T that even if some switch models could eventually be made to work with Feature Group D customized routing, this effort will not provide a ubiquitous solution until all switch vendor types and models can be upgraded. This would include the multiple varieties manufactured by Lucent, Nortel, Siemans, and

[3] Arbitration hearing in Application 01-01-010, The Application of Pacific Bell for Arbitration of an Interconnection Agreement with MCImetro., Mr. Caputo (for MCIm), Tr. Vol. 9, p. 862.

Ericsson, among others. And, even if technically feasible on a ubiquitous basis, the cost of such a massive conversion is not known at this time.

Thus, a significant product development effort would be required to determine the technical feasibility of such request, and if the request were found to be technically feasible, significant capital would be required to develop, test and deploy vendor software and to allow ordering and billing to fulfill the request. The BFR process is the appropriate process for this CLEC-specific development effort.

Q. WHAT IS A BFR?

A. A Bona Fide Request (BFR) is a request by a CLEC that SBC Illinois provide features, capabilities, network elements or combinations that are not otherwise provided by the terms of the contract.. In Schedule 2.2, AT&T and SBC Illinois have agreed upon the BFR provisions that will govern the new agreement.

Q. **WHY SHOULD AT&T HAVE TO PURSUE ITS REQUEST FOR CUSTOM ROUTING OVER FEATURE GROUP D THROUGH THE BFR PROCESS?**

A. Two reasons. First, the FCC has found that an ILEC can require a CLEC to use a BFR process to request a new a switch capability (which this custom routing would be):

> We recognize that, before offering a vertical feature for the first time, a BOC will want to ensure that the requested feature will not cause adverse network reliability effects. Furthermore, a BOC will need to modify its systems to accept orders for these new features, and develop maintenance routines to resolve problems. Therefore, we find that a BOC can require a requesting carrier to submit a request for such a vertical feature through a predetermined process that gives the BOC an opportunity to ensure that it is technically

feasible and otherwise develop the necessary procedures for ordering those features. The process cannot be open ended and it should not be used to delay the availability of the vertical feature. A BOC must provide the requesting carrier with a response within a reasonable and definite amount of time. Furthermore, a BOC must demonstrate that the access it provides to competing carriers satisfies its duty of nondiscrimination.[4] (emphasis added).

Second, it is the fair outcome. If AT&T wants SBC Illinois to expend a great deal of time, effort and expense to investigate and develop a new capability (especially one of questionable feasibility), then it should agree up front to pay for those costs. By attempting to avoid the BFR process, AT&T is unwilling to do so.

Q. HOW DO YOU CHARACTERIZE AT&T'S POSITION?

A. In my view, AT&T's position is fundamentally unfair. On the one hand, it says that SBC Illinois must develop and test a capability of questionable feasibility. At the same time, it is unwilling to commit to paying for those development activities by issuing a BFR, nor has it committed to buying the capability at a price and a quantity that would allow SBC Illinois to recoup its costs.

Q. ARE THERE ADDITIONAL REASONS WHY AT&T SHOULD USE THE BFR PROCESS IN THIS SITUATION?

A. Yes. Quite often, CLECs must provide to SBC Illinois detailed engineering information that allows SBC Illinois to assess the CLEC request. Without such detailed information SBC Illinois cannot determine the viability of the request, and cannot estimate and provide costs associated with the request, if any. The BFR process is the only defined method that allows AT&T to communicate engineering and operational needs associated with the request, and that allows SBC Illinois to make the appropriate assumptions when

[4] *Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana,* FCC 98-121, 13 F.C.C.R. 20599 (Oct. 13, 1998) ("Louisiana II"), at ¶ 220.

it develops the new capability. Without proper communication, SBC Illinois would not know the precise functionality the CLEC desired.

Q. YOU MENTIONED THE CONSIDERABLE EXPENSE THAT SBC ILLINOIS WOULD INCUR TO DEVELOP THE CAPABILITY THAT AT&T SEEKS. ASSUMING THAT IT IS TECHNICALLY FEASIBLE TO DO SO, WHAT TYPES OF EXPENSES WOULD SBC ILLINOIS INCUR?

A. Research and development costs alone can be quite large. After research and development, the Company would have to purchase and install vendor software feature packages for all SBC end offices, including but not limited to, LUCENT, Siemans and NORTEL DMS technologies.

