Exhibit No:

Issues: Calling Party Number ('CPN")

Witness: Chris Read

Type of Exhibit: Direct Testimony

Sponsoring Party: Southwestern Bell Telephone, L.P.,

d/b/a AT&T Missouri

Case No: TE-2006-0053

SOUTHWESTERN BELL TELEPHONE, L.P., d/b/a AT&T MISSOURI

CASE NO. TE-2006-0053

DIRECT TESTIMONY

OF

CHRIS READ

Dallas, Texas

March 24, 2006

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Bell Telephone	e, L.P., d/b/a SBC Missouri, for) Case No. TE-2006-0053 Certain Requirements of 4 CSR)
	AFFIDAVIT OF CHRIS READ
STATE OF TH	EXAS) SS
COUNTY OF	
I, Chris	Read of lawful age, being duly sworn, depose and state:
1,	My name is Chris Read. I am presently Senior Business Manager for AT&T Services, Inc.
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.
	Chris Read
Subscribed and	I sworn to before me this day of March, 2006.
	Juli L. Perfer Notary Public D
My Commissic	on Expires: January 25, 2009 Jerri L Pelffer Notary Public, State of Texas My Commission Expires: January 25, 2009

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1		I. <u>INTRODUCTION</u>
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Chris Read. My business address is Two SBC Plaza, Floor 11, Dallas, Texas
4		75202.
5		
6	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?
7	A.	I am employed by AT&T Services, Inc., and my current position is Senior Business
8		Manager, within the Information Technology organization.
9		
10	Q.	HAVE YOU PREPARED AN EXHIBIT THAT SUMMARIZES YOUR
11		PROFESSIONAL AND EDUCATIONAL BACKGROUND AND EXPERIENCE
12		BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION
13		("COMMISSION")?
14	A.	Yes. This information is contained in Read-Schedule 1.
15		
16		II. PURPOSE AND MAIN POINTS OF TESTIMONY
17	Q.	WHAT IS THE ISSUE IN THIS CASE?
18	A.	The hearing in this case has been bifurcated into two phases. In this first phase, the issue
19		is:
20 21 22 23		Does Commission Rule 4 CSR 240-29.040(4) require the originating tandem carrier to include the Calling Party Number ("CPN") as part of the Category 11-01-XX record that it provides for wireless-originated calls that transit the LEC-to-LEC network and terminate to other LECs?

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony explains, primarily from an intercompany billing records and data processing perspective, why Rule 4 CSR 240-29.040(4) of the Commission's Enhanced Records Exchange rules does not, and should not, require originating tandem carriers (like AT&T Missouri) to include Calling Party Number ("CPN") as part of the Category 11-01-XX billing records it provides for wireless-originated calls that transit the LEC-to-LEC network and terminate to other LECs.

Q. WHAT ARE THE MAIN POINTS OF YOUR TESTIMONY?

- 10 A. The main points I would like to make in my testimony are:
 - Neither the text nor the purpose of Commission rule 29.040(4) requires tandem carriers to include CPN in the Category 11-01-XX records for wireless-originated calls.

o Rule 29.040's stated purpose is to identify carriers that originate traffic transmitted over the LEC-to-LEC network. This information is needed by terminating carriers so that they know which carrier to bill.

O AT&T Missouri's wireless Category 11-01-XX records, in compliance with the rule and industry standards, identifies such carriers by providing the Operating Company Number ("OCN"). The provision of this and other information contained in AT&T Missouri's record gives terminating carriers all the information they need to render bills for intercompany compensation to wireless carriers.

 CPN does not identify the originating carrier on wireless-originated calls and cannot be used for billing intercompany compensation on wirelessoriginated calls because of its inherent unreliability.

• Industry Standards do not support Rule 29.040(4) requiring CPN to be included as part of the Category 11-01-XX records for wireless-originated calls.

1 2 EMI guidelines require wireless Category 11-01-XX records to 3 contain OCN, not CPN. 4 5 The Lucent switches' technical inability to record CPN on 0 6 wireless-originated calls and other carriers' records confirm that 7 industry standards do not require CPN to be included in the 8 wireless Category 11-01-XX record. 9 10 0 Interpreting Rule 29.040(4) to require CPN on billing records 11 would (1) require AT&T Missouri to pay Lucent Technologies \$1 million or more to develop that technical capability for AT&T 12 13 Missouri's Lucent switches, (2) require very substantial and 14 burdensome changes to AT&T Missouri's internal information 15 processing systems used to generate intercompany billing records; 16 and (3) produce little, if any, benefit to AT&T Missouri or to the 17 carriers that use AT&T Missouri's Category 11-01-XX for 18 intercarrier billing purposes. 19 20 The Commission could not have intended to adopt a rule requiring 0 21 the provision of CPN on wireless originated calls without first 22 considering the evidence on current industry standards, what is 23 currently being provided, whether it was technically capable of being provided, and at what cost. The Commission did not gather 24 25 any evidence on these issues in the course of the rulemaking 26 because the proposed rule did not require CPN to be provided on 27 billing records associated with wireless-originated calls. Had the 28 rule proposed to require CPN, AT&T Missouri and other 29 companies would have explained that such a requirement was not 30 currently feasible and expensive and time consuming to develop. 31 That the proposed rule did not require CPN on billing records for 32 wireless-originated traffic is also made clear from written 33 comments filed by the small LECs in the rulemaking. 34 35 III. 36 NEITHER THE TEXT NOR THE PURPOSE OF RULE 29.040(4) REQUIRES CPN TO BE INCLUDED IN WIRELESS CATEGORY 11 37 38 **BILLING RECORDS** 39 40 DOES RULE 29.040(4) REQUIRE CARRIERS TO INCLUDE CPN IN THE Q. 41 **CATEGORY** 11-01-XX INTERCARRIER BILLING **RECORDS THEY CURRENTLY PROVIDE ON WIRELESS-ORIGINATED CALLS?** 42