Also, costs would be incurred for all switching technologies to develop Methods and Procedures (M&P) for ordering, provisioning and billing the service, and for personnel required to implement the service. I cannot estimate the overall cost of such a project, but it would easily run into the millions of dollars.

Q. HOW SHOULD THE COMMISSION RULE ON UNE ISSUES 23, 24(a) AND 24(b)?

A. The Commission should reject AT&T's proposed language (just one sentence) for Schedule 9.2.6.1.7 (UNE Issue 23). Similarly, the Commission should reject AT&T's proposed language for Schedule 9.2.6.1.7.2 and should adopt SBC Illinois' language instead (UNE Issues 24(a) and (b)).

ISSUE 25: UNDER WHAT CONDITIONS SHOULD SBC ILLINOIS BE REQUIRED TO PROVIDE UNBUNDLED SHARED TRANSPORT?

Q. WHAT IS YOUR UNDERSTANDING OF UNE ISSUE 25?

A. SBC Illinois agrees to provide access to the shared transport UNE, but seeks clarification that, for technical reasons, the shared transport UNE must be purchased in conjunction with an unbundled local switch port. My testimony is limited to this question. There are other aspects of Issue 25 and those are addressed by SBC Illinois witness Deb Fuentes.

Q. WHAT SPECIFIC LANGUAGE IS BEING PROPOSED BY THE PARTIES?

A. I set forth below the dueling language for Schedule 9.2.7.1.1.1:

> SBC Language: Not withstanding anything in this agreement to the contrary, SBC-Ameritech provides access to unbundled shared transport only when purchased in conjunction with a ULS port that AT&T subscribes to for the purpose of delivering traffic to/from a AT&T End User as set forth below.

> AT&T Language: SBC-Ameritech shall not impose any restrictions on AT&T regarding the use of the unbundled shared transport it purchases from SBC-Ameritech (other than as set forth in Article 9, Section 9.1.2) provided such use does not result in demonstrable harm to either SBC-Ameritech network or personnel.

Q WHAT ARE THE TECHNICAL REASONS THAT THE SHARED TRANSPORT UNE MUST BE PURCHASED ONLY IN CONJUNCTION WITH UNBUNDLED LOCAL SWITCHING?

A. The answer has to be that UST just won't operate as a stand-alone UNE –there is nothing it could do, no function it could perform, on a stand-alone basis. It is similar to a VCR and a videotape. Standing alone, neither is much good. It's only when they are used together that they actually operate as intended.

Q. HAS THE FCC RECOGNIZED THAT UNBUNDLED SHARED TRANSPORT AND UNBUNDLED LOCAL SWITCHING ARE INTENDED TO OPERATE TOGETHER?

A. Yes. In the *Third Local Competition Order*, at footnote 731, the FCC explicitly acknowledged that the only carriers that would need to use the unbundled shared transport UNE would be those carriers that also used the ILECs unbundled local switching.

> We note at the outset that a requesting carrier that uses its own self-provisioned switch, rather than unbundled local switches obtained from an incumbent local LEC, to provide local exchange and exchange access service would use dedicated transport facilities to carry traffic between its network and the incumbent LEC's network. Thus, the only carrier that would need shared transport facilities would be one that was using an unbundled local switch.

Q. HOW SHOULD THE COMMISSION RESOLVE THIS DISPUTE?

A. In recognition of the fact that unbundled shared transport can only be used in conjunction with unbundled local switching, as confirmed by the FCC, the Commission should adopt SBC Illinois' language for Schedule 9.2.7.1.1.1.

<u>ISSUE 26:</u> SHOULD SBC ILLINOIS REFUSE TO CUSTOM ROUTE TRAFFIC BY OPERATING COMPANY NUMBER (OCN) WITHIN A CENTRAL OFFICE?

Q. WHAT IS THIS ISSUE ABOUT?

A. It's another custom routing issue, but with a different twist. When AT&T uses Unbundled Local Switching-Shared Transport ("ULS-ST") in a central office (as it does when it purchases a UNE-Platform in an office), it creates certain technical limitations on SBC Illinois' ability to custom route calls to AT&T's OS/DA provider of choice. Specifically, SBC Illinois asks that AT&T custom route all of its OS/DA calls within the same class of service in the same way. AT&T disagrees with this technical limitation and

asks SBC Illinois be able to custom route some OS/DA calls one way and other OS/DA calls a different way – based on the Operating Company Number ("OCN") of the calling party.

Q. WHAT IS SBC ILLINOIS' POSITION ON THIS ISSUE?

A. SBC 13 state does not use the OCN to route calls. To my knowledge, there are no class 5 end office switching technologies, produced by any vendor, that use the OCN to route originating or terminating calls. The OCN is not used as a routing parameter, nor is it presently technically possible to do so. For this reason, AT&T's proposal is technically infeasible.

Q. WHAT IS AN OCN?

A. An OCN is an Operating Company Number that identifies a specific carrier. For example, AT&T's three local exchange carriers in Illinois use at least three OCNs: one for AT&T Communications of Illinois, one for TCG Illinois and one for TCG Chicago. OCNs are used in billing to associate the originating end user with the local exchange carrier that provides service to that end user. The OCN may also be used by a terminating carrier to identify the originating carrier of a call.

Q. YOU SAID THAT THE OCN IS NOT USED TO ROUTE CALLS. WHAT TYPE OF END OFFICE SWITCHING PARAMETERS ARE GENERALLY USED TO ROUTE CALLS?

A. Traditionally, calls are routed using the called number. For example, when I call the Company's offices in Chicago and dial 312-727-2415, the switch uses those 10 dialed digits to route the call over the public switched network. All along the call path, the network is set up to look for specific information in those dialed digits that allow it to route the call to its final destination. Databases that are peripheral to end office switches may also be used to provide additional instructions used in the routing of a call. For example, when an end user dials an 800 number, the network performs a "look-up" in the national 800 database in order to route the call to the terminating number.

Q. WHAT IS AT&T'S POSITION ON THIS ISSUE?

A. Once again, AT&T does not address this issue in its testimony, so I cannot tell. Although Mr. Noorani's testimony lists UNE Issue 26 as being among the list of those he addresses in lines 1551-1648, in fact he does not say a single thing about custom routing by OCN within an office. I do note, however, that AT&T's position statement in the DPL complains about having to use the same OCN for multiple entities because SBC Illinois has not implemented some OSS requirement from 2001. I have checked with the internal subject matter experts at SBC Midwest and we are not aware of any OSS implementation item from 2001 that would impact this OCN issue. There is an upcoming change in September of 2003 that will allow CLECs to use more than one OCN, but that change will have absolutely nothing to do with this custom routing issue. If AT&T's real issue has to do with this upcoming change to SBC Midwest's OSS, that change will take place as scheduled and no contract language is needed to address it.

Q. HOW SHOULD THE COMMISSION RESOLVE UNE ISSUE 26?

A. The Commission should reject AT&T's proposal to insert the words "and OCN" in Schedule 9.2.7.2.1. AT&T has not explained why these words are needed. SBC Illinois has explained that these words would impose an obligation that is, in fact, technically infeasible.

ISSUE 32A: Should SBC Illinois be required to provide access to SBC IlLinois designed Advanced Intelligent Network (AIN) Features functions and services?

Q. WHAT IS YOUR UNDERSTANDING OF THE DISPUTE BETWEEN SBC ILLINOIS AND AT&T IN REGARDS TO WHETHER SBC ILLINOIS SHOULD BE REQUIRED TO PROVIDE ACCESS TO SBC DESIGNED AIN FEATURES, FUNCTIONS AND SERVICES?

A. AT&T is proposing that SBC Illinois provide access to proprietaryAIN based services that SBC Illinois developed for itself.

Q. WHAT IS SBC ILLINOIS' POSITION?

A. SBC Illinois does not propose to disallow AT&T access to all AIN based services that have been developed by SBC. However, SBC Illinois must be allowed to retain exclusive use of SBC developed AIN based service if that service does not support the basic operational capability of an AT&T UNE-P end user.

Q. ARE YOU INFERRING THAT SOME SBC AIN BASED SERVICES ARE REQUIRED TO SUPPORT THE OPERATIONAL CAPABILITY OF OTHER CLEC'S OR AT&T UNE-P END USERS, AND THAT SOME AIN BASED SERVICES DO NOT SUPPORT THE OPERATIONAL CAPABILITY OF OTHER CLEC'S OR AT&T UNE-P END USERS?