Industry standards for wireless identification as set out in the OBF

1	A.	No. Rule 29.040(4) does not impose such a requirement. It merely requires the provision
2		of a Category 11-01-XX billing record:
3 4 5 6		(4) When transiting traffic for any carrier other than an incumbent local exchange carrier, originating tandem carriers shall, for each compensable call, create and make the following available upon request by a terminating carrier, at no charge to the terminating carrier:
7 8 9 10		(A) A category 11-01-XX record or, if no Carrier Identification Code is available, a Missouri-specific category 11-01-XX record.
11 12 13		(B) Nothing in (A) above shall preclude two carriers from mutually agreeing to exchange other types of billing records.
14 15 16 17 18 19 20		(C) A list of originating carriers connected to their tandem switch who originate traffic on the LEC-to-LEC network. The originating tandem carrier will ensure this list of originating carriers is readily accessible to any carrier involved in the completion of such calls. The originating tandem carrier will maintain the following information for carriers using its tandem switch to originate traffic on the LEC-to-LEC network:
21 22 23 24 25 26 27 28		 The name of the originating carrier plus the name, mailing address, telephone number and electronic address of an individual responsible for contacts regarding LEC-to-LEC network traffic billing and payment inquires.
28 29	Q.	DOES AT&T MISSOURI CURRENTLY PRODUCE CATEGORY 11 RECORDS
30		IN ACCORDANCE WITH THE RULE?
31	A.	Yes. AT&T Missouri produces Category 11 records in accordance with the rule. Its
32		records for wireless-originated traffic accurately identify the carrier responsible for
33		payment by using industry standard Operating Company Number ("OCN") codes.
34		AT&T Missouri (then doing business as SBC Missouri) notified carriers in Missouri
35		through an Accessible Letter issued March 18, 2004 that it was going to start providing
36		individual detail Category 11-01-XX records on wireless-originated traffic. A copy of

1		this letter is attached to my testimony as Read-Schedule 2. AT&T Missouri provided
2		additional information about these new records in a letter issued on April 22, 2004 (a
3		copy of this letter is attached as Read-Schedule 3). AT&T Missouri began providing
4		these records in June, 2004. AT&T Missouri notified carriers of enhancements to these
5		records in an Accessible Letter issued November 29, 2004 (a copy of this letter is
6		attached as Read-Schedule 4.)
7		
8	Q.	WHAT IS THE TITLE OF RULE 29.040?
9	A.	The title is:
10 11 12		4 CSR 240-29.040 Identification of Originating Carrier for Traffic Transmitted Over the LEC-to-LEC
13	Q.	WHAT IS THE PURPOSE OF RULE 29.040?
14	A.	The purpose is stated as follows:
15 16 17 18		PURPOSE: The purpose of this rule is to establish a proper means of identifying to transiting and terminating carriers all carriers who originate traffic that is transmitted over the LEC-to-LEC network.
19	Q.	DID THE COMMISSION'S PROPOSED RULE 29.040(4) CONTAIN A
20		REQUIREMENT TO INCLUDE CPN IN THE INTER-COMPANY BILLING
21		RECORD FOR WIRELESS ORIGINATED CALLS?
22	A.	No. As noted above, the language in the "Title" of Rule 29.040 and the "Purpose" of the
23		rule clearly stated that the goal is to identify originating carriers.

1	Q.	IS THERE ANY REFERENCE TO CPN IN RULE 29.040(4) MAKING CPN A
2		REQUIREMENT FOR THE INTER-COMPANY BILLING RECORD FOR
3		WIRELESS ORIGINATED CALLS?
4	A.	No.
5		
6	Q.	HAD THE PROPOSED RULE REQUIRED THE PROVISION OF CPN ON
7		BILLING RECORDS ASSOCIATED WITH WIRELESS-ORIGINATED CALLS,
8		WOULD AT&T MISSOURI HAVE PROVIDED COMMENTS ON THAT
9		PROPOSAL?
10	A.	Yes. AT&T Missouri would have explained that neither it nor any other ILEC provided
11		CPN on the billing records associated with wireless-originated calls. AT&T Missouri
12		would have explained that industry standards did not support such a requirement and that
13		it would be expensive and time consuming to develop the capability, with little or no
14		benefit. The fact that this evidence was not presented is critical no party's written
15		comments in the rulemaking indicated an understanding that the rule included such a
16		requirement and the rule did not propose the inclusion of CPN.
17		
18	Q.	DO ANY OF THE SMALL ILEC'S WRITTEN COMMENTS IN THE
19		RULEMAKING INDICATE AN UNDERSTANDING THAT CPN WOULD BE
20		INCLUDED IN THE BILLING RECORD?
21	A.	No. The only reference to a requirement in the rule to provide CPN were in the STCG's
22		supporting comments that pertained to Rule 29.040(1), (2) and (6) which are not at

issue here.¹ These sections deal with the transmission of CPN with the call and, with minor exception, were also supported by AT&T Missouri. STCG's only reference to Rule 29.040(4) -- the rule at issue here -- was a supporting comment pointing out that it requires the "use of industry standard Category 11-01-XX records when requested by a terminating carrier," which it observed "will facilitate billing for traffic delivered to the STCG member companies by the former PTCs. . . ."² And the MITG's only specific written comment about the content of these records was:

the ERE rule would substitute a new type of billing record different than the industry standard 1101 record. Whereas the industry standard 1101 identifies the IXC bringing the call to the terminating tandem as the financially responsible carrier, the ERE substitutes modifications to the 1101 which are designed to attempt to identify the originating carrier.³

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- Q. DOES AT&T MISSOURI COMPLY WITH THE RULE BY PROVIDING
 TERMINATING CARRIERS CATEGORY 11-01-XX RECORDS ON WIRELESSORIGINATED CALLS THAT IDENTIFY THE CARRIER FOR
 INTERCARRIER BILLING PURPOSES?
- 18 A. Yes.

- 20 Q. HOW DOES AT&T MISSOURI'S CATEGORY 11-01-XX RECORD FOR
 21 WIRELESS-ORIGINATED CALLS IDENTIFY THE ORIGINATING CARRIER?
- A. The originating wireless carrier is identified by the population of the originating OCN field of the Category 11 record.

¹ STCG Comments on Proposed Enhanced Records Exchange Rule, filed in Case No. TX-2003-0301 on February 2, 2005 at p. 9.

² <u>Id</u>., pp. 9-10

³ Supporting Comments of the MITG, filed in Case No. TX-2003-0301 on February 1, 2005 at p. 10, fn. 5.