A. Yes. And, SBC Illinois argues that there are legitimate distinctions that should be maintained between those SBC developed AIN based services that support the operational capability of other CLEC's or AT&T UNE-P end users, and those AIN based services that in no way support the operational capability of other CLEC's or AT&T UNE-P end users.

Q. CAN YOU PROVIDE AN EXAMPLE OF AN SBC DEVELOPED AIN BASED SERVICE THAT IS REQUIRED TO SUPPORT THE OPERATIONAL CAPABILITY OF AT&T UNE-P END USERS?

A. UNE-P switch port call routing over shared transport is an excellent example of an SBC AIN based service that is required to support the basic operational capability of each UNE-P end user since shared transport is used when SBC routes UNE-P end user calls to the PSTN. A shared transport product used in conjunction with AIN based services was developed by SBC Illinois to specifically support routing of CLEC UNE-P end user calls.

Q. IS THE SBC SHARED TRANSPORT AIN BASED SERVICE YOU MENTION LIMITED TO SIMPLY ROUTING UNE-P CALLS OVER SHARED TRANSPORT?

A. No. It also allows for UNE-P billing, inter-carrier compensation, and may be used in screening of UNE-P end users calls. Also, it must be remembered that as a condition of

the Illinois Ameritech merger to SBC, the routing of UNE-P end users over shared transport was to be accomplished using an AIN based service solution.

Q. WHAT IS ANOTHER EXAMPLE OF AN SBC DEVELOPED AIN BASED SERVICE THAT IS USED SOLELY IN SUPPORT OF ROUTING UNE-P END USER CALLS?

A. Customized Routing which was developed by SBC to allow UNE-P end users to be routed to transport facilities that may be dedicated to (for example) AT&T's customers only. In the context of this hearing, the basic difference between transport that is employed using Customized Routing and shared transport is that Customized Routing implies SBC will route CLEC UNE-P end user calls over transport facilities that have a dedicated use that is subject to the ordering CLEC's discretion, and usually terminate to the ordering CLEC. Shared transport implies SBC routing of any UNE-P CLEC's end user calls over transport facilities that many carrier types may share, usually with access to the PSTN.

Q. MAY END USERS SELECTIVELY PURCHASE SHARED TRANSPORT, CUSTOMIZED ROUTING OR LNP IRECTLY FROM SBC ILLINOIS?

A. No. Shared transport, Customized Routing or LNP may not be selectively purchased by end users at home, directly from SBC Illinois. In the context of this hearing, shared transport, Customized Routing and LNP are purchased by CLECs such as AT&T.

Q. WHAT IS AN EXAMPLE OF AN AT&T REQUESTED AIN BASED SERVICE WHOSE ABSENCE WOULD NOT INTERFERE WITH THE BASIC OPERATION OF UNE-P END USER CALLS?

A. Privacy Manager® is such an example. If the AIN based service Privacy Manager® were absent from the SBC Illinois product line and had never been defined and implemented by SBC Illinois, the absence of Privacy Manager® would not interfere with the basic operation of AT&T UNE-P end user calls, would not interfere with the ability of AT&T UNE-P end users to place local or long distance calls, and would not impair AT&T's ability to offer basic local service to end users via the SBC Illinois UNE-P product.

Q. WHAT IS PRIVACY MANAGER®?

A. Privacy Manager® is an SBC Illinois' proprietary AIN-based service that intercepts unidentified calls that are displayed as "anonymous," "out of area," "private," or "unavailable" to end users who have caller identification ("Caller ID") with the "name" feature. When an end user with Privacy Manager® receives an incoming call from an unidentified source, Privacy Manager® tells the caller that the number he or she has dialed does not accept calls from unidentified numbers. Privacy Manager® contains options that allows the calling party to either be connected to the called party or to leave a message for the called party. Privacy Manager® also contains options that allows the called party to screen incoming calls, and to allow the calling party to connect to the called party simply by announcing the calling party's name.

Q. IS PRIVACY MANAGER® A PROPRIETARY SERVICE?

A. Yes. SBC holds a number of patents for Privacy Manager®.

Q. DOES THE SBC ILLINOIS DEVELOPED SOFTWARE THAT WAS CREATED SPECIFICALLY TO SUPPORT AIN BASED SERVICES SUCH AS PRIVACY MANAGER® RESIDE IN CLASS 5 LOCAL END OFFICE SWITCHES THAT PROVIDE END USERS WITH DIAL TONE?

A. No. AIN based services such as Privacy Manager® software is not loaded in class 5 local end office switches that provide end users with local dial tone service. Instead, AIN based services such as Privacy Manager® is supported by software that must be loaded into an external SBC Illinois' Advanced Intelligent Network ("AIN") architecture, or AIN platform, whenever a new AIN based service has been created by SBC Illinois. Once an end user purchases an AIN based service such as Privacy Manager®, the class 5 local end office switch that provides dial tone to the end user will interact with the AIN platform. The end office switch will query the AIN platform each time it receives a call being placed to the end user. For each call, the switch queries the Privacy Manager® service software in the AIN platform so that the call treatment described above is followed.

Q. WHY IS CONSIDERABLE RESEARCH AND DEVELOPMENT REQUIRED FOR EACH AIN BASED SERVICE, AT GREAT COST TO SBC ILLINOIS?

A. I equate the AIN platform to a blank piece of paper. Vendors who manufacture AIN platforms do not necessarily anticipate what service a carrier will develop within the AIN platform anymore so than a manufacturer of 8 1/2 x 11 reams of paper anticipates what the purchaser will write on the paper. AIN platforms are delivered by the vendors to

SBC Illinois as 'a blank piece of paper'. AIN services must be created by SBC Illinois and loaded into the AIN platform using predefined resources provided by the vendor. SBC Illinois must research, develop, apply and test each AIN service it chooses to deploy within the AIN platform Creation of software specific to an AIN based service requires use of the hardware and software resources of the AIN platform and is written on blank space contained within the AIN platform. Each AIN based service is strictly dependant upon the research, imagination, and creativity of the developing carrier. And, once an AIN based service such as Privacy Manager® is developed by a carrier, it remains proprietary to that carrier, and the software created that supports the AIN based service is unavailable for access and review by unauthorized users.

Q. SINCE SBC ILLINOIS DOES NOT AGREE THAT AT&T MAY USE SBC ILLINOIS DEVELOPED AIN BASED SERVICES SUCH AS PRIVACY MANAGER®, IS AT&T PREVENTED FROM OFFERING AT&T UNE-P END USERS AIN BASED SERVICES?

A. Not at all. AT&T may develop AIN based services for AT&T UNE-P end users that are defined in SBC Illinois end office switches, in the same manner as and in parity with SBC Illinois.

Q. HOW MAY AT&T OFFER AIN BASED SERVICES SUCH AS PRIVACY MANAGER TO AT&T UNE-P END USERS THAT ARE DEFINED IN SBC ILLINOIS END OFFICE SWITCHES, IN THE SAME MANNER AS AND IN PARITY WITH SBC ILLINOIS?

A. AT&T has physical access to the SBC Illinois AIN Service Creation Environment (SCE). SBC Illinois allows AT&T access to blank portions of the AIN platform where AT&T

may develop and apply AIN based services. And, AT&T research, imagination and creativity will benefit only AT&T's end users, at AT&T's sole discretion.

Q. DOES SBC ILLINOIS PROVIDE TO AT&T NON-DISCRIMINATORY ACCESS TO THE SCE IN ILLINOIS?

A. Yes. SBC Illinois provides to AT&T non-discriminatory access to the SCE. SBC Illinois has created an SCE access guide that is available to AT&T. A copy of the current guide is provided as Attachment A to Carol Chapman's testimony.

Q. PLEASE GIVE AN OVERVIEW OF THE SCE ACCESS GUIDE.

A. The SCE access guide explains the process that AT&T will follow to develop AT&T AIN services within SBC Illinois AIN UNE elements that comprise the SBC Illinois UNE AIN platform. More specifically, this guide provides AT&T information required to order, initiate, deploy and maintain AIN service, explains access to the Service Creation Environment and Access to the Service Management System.

Q. DOES THE SCE GUIDE RELATE THE TYPES OF INFORMATION THAT SBC ILLINOIS WILL NEED TO ACCOMMODATE AT&T'S AIM SERVICES DEVELOPMENT EFFORTS?