1 Q. WHAT IS AN OCN?

- 2 A. An OCN is a four digit code assigned by the National Exchange Carrier Association
- 3 ("NECA") used in the telephone industry to identify telephone companies. NECA also
- 4 assigns OCNs to other carriers, such as CLECs and wireless carriers.

5

6 Q. HOW ARE OCNs USED?

- 7 A. OCNs are used in inter-company billing records to identify the carrier responsible for
- 8 paying intercarrier compensation charges on telephone calls. For example, when one
- 9 carrier terminates telecommunications traffic originated by another carrier, the
- terminating carrier bills the originating carrier for the cost of that termination. To do so,
- of course, it needs to be able to identify the originating carrier.

12

13 Q. HAS THE OCN ALWAYS BEEN USED?

- 14 A. No. Historically, the first six digits (NPA-NXX) of a telephone number was enough to
- identify a company because that company would own all the line numbers (last four
- digits of a telephone number) that follow the NPA-NXX. The billing company, in this
- case the terminating company, could simply perform a lookup of the originating NPA-
- NXX in a table.

19

20 Q. DOES THE NPA-NXX STILL PROVIDE ENOUGH INFORMATION TO

21 **IDENTIFY THE RESPONSIBLE CARRIER?**

- A. No. NPA-NXX is no longer enough. The industry has evolved substantially; so much so
- 23 that today, with Resale, UNE-P (which is being replaced by wholesale commercial

1 agreements), number portability (wireless and wireline), that all line numbers sharing an 2 NPA-NXX are not customers of the same company. Therefore, it was apparent that other 3 methods of carrier identification for billing purposes were needed and have been 4 developed under industry standards. 5 6 Q. **HAS** THE **INDUSTRY** DEVELOPED A MEANS OF **IDENTIFYING** ORIGINATING CARRIERS FOR BILLING PURPOSES? 7 8 A. Yes. Through the OBF, the industry has reached consensus on the inclusion of OCN in 9 the Category 11-01-XX EMI record for wireless originating calls and has added fields to 10 the record for this purpose. 11 IS THIS ALSO CONSISTENT WITH THE COMMISSION'S RULES? 12 Q. 13 A. Yes. Commission Rule 29.020(5)(A), which is part of the rule's definition for a Category 14 11-01-XX record states: (A) A Missouri-Specific Category 11-01-XX Record is a mechanized 15 individual call detail record for feature group C (FGC) traffic developed 16 by the incumbent local exchange carriers in Missouri for intercompany 17 18 settlements pursuant to the MoPSC Report and Order in Case No. TO-99-19 254. This record contains data transferred from a 92-01-XX mechanized 20 call detail record. The first two digits in the record are "11." This type of 21 call record is identical to a category 11-01-XX record except that it 22 contains an originating operating company number (OCN) in positions 23 167 through 170 instead of a CIC in positions 46 through 49. 24 25 IN THE COMMISSION'S ORDER OF RULEMAKING ADOPTING 29.040(4), 26 Q 27 THE COMMISSION STATED: "WE ACKNOWLEDGE THE MITG CLAIMS THAT SBC STRIPS OFF THE CPN OF THE WIRELESS-ORIGINATED CALLS 28

1		WHEN IT CREATES CATEGORY 11-01-XX BILLING RECORDS."4 DOES
2		AT&T MISSOURI (FORMERLY KNOWN AS SBC MISSOURI) "STRIP" CPN
3		FROM THESE CATEGORY 11-01-XX BILLING RECORDS?
4	A.	No. As I explain further below, CPN is not used for billing intercompany compensation
5		to wireless carriers and has never been included in the industry standard Category 11-01-
6		XX EMI billing record for wireless-originated traffic. Mr. Constable also explains in his
7		testimony that industry standards do not call for CPN to be included in the AMA
8		recordings for wireless-originated calls. Since it was never part of the AMA, it is not
9		available to the billing processing systems for the creation of EMI records, such as the
10		Category 11-01-XX records for wireless originating traffic.
11		
12	Q.	IN ITS <u>ORDER OF RULEMAKING</u> ADOPTING 29.040(4), THE COMMISSION
13		STATED THAT THE LACK OF CPN IN AT&T MISSOURI'S CATEGORY 11-
14		01-XX RECORDS FOR WIRELESS-ORIGINATED CALLS "LEAVES
15		TERMINATING CARRIERS WITH LITTLE OR NO MORE INFORMATION
16		THAN WAS PREVIOUSLY CONTAINED IN SBC'S CTUSR." IS THIS
17		CORRECT?
18	A.	No. The Cellular Transiting Usage Summary Report ("CTUSR") was a very high level
19		monthly report AT&T Missouri prepared for each LEC summarizing the total number of
20		calls and minutes, broken down by exchange that each wireless carrier terminated to the
21		LEC's exchanges. For example, a CTUSR for New Florence Telephone Company (a
22		single exchange company) might state that in the reporting month Cingular terminated 10

 $^{^4}$ Order of Rulemaking, Missouri Register Vol. 30, No. 12, issued June 15, 2005 at p. 1388.

calls for 30 minutes, Verizon terminated 15 calls for 45 minutes, and Nextel terminated
2 calls for 60 minutes. The CTUSR contained no information concerning the specific
3 calls, such as date, time, duration or the dialed number. A sample of the CTUSR is
4 attached to my testimony as Read-Schedule 5.

Category 11-01-XX records for wireless-originated calls, on the other hand, are detailed EMI records. The records contain information for each call such as date, time, duration and the dialed number, as well as important identification information such as OCN, Type of Access, Trunk Group, and 30 different Indicators populated as appropriate for various call types. A sample of the Category 11-01-01 record is attached to my testimony as Read-Schedule 6(P).

Q. DOES CPN PROVIDE ENOUGH INFORMATION TO BILL THE ORIGINATING CARRIER?

15 A. No. While CPN served a purpose in the past for landline-originated calls (e.g., IXC calls,
16 LEC carried local/toll calls), the industry has always recognized it has little or no value
17 for billing purposes for wireless traffic. The commission recognized this deficiency in its
18 Order of Rulemaking when it stated "...due to roaming, the presence of CPN will not
19 always permit determination of the proper jurisdiction of each and every telephone call."⁵

Q. WHY DOES ROAMING MAKE CPN UNRELIABLE FOR USE IN BILLING WIRELESS-ORIGINATED TRAFFIC?

⁵ Order of Rulemaking, Mo. Reg. Vol. 30, No. 12 (June 15, 2005) at pp. 1377-1378.

1 A. Because of roaming, CPN cannot be used to jurisdictionalize a call because it does not 2 provide the geographic location of the wireless subscriber placing a call. For example, 3 when a wireless subscriber with a Kansas City, Missouri wireless number travels to 4 Chicago, Illinois and places a wireless call to a landline customer back in Kansas City, 5 that call would be an interstate-interMTA call, for which interstate, interMTA rates 6 (typically interstate access charges) would apply. But if the CPN (the calling party 7 number) and the called number were used to jurisdictionalize the call, it would be 8 incorrectly billed because the call would appear to be a local call, for which lower 9 intraMTA charges would be charged.

10

11

Q. IS CPN USED BY LECs IN THE INDUSTRY FOR INTERCOMPANY BILLING

- 12 OF WIRELESS-ORIGINATED CALLS?
- 13 A. No.

- 15 Q. IF LECs CANNOT USE CPN, HOW DO THEY DETERMINE THE CORRECT
- 16 JURISDICTIONAL RATE TO APPLY TO WIRELESS-ORIGINATED CALLS
- 17 **THEY TERMINATE?**
- 18 A. LECs use "factors" (<u>i.e.</u>, percentages) that are usually agreed-upon between a LEC and a

 19 wireless carrier and are contained in interconnection agreements. These factors represent
- 20 the parties' estimation of the amount of traffic exchanged between them that is
- 21 intraMTA, intrastate-interMTA, and interstate-interMTA. If the parties cannot agree on
- factors, the parties can ask the state commission to set the factors in an arbitration under
- the federal Telecommunications Act.

1	Q.	ARE THERE OTHER PROBLEMS WITH USING CPN IN BILLING FOR
2		WIRELESS-ORIGINATED CALLS?
3	A.	Yes. Wireless number portability also causes CPN to be unreliable. Now, customers
4		changing their wireless company can take their old wireless telephone number with them
5		to their new wireless provider (which is called "porting").
6		
7	Q.	WHAT IMPACT DOES PORTING HAVE?
8	A.	Porting precludes the use of CPN for identifying carriers. For example, a wireless
9		subscriber's telephone number may have originally been assigned to U.S. Cellular. But if
10		the subscriber changes to Verizon service and ports his or her old U.S. Cellular number to
11		Verizon, use of CPN for intercompany billing purposes would result in the erroneous
12		billing of U.S. Cellular.
13		
14 15 16		IV. <u>INDUSTRY STANDARDS DO NOT SUPPORT RULE 29.040(4)</u> REQUIRING CPN TO BE INCLUDED AS PART OF THE CATEGORY 11-01-XX RECORDS FOR WIRELESS-ORIGINATED CALLS
17 18	Q.	IN ITS <u>ORDER OF RULEMAKING</u> ADOPTING 29.040(4), THE COMMISSION
19		STATED THAT THE LACK OF CPN IN AT&T MISSOURI'S CATEGORY 11-
20		01-XX RECORDS FOR WIRELESS-ORIGINATED CALLS LEAVES IT "NON-
21		INDUSTRY STANDARD." IS THIS CORRECT?
22	A.	No. CPN has never been a standard field in the Category 11-01-XX record for wireless-
23		originated calls. Therefore, the lack of it can not make the record non-industry standard.
24		As I explain below, industry standards call for such records to include the responsible
25		wireless carrier's Operating Company Number ("OCN"), which informs the terminating

1		carrier of the appropriate wireless carrier to bill. AT&T Missouri's Category 11-01-XX
2		record contains the OCN and complies with this requirement to identify the carrier.
3		
4	Q.	DOES AT&T MISSOURI'S CATEGORY 11-01-XX RECORDS FOR
5		WIRELESS-ORIGINATED CALLS COMPLY WITH INDUSTRY STANDARDS?
6	A.	Yes. At AT&T Missouri, we have designed our Category 11-01-XX record for wireless
7		calls based on the EMI standard developed and maintained by the Ordering and Billing
8		Forum ("OBF") of the Alliance for Telecommunications Solutions ("ATIS").
9		
10	Q.	IS THIS CONSISTENT WITH THE MISSOURI COMMISSION RULES?
11	A.	Yes. Commission Rule 29.020(5), which is part of the definition section, states: "A
12		Category 11-01-XX Record is a mechanized individual call detail record developed in
13		compliance with the Ordering and Billing Forum (OBF) exchange message interface
14		(EMI) industry guidelines "
15		
16	Q.	WHAT IS ATIS?
17	A.	Originally called the Exchange Carriers Standards Association, ATIS describes its
18		industry standard-setting role as follows on its website:
19 20 21 22 23		ATIS is a United States based body that is committed to rapidly developing and promoting technical and operations standards for the communications and related information technologies industry worldwide using a pragmatic, flexible and open approach.
242526		ATIS prioritizes the industry's most pressing, technical and operational issues, and creates interoperable, implementable, end to end solutions standards when the industry needs them and where they need them.

31

32

1 Over 1,100 industry professionals from more than 350 communications 2 companies actively participate in ATIS' 22 industry committees and 3 incubator solutions programs. ATIS develops standards and solutions 4 addressing a wide range of industry issues in a manner that allocates and 5 coordinates industry resources and produces the greatest return for 6 communications companies. 7 8 ATIS creates solutions that support the rollout of new products and 9 services into the communications marketplace. Its standardization 10 activities for wireless and wireline networks include interconnection 11 standards, number portability, improved data transmission, Internet telephony, toll-free access, telecom fraud, and order and billing issues, 12 13 among others. ATIS is accredited by the American National Standards 14 Institute (ANSI). 15 16 17 WHAT IS THE OBF? Q. 18 A. The ATIS-sponsored Ordering and Billing Forum (OBF) provides a forum for customers 19 and providers in the telecommunications industry to identify, discuss and resolve national 20 issues which affect ordering, billing, provisioning and exchange of information about 21 access services, other connectivity and related matters. 22 23 WHAT ARE EMI RECORDS? Q. 24 A. EMI records are part of the ATIS OBF EMI document. The EMI as described on the 25 ATIS OBF website is: 26 The Exchange Message Interface (EMI) document is a message exchange 27 guideline for the telecommunications industry. It is used as a standard method of interface between companies providing various services in the 28 29 industry. The EMI is used to support customer billing and various

customer and company support functions needed by the industry (e.g.

account summary and tracking analysis).

1	Q.	HOW ARE EMI RECORDS CREATED?
2	A.	At AT&T Missouri, EMI records are created utilizing the network recordings made in
3		AMA format as the primary source. Some fields are populated or derived from tables
4		within the application billing system. The following is a simple depiction of the process.
5		The Category 11 record is an example of a EMI record.
6 7		AMA Recordings→ Message Processing System→ Call Detail Records (EMI format)
8	Q.	CAN THE AT&T MISSOURI BILLING SYSTEM POPULATE THE CATEGORY
9		11-01-XX RECORD WITH WIRELESS CPN UTILIZING THE AMA RECORDS
10		FROM THE SWITCH OR TABLES IN THE AT&T MISSOURI BILLING
11		SYSTEM?
12	A.	No. As AT&T network witness Jason Constable explains, AT&T Missouri's current
13		Lucent switches do not have the technical capability to record the CPN for wireless
14		originated traffic, and its Nortel switches are not configured to do so. As I explained, the
15		CPN is not used for billing purposes, and has never been part of the AMA recording for
16		this type of traffic in AT&T Missouri. Therefore, as far as the downstream billing system
17		is concerned, the information does not exist as an input to the process of creating the EMI
18		record. Thus, that information is not available to populate on Category 11 records.
19		
20	Q.	WHAT OBF STANDARD DID AT&T MISSOURI FOLLOW IN DEVELOPING
21		ITS CATEGORY 11-01-XX RECORD FOR WIRELESS-ORIGINATED CALLS?
22	A.	In compliance with OBF standard Category 11-01-01 record description on page 3-296
23		of the EMI document, AT&T Missouri developed Category 11-01-XX records to identify

1		originating wireless calls. A copy of this record description is attached to my testimony
2		as Read-Schedule 7(P).
3		
4	Q.	DID THE OBF CONDUCT INDUSTRY DISCUSSIONS TO ADDRESS WHAT
5		INFORMATION WAS NEEDED IN ORDER TO BILL INTERCOMPANY
6		COMPENSATION ON WIRELESS-ORIGINATED TRAFFIC?
7	A.	Yes. Very extensive discussions were held at OBF and documented in issues 2308 which
8		was titled: "Need for Accurate Jurisdictional Information for Accurate Billing" and issue
9		2349 which was titled: "Impact of Wireless Number Portability on Wireline Service
10		<u>Providers</u> ." These issues were discussed and documented for over three years by a cross
11		section of wireless providers, Incumbent LECs (including Regional Bell Operating
12		Companies or "RBOCs" and Independent LECs), CLECs and vendors. The
13		overwhelming theme of the discussions held by these groups was "identification of
14		wireless traffic." Copies of the documentation notes from OBF Issues 2308 and 2349 are
15		attached to my testimony as Read-Schedules 8(P) and 9(P).
16		
17	Q.	DOES THE DOCUMENTATION ON THESE ISSUES REFLECT ANY NEED TO
18		INCLUDE CPN IN THE CATEGORY 11-01-XX RECORD FOR WIRELESS-
19		ORIGINATED CALLS?
20	A.	No. At no place in the OBF documentation is it even suggested that wireless originating
21		CPN is needed for wireless identification. Instead, the documentation reflects industry
22		consensus that the OCN should be provided. In fact in issue 2349 on page 27 of the
23		notes, a question was asked of the industry, "Will the EMI record reflect the correct

1		identification (OCN) of the Wireless Provider?" The responses from BellSouth, SBC,
2		Sprint, and Verizon stated, "Yes,will continue to provide these records." It is clear to
3		the industry that CPN for wireless originating calls provides no benefit and that the
4		"correct identification" is the use of OCN.
5		
6	Q.	WHEN IS CPN A RELIABLE SOURCE FOR DETERMINATION OF PROPER
7		JURISDICTION OF WIRELESS ORIGINATING TRAFFIC?
8	A.	Since there is no way to tell from billing records when a cell phone is roaming, the
9		answer must be <u>never</u> .
10		
11	Q.	IS CPN AN INDUSTRY RECOGINIZED SOURCE OF INFORMATION FOR
12		ORIGINATING WIRELESS CARRIER IDENTIFICATION?
13	A.	No.
14		
15	Q.	WHAT HAS THE INDUSTRY DONE IN THE AREA OF WIRELESS
16		IDENTIFICATION TO ASSIST BILLING COMPANIES?
17	A.	The Record Description page for a Category 11-01-01 record in the EMI document
18		states:
19 20 21 22		To identify Cellular/Wireless originating and terminating traffic, the Type of Access Service (position 78-79) and Indicator 9 or 10 (position 90 & 91) should be populated.
23		This information will positively identify the record as a wireless originating or
24		terminating record. Also populated is the Operating Company Number ("OCN") for

1		originating calls (position 167-170) and this will positively identify the originating
2		wireless carrier.
3		
4	Q.	DOES THE OBF EMI DOCUMENT PRESCRIBE DIFFERENT STANDARDS
5		FOR DIFFERENT TYPES OF CALLS (e.g., WIRELINE CALLS AS OPPOSED
6		TO WIRELESS-ORIGINATED CALLS)?
7	A. Yes.	
8		
9	Q.	WHY ARE THE STANDARDS DIFFERENT?
10	A.	Different information is needed to bill different types of calls. In Wireline billing,
11		geographic location is critical for distance billing. In Wireless billing, geographic
12		location cannot be obtained due to the mobile nature of the wireless end of the call and is
13		therefore not used in billing.
14		
15	Q.	DOES AT&T PROVIDE A CATEGORY 11 RECORD FOR WIRELESS
16		ORIGINATING TRAFFIC POPULATED AS DISCUSSED ABOVE, IN ANY OF
17		ITS OTHER TWELVE STATES IN WHICH IT PROVIDES SERVICE AS A
18		LOCAL EXCHANGE COMPANY?
19	A.	Yes. AT&T provides the same type of record in all five states in its Southwest Region
20		and is currently in the process of making software changes to implement them in its
21		Midwest Region later this year. Consistent with requests from carriers across the
22		industry, our goal is to bring consistency across our regions. I would note that CPN is

1		not provided in the billing records associated with wireless-originated traffic in any of the
2		AT&T states.
3		
4	Q.	DO ANY OTHER LOCAL EXCHANGE COMPANIES IN THE COUNTRY USE
5		THIS SAME RECORD?
6	A.	Yes, as noted above through the notes of OBF issue 2349, BellSouth, Verizon, and Sprint
7		also provide this information in this manner.
8		
9	Q.	DO ANY OTHER LOCAL EXCHANGE COMPANIES IN MISSOURI USE THIS
10		TYPE OF RECORD?
11	A.	Yes. I understand from recent workshops in Missouri that Sprint Missouri (which soon
12		will be known as Embarq) and CenturyTel also currently follow this process.
13		
14	Q.	DOES THE CATEGORY 11-01-XX RECORD AT&T MISSOURI PROVIDES ON
15		WIRELESS-ORIGINATED CALLS COMPLY WITH THE INTENT OF
16		COMMISSION RULE 29.040?
17	A.	Yes. The overall intent of Commission Rule 29.040 is clear from the title of the rule and
18		its purpose statement, which is to identify the originating carrier. Our Category 11-01-
19		XX record for wireless-originated calls does that and is fully compliant with the rule.
20		
21	Q.	IS CPN A REQUIRED FIELD IN THE INDUSTRY STANDARD EMI
22		CATEGORY 11-01-XX RECORD?
23	A.	No.

1		
2	Q.	IS THERE AN ESTABLISHED ACCEPTED INDUSTRY PRACTICE FOR THE
3		USE OF CPN IN STANDARD EMI CATEGORY 11-01-XX RECORDS FOR
4		WIRELESS ORIGINATED TRAFFIC?
5	A.	No.
6		
7	Q.	WHAT INFORMATION DOES AT&T MISSOURI PROVIDE IN CATEGORY
8		11-01-XX RECORDS PASSED TO THE ILECS OF MISSOURI TO ASSIST IN
9		THE BILLING OF WIRELESS ORIGINATING TRAFFIC?
10	A.	AT&T Missouri does not use CPN to bill wireless carriers for the calls originated by
11		these carriers. The records passed to the terminating LECs will contain the same
12		information used in AT&T Missouri's billing system for billing wireless originating
13		traffic. As noted in Accessible Letter ILEC 04-014 SW, dated November 29, 2004, the
14		originating wireless OCN, Type of Access and Indicator 9 will be populated, thus
15		remaining in industry compliance. In addition the trunk group number will be populated
16		in position 41-44 as well as the Billing Telephone Number ("BTN") of the purchaser of
17		the trunk group.
18		
19	Q.	IS THIS THE ESTABLISHED ACCEPTED INDUSTRY PRACTICE FOR
20		INFORMATION EXCHANGED VIA EMI CATEGORY 11-01-XX RECORDS
21		FOR WIRELESS ORIGINATED TRAFFIC?
22	A.	Yes. This is the established industry practice, not only used by AT&T Missouri, but
23		other companies such as BellSouth and Verizon.

1

- 2 Q. DOES AT&T MISSOURI OPPOSE A FINDING BY THE COMMISSION THAT
- 3 RULE 29.040(4) REQUIRES TANDEM CARRIERS TO PROVIDE CPN IN
- 4 CATEGORY 11 BILLING RECORDS ON WIRELESS ORIGINATED TRAFFIC?
- 5 A. Yes. AT&T Missouri strongly opposes such a requirement.

7 Q. WHAT IS THE BASIS FOR AT&T MISSOURI'S OPPOSITION?

8 A. Aside from the fact that Rule 29.040(4) never contained this requirement in the first 9 place, AT&T Missouri opposes such a finding because: it is contrary to industry 10 standards; it is beyond the technical capability of AT&T Missouri's network; would 11 require AT&T Missouri to pay Lucent Technologies \$1 million or more to develop that 12 technical capability for AT&T Missouri's Lucent switches, and would require very 13 substantial and burdensome changes to AT&T Missouri's internal information processing 14 systems used to generate intercompany billing records; and would produce little, if any, 15 benefit to AT&T Missouri or any other carriers.

- 17 Q. WHY WOULD REQUIRING CPN IN CATEGORY 11-01-XX BILLING
- 18 RECORDS FOR WIRELESS-ORIGINATED CALLS BE INCONSISTENT WITH
- 19 **INDUSTRY STANDARDS?**
- 20 A. As AT&T Missouri witness Jason Constable stated, there are two industry standards that
- apply here, and such a requirement would be inconsistent with both of them. The first
- standard comes from the Ordering and Billing Forum ("OBF") and pertains to the content
- of Exchange Message Interface ("EMI") intercompany billing records. As I explained

1		above, this standard does not require CPN to be included in the Category 11-01-XX
2		billing record for wireless-originated calls. The other standard comes from Telcordia
3		Technologies and defines the content of AMA records that are created by telephone
4		company switches. As Mr. Constable explains in his testimony, this standard also does
5		not require the inclusion of CPN in AMA records for wireless-originated calls.
6		
7	Q.	DOES AT&T MISSOURI HAVE THE TECHNICAL CAPABILITY TO
8		INCLUDE CPN IN THE CATEGORY 11-01-XX RECORDS ITS PROVIDES TO
9		OTHER CARRIERS ON WIRELESS-ORIGINATED CALLS THAT TRANSIT
10		ITS NETWORK?
11	A.	No. As AT&T Missouri witness Jason Constable explained, AT&T Missouri's Lucent
12		5ESS tandem switches were designed in accordance with industry standards to not
13		capture and populate CPN in wireless originated AMA records. In addition, AT&T
14		Missouri does not have processing in place that is capable of creating an EMI Category
15		11-01-XX billing record on wireless-originated calls even if its switches could capture
16		and generate such AMA recordings on these types of calls.
17		
18	Q.	WHAT CHANGES WOULD AT&T MISSOURI NEED TO MAKE TO ITS
19		INTERNAL DATA PROCESSING SYSTEMS TO ENABLE IT TO INCLUDE
20		CPN IN EMI CATEGORY 11-01-XX RECORDS FOR WIRELESS-ORIGINATED
21		CALLS?
22	A.	To include CPN for wireless originated calls, AT&T Missouri would have to change to
23		its Usage Processing System ("UPS") as well as its Carrier Access Billing System. In

1		UPS we would first have to identify the calls as terminating to an ILEC in Missouri, so
2		they could be segregated for special handling. The Missouri-only ILEC terminating
3		records would then be populated according to commission order.
4		
5	Q.	WHY WOULD AT&T MISSOURI "SEGREGATE[D] FOR SPECIAL
6		HANDLING"?
7	A.	AT&T Missouri is responsible in Missouri and all other states to provide accurate,
8		industry standard records to our trading partners, including Competitive Local Exchange
9		Carriers ("CLECs").
10		
11	Q.	WHY WOULD AT&T MISSOURI NOT PROVIDE CLECS CPN FOR
12		WIRELESS ORIGINATED CALLS?
13	A.	For AT&T Missouri to provide industry standard records in a consistent manner in all
14		states, would require the CLECs to change their processes.
15		
16	Q.	DO YOU BELIEVE CLECS WOULD WANT CPN IN THESE TYPES OF
17		CALLS?
18	A.	No. Many CLECs, as well as ILECs, have participated in the OBF discussions regarding
19		identification of wireless originating traffic. As not one has suggested CPN is part of the
20		solution, it is clear they realize there is no benefit from making such a change. In
21		addition, any change AT&T Missouri made to change BTN to CPN would force costs on
22		the CLEC and would likely lead to disputes.

Q. WHAT DO YOU ESTIMATE THE COST TO AT&T MISSOURI OF CHANGING

ITS INTERNAL DATA PROCESSING AND BILLING SYSTEMS TO PROVIDE

CPN IN WIRELESS CATEGORY 11-01-XX RECORDS TO BE?

A. Mr. Constable discusses the cost of the network upgrades needed to provide CPN in Missouri AMA records. Once that is done, the cost to change the billing system would likely be over \$100,000 in internal personnel costs. The greater cost, that is difficult to measure, is the cost of IT maintaining unique coding for Missouri to handle the segregated process. This will require additional testing in every subsequent programming release. There is also the concern, since UPS handles all usage, not just ILEC records,

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Q. HOW LONG WOULD SUCH AN EFFORT TAKE?

that a special handling process puts all records at risk.

13 A. The IT work will require a project implementation. AT&T Missouri has a very intense 14 Software Development Life Cycle ("SDLC"), to ensure billing accuracy. Projects are 15 scheduled based on priority and efficiencies. After they are scheduled the SDLC process 16 takes about eight months.

17

18

Q. WHY DOES THE BILLING PROCESS TAKE SO LONG?

19 A. This is best explained by understanding the AT&T Missouri SDLC. The process,
20 described in detail below, must be followed to ensure that these changes are very
21 structured, which is necessary to ensure the integrity of these critical systems. This
22 process is very labor intensive due to the many work groups that must work
23 interdependently throughout the process.

A.

Q. HOW DOES THIS WORK GET STARTED?

When the Commission issues its <u>Order</u>, a copy of the <u>Order</u> will be provided to the Wholesale Marketing organization who has the responsibility of determining which organizations within AT&T Missouri will be impacted by the changes that are contained in the mandate⁶. When the Wholesale Marketing organization determines that a mandate will impact AT&T's billing system, it contacts the Information Technology ("IT") organization for placement of the mandate on IT's Retail Major Billing Release Calendar. When the estimated hours associated with a mandate are less than 5,000 (as in this case), AT&T's standard Services' Software Development Lifecycle ("SDLC") process is utilized. This process generally takes about 8 months to complete and results in six Retail Major Billing Releases per year. The SDLC process involves four phases: (1) Consultation and Assessment (C&A), (2) Definition and Funding (D&F), (3) Developing and Testing (D&T), and (4) Deployment. Each phase contains multiple steps or milestones. Some of the most significant milestones within this process includes the following components:

(1) The Work Request;

The Work Request as part of the C&A phase is a document stating a need for potential changes to be made by the IT department. The purpose of the C&A phase is to consult with and clarify the needs of the client, provide an initial IT impact assessment, and determine if the initiative has the necessary priority and resources to proceed to the next phase. During this step a project manager will be assigned to assist the client in gathering all necessary work groups to discuss the potential change. The initial meeting

⁶ The mandate approval process is an effort to more closely manage which projects are given mandate status. This review process ensures that all projects submitted to IT as mandated projects are, in fact, mandated by a regulatory or legislative action. By adding a review process that ensures that a mandate is truly a regulatory or legislative requirement and that the scope of the project aligns with the specific provisions contained in the mandate, AT&T has been able to use its IT resources more effectively in responding to qualified mandates.

will have the client explaining what they want done. This meeting will also help identify additional work areas that need to be involved. Work areas take action items to assess their impacts. Additional meetings must be held to coordinate all the groups and help create a High Level Estimate of work. This will also help in getting a first guess at the complexity of the potential project. While these meetings are taking place, other meetings are being conducted to determine if the project is a mandate. Even though the Work Request process is time consuming, each section is critical to ensuring that the outcome of the project is exactly as the client desires.

(2) Resource Commitment for Design and Funding;

This step, as part of the C&A phase, is to ensure that resources from the impacted IT work groups are available to assist with the design of the project. Funding for the work must be determined, but does not cause a delay once the project is deemed mandated. The impacted work groups that have been identified thus far for this project are UPS, Reference Tables, BSD- Common Rating and CABS. These groups are some of the core billing applications that are involved with the creation and maintenance of all customer billing and detailed usage exchange. Therefore the impact is a risk to millions of Missouri customer bills and the associated usage. Billions of usage records each month flow through these impacted systems.

(3) Baselined Business Requirements;

In this step of the D&F phase, a document is coordinated with all identified areas of the business to ensure that the needs of the requesting client do not negatively impact other areas of the business. If impacts exists, plans must be made to either change the other areas of business or notify customers of impending, non-negotiable change. For example, analysis must be done to determine if Competitive Local Exchange Companies (CLECs) will be impacted by this requested change. If so, what are the appropriate steps necessary to notify CLECs and possibly the industry of the upcoming change. This step will include the Client, technical requirements people, Methods and Procedure groups, Electronic Data Storage representatives, as well as other identified groups. The goal is to create a document that works for the entire business without losing site of what the client is requesting. Multiple meetings with be coordinated by the project manager so that each area of the business understands and has an opportunity to analyze impacts to their organization and/or products.

(4) Baselined Technical Requirements;

To complete this milestone, a document is created that defines the technical functionality that must exist to satisfy the Business Requirements. It describes what the software must do and its operational constraints. The Technical Requirements will be created through multiple meetings with experts from each of the application groups (as defined above in the C&A phase). Just as in the Business Requirements, each of the predetermined impacted areas will need to complete their section of this document. When completed this document will further explain what the client has requested, but this time in technical terms that can be understood by developers.

(5) Baselined High Level Design;

This step (HLD) identifies and describes the new, modified, and/or deleted components needed to support the business requirements for a functional This document will identify each impacted functional area and describe impacts to data models, functionality changes, and/or file layouts that affect multiple system applications. HLD can be system design, application design or both. Research will be required as if both are needed. Questions will be answered such as, Is a new system needed to handle the increased volume of work or can the existing systems handle the additional work? Will a new application be needed to handle the new or changed product/service or can the existing application be modified to accommodate the change? Dedicated Systems and Application Leads will coordinate with all the applications identified previously. They will work with the client, project manager, and Technical Requirements documents to create a design document. This document will be a pictorial view or road map of necessary changes to be followed by the developers. This will involve multiple meetings with committed personnel from previous steps as well as informal communication with developers.

(6) Project Release Commitment;

In this step all definition documents are reviewed to ensure there is no contradiction with other projects in the targeted release.

(7) Baselined Detail Design;

This step in the D&T phase begins by determining which components will require a Detailed Design by referring to the Baselined HLD document. Designers will identify any opportunity to reuse existing coding therefore saving development time and resources. Also, the designers will review the HLD and further decompose each of the key components into modules

The resultant document will demonstrate the and sub-processes. processing logic, data structures, data definitions, modules and sub-processes created in enough detail for a programmer to develop the code. The Designer(s) will take the HLD created previously and create a step by step process (design) so that each application developer is working to the same goal, even though they work independently. (8) Software Products Approved for System Test;

In this step the software is changed and/or created, including appropriate reuse of existing code. Once the coding and/or new systems and applications are complete, they are approved for testing. Most software is developed in modules, units of code. Developers must continually coordinate to ensure compliance with the Detailed Design. This step handled by the programmers (developers) from all development groups working with Design Leads.

(9) System Test Complete;

System testing consist of many steps and frequently results in necessary code modifications created in the previous step. After a test plan is developed, testing begins with a Unit Test. This is testing the new code within the containing module. Integration Testing is often next and this includes the identified impacted modules within the application leg. Success brings the next series of tests including System Tests, Performance Tests, and End-to-End Tests. These are tests to ensure no negative impacts to the system, CPU efficiency, or other products or services. Tests are also conducted to verify/validate impacts or no impacts to External/CLEC customers.

(10) Software Deployed.

After all testing is complete, the new code is prepared for production release. This include coordination between the software developers and the regional data centers. The new code is installed and validated.

V. SUMMARY

39 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

40 A. Neither the text nor the purpose of Commission rule 29.040(4) requires tandem carriers
41 to include CPN in the Category 11-01-XX records for wireless-originated calls. Rule

29.040's stated purpose is to identify carriers that originate traffic transmitted over the LEC-to-LEC network so that terminating carriers know which carrier to bill. AT&T Missouri's wireless Category 11-01-XX records, in compliance with the rule and industry standards as set out in the OBF EMI guidelines, identifies such carriers by providing the OCN. The provision of this and other information contained in AT&T Missouri's record gives terminating carriers all the information they need to render accurate bills for intercompany compensation to wireless carriers. CPN does not identify the originating carrier on wireless-originated calls and cannot be used for billing intercompany compensation on wireless-originated calls because of its inherent unreliability.

Adding a CPN requirement to Rule 29.040(4) would (1) require AT&T Missouri to pay Lucent Technologies \$1 million or more to develop that technical capability for AT&T Missouri's Lucent switches, (2) require very substantial and burdensome changes to AT&T Missouri's internal information processing systems used to generate intercompany billing records; and (3) produce little, if any, benefit to AT&T Missouri or to the carriers that use AT&T Missouri's Category 11-01-XX for intercompany billing purposes.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

20 A. Yes, it does.

SUMMARY OF EDUCATION AND WORK EXPERIENCE

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I received my Bachelor of Business Administration in Personnel Management from East
 Texas State University in 1981.

O. PLEASE OUTLINE YOUR WORK EXPERIENCE.

A. I began employment with AT&T in 1981 in Information Services. My responsibilities included data center operations cycle processing for Payroll, Toll, Customer Records Information System ("CRIS"), Customer Access Billing System ("CABS") and related online systems. I spent three years in systems development at Corporate Headquarters. I then worked for four years in Mid-Range Computer operations with duties which included toll data collection. Since 1997, I have been a part of the IT Billing Project Management support team. My responsibilities include support for all of AT&T Illinois with respect to Industry Markets Product and Account Management, primarily in the area of Daily Usage File ("DUF"). I also serve as an AT&T representative to OBF and currently hold the title of Co-Chair of the OBF Strategic Advisory Group.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS?

A. Yes. I testified in May 2005 before the Missouri Public Service Commission in Case No. TO-2005-0336, which was the consolidated arbitration between AT&T Missouri (doing business then as SBC Missouri) and numerous CLECs for a replacement interconnection agreement for the Missouri 271 Agreement ("M2A").

I have testified before the Illinois Commerce Commission in conjunction with interconnection arbitrations with MCI and AT&T as well as the Public Utility Commission of Texas ("Texas PUC") in Docket No. 28209 and Docket No. 30368 in cases with Premiere and CyTel regarding disputed bills and message exchange.

I have testified in interconnection arbitrations with Level 3 in Illinois, Wisconsin, Kansas, California, and Arkansas, in addition to filing written testimony for Level 3 arbitration hearings in Connecticut, Michigan, and Indiana. I have also testified in interconnection arbitrations with multiple CLECs in Kansas (K2A), Oklahoma (O2A), Texas (T2A), and Arkansas (A2A).