A. Yes. The SCE guide relate the types of information that SBC Illinois will need to accommodate AT&T's AIM services development efforts. It is important for SBC Illinois and AT&T to partner in such efforts so that SBC Illinois can determine which SBC systems and technical expertise will be needed for SBC Illinois to identify, and if

necessary upgrade, support systems and network components and to identify and make available subject matter experts who will participate in AT&T's design coordination meetings with AT&T.

The SCE access guide also provides that both SBC Illinois and AT&T will engage in joint Design Coordination, Service Creation, and Service Logic Testing and Field Integration Testing activities. These activities do not include SBC Illinois being part of AT&T's actual AIN services development efforts, but SBC Illinois will assist AT&T efforts to access, test and maintain its own AIN services.

Q. WHY WOULD AT&T'S PROPOSAL DISCOURAGE SBC ILLINOIS FROM INVESTING IN RESEARCH, DEVELOPMENT, TESTING AND DEPLOYMENT OF NEW AIN BASED SERVICES?

A. To my knowledge, there is nothing in the Telecommunications Act of 1996 that requires SBC Illinois to develop new competitive end user offerings so that they may be confiscated by SBC Illinois competitors. If AT&T prevails in this argument, SBC Illinois would have little or no incentive to invest the resources necessary to develop offerings to end users if its' competitors could simply come in and reap the benefits of the laborious product research and development effort that SBC Illinois must undergo to develop AIN based services, such as Privacy Manager®.

ISSUE 32b: Should access to AIN be provided pursuant to a BFR with all terms and conditions and pricing negotiated pursuant to the BFR

Q. WHAT WILL CLECS NEED TO DEVELOP THEIR OWN SERVICES ON THE COMPANY'S SCE?

A. I anticipate that each AT&T AIN based service development effort will be a unique effort. Due to the individual nature and potential complexity of each CLEC request to develop AIN based services, SBC Illinois is unable to anticipate all activities and resources that may be required. It must also be stressed that different SBC Illinois hardware and software resources may be required in both SBC Illinois class 5 end offices and in the AIN platform in order to accommodate each unique CLEC effort to create AIN based services. These activities will vary for every request based upon the CLEC's proposed design. As a result, SBC Illinois did not, and could not, develop methods and procedures that address the specific activities that will occur for each individual request. Instead, SBC Illinois developed a flexible process that will accommodate a wide variety of CLEC requests.

Q. HOW WILL SBC ILLINOIS KNOW THAT AT&T WILL REQUIRE ACCESS TO THE SCE IN ORDER TO CREATE AIN BASED SERVICES?

A. As set forth in the respective interconnection agreements between SBC Illinois and AT&T, the current process whereby AT&T may request access to the SCE and SMS, and

inform SBC Illinois of AT&T's intention to do so, is through the Bona Fide Request ("BFR"). Since each new CLEC service offering will potentially impact SBC Illinois' network differently, each new offering must be evaluated. The BFR process is flexible enough to adapt to the unique nature of the requesting CLEC's request.

Q. HOW WOULD THE BFR PROCESS BE UTILIZED IN THIS SITUATION?

A. Under the BFR process, the requesting CLEC will initially provide information necessary to allow SBC Illinois to determine which systems will be impacted by the service. Based upon this information, SBC Illinois will determine the areas where SBC Illinois network and engineering resources are required and to ensure that the CLEC AIN based services functions within SBC Illinois' specifications without causing harm to the SBC Illinois network. After reviewing the BFR request SBC Illinois will provide the CLEC with TELRIC cost information associated with each specific AIN based service development effort.

Q. CAN TERMS, CONDITIONS AND PRICING BE ANTICIPATED AND REFLECTED IN THE CONTRACT FORAT&T AIN BASED SERVICES DEVELOPMENT AND DEPLOYMENT EFFORTS, PRIOR TO RECEIVING A SPECIFIC REQUEST?

A. Absolutely not. Each AT&T AIN based service development effort must be fully accessed by SBC Illinois to determine what SBC Illinois resources will be required. Actually, each effort will require unique resources on the part of both AT&T and SBC Illinois. Since each request will be unique, it would be impractical to try to predetermine

specific terms, conditions and pricing that would apply. These must be determined on a case by case basis.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes