BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the matter of tariff sheets of NOS Communications, Inc., designed to establish a new method for calculation of customer charges.)))	CASE NO. TR-95-331
In the matter of tariff sheets of Affinity Network Incorporated designed to establish a new method for calculation of customer charges.))	CASE NO. TR-95-332
In the matter of tariff sheets of NOSVA Limited Partnership designed to es- tablish a new method for calculation of customer charges.)	CASE NO. TR-95-333

REPORT AND ORDER

Issue Date: January 24, 1996

Effective Date: February 6, 1996

OF THE STATE OF MISSOURI

In the matter of tariff sheets of NOS

Communications, Inc., designed to calculation of customer charges.

In the matter of tariff sheets of Affinity Network Incorporated designed to establish a new method for calculation of customer charges.

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CASE NO. TR-95-332

CASE NO. TR-95-333

CASE NO. TR-95-333

APPEARANCES:

Charles H. Helein, General Counsel and Jack Buechner, General Counsel, Helein & Associates, P.C., 8180 Greensboro Drive, Suite 700, McLean, Virginia 22102, For: NOS Communications, Inc., Affinity Network Incorporated and NOSVA Limited Partnership.

Michael F. Dandino, Senior Public Counsel, P. O. Box 7800, Jefferson City, Missouri 65102, For: Office of the Public Counsel and the Public.

Robert J. Hack, General Counsel, P. O. Box 360, Jefferson City, Missouri 65102, For: Staff of the Missouri Public Service Commission.

Administrative Law Judge:

Anne Wickliffe Freeman

REPORT AND ORDER

Procedural History

NOS Communications, Inc., Affinity Network Incorporated, and NOSVA Limited Partnership (NOS, ANI, and NOSVA, or the "Companies") submitted proposed tariff sheets on February 14, 1995, designed to

establish a new method for calculating customer charges for interexchange telecommunications services. The effective dates of the proposed tariff sheets were suspended until August 29, 1995, on the recommendation of the Staff of the Missouri Public Service Commission (Staff). An early prehearing conference was set for May 25, 1995. The first prehearing conference date was postponed and a prehearing conference was held on June 27, 1995. The tariffs' effective dates were further suspended to February 29, 1996, by Commission order dated July 25, 1995. In response to a motion filed by the Companies, the Commission consolidated the three cases under Case No. TR-95-331 on August 25, 1995. There were no intervenors in this case. The Commission conducted a hearing of the consolidated cases on October 17, 1995. The parties filed initial and reply briefs.

Findings of Fact

The Missouri Public Service Commission, having considered all of the competent and substantial evidence upon the whole record, makes the following findings of fact:

NOS, ANI, and NOSVA are under common ownership but continue to operate under separate names because of pending litigation. The three submitted identical tariff filings designed to implement a rate structure which incorporates non-transport costs, such as overhead, into the per-unit cost of a call. ANI currently uses this rate structure for its Missouri customers under tariff sheets approved by the Commission in July of 1994 that are substantially the same as the proposed tariffs in this case. At the end of the hearing there were evidentiary questions left unresolved which the Commission will consider before making its findings on the reasonableness of the proposed tariffs.

I. Evidentiary Rulings

A: Testimony of Anthony J. Zerillo: The Staff of the Commission prefiled rebuttal testimony prepared by Anthony J. Zerillo on September 12, 1995. At the evidentiary hearing Staff presented Mr. Zerillo as its expert witness and proffered his rebuttal testimony into evidence. After recross examination the Companies objected to the admission of Mr. Zerillo's testimony in its entirety on the basis that Mr. Zerillo failed to qualify as an expert witness, and that portions of his testimony constituted inadmissible hearsay.

1. Qualification to testify as an expert: In support of its objection the Companies stated that Mr. Zerillo had denied that he was an expert in telecommunications and noted his reference to the opinions of other analysts on the Commission's Staff. Staff countered that Mr. Zerillo's denial of expertise was a result of being overly modest. Staff also argued that the fact that the Commission Staff backed Mr. Zerillo's testimony supported his expert qualifications. The objection was taken with the record.

The question of whether a witness is qualified to testify as an expert is within the discretion of the trial court, in this case, the Commission. MacDonald v. Sheets, 867 S.W.2d 627, 630 (Mo.App. 1993). Mr. Zerillo's opinion on his own expertness is not dispositive. To qualify as an expert a witness must have knowledge, skill, experience, training or education which would make his opinion helpful to the trier of fact. Id. Mr. Zerillo testified that he has a degree in civil engineering and, at the time of the hearing, had been employed for approximately seven months by the Missouri Public Service Commission. He stated that he had analyzed twenty or more tariff filings, some for residential and some for business services. Mr. Zerillo demonstrated a clear understanding of the rate

structure at issue superior to that of other witnesses. The record supports the fact that Mr. Zerillo has training and experience useful to the Commission in deciding this case. Any lack of experience on Mr. Zerillo's part affects the weight to be given his testimony, not its admissibility. See also *St. Louis Southwestern v. Federal Compress*, 803 S.W.2d 40, 42-43 (Mo.App. 1990). The Companies stated on the record that the proposed tariff submitted by Mr. Zerillo as Schedule 3 to his prefiled testimony (Attachment A to this order) would be acceptable to them as a resolution of Staff's concerns about the confusing nature of the tariffs as filed. The Companies themselves have thus supported Mr. Zerillo's analysis. Refusing to admit Mr. Zerillo's testimony would deprive the Commission of a potential resolution of issues in this case.

2. Hearsay: The Companies argue that Mr. Zerillo's testimony is based on the opinions of others and therefore constitutes inadmissible hearsay. Although hearsay does not generally constitute competent and substantial evidence, an expert may generally rely on some sources which would otherwise constitute hearsay when preparing his opinion. State v. Delmar Gardens of Chesterfield, 872 S.W.2d 178, 181-182 (Mo.App. 1994). As long as those sources "serve only as a background for his opinion and are not offered as independent substantive evidence of value, he should not be precluded from testifying." Id.

The Commission finds that Mr. Zerillo gave testimony to his own opinion based upon his training and his experience in reviewing tariff filings for the Commission. The Commission finds that Staff did not attempt to offer, by means of Mr. Zerillo's testimony, the opinions of others as independent substantive evidence. The Commission finds that Mr. Zerillo was qualified to testify as an expert witness, that a proper

foundation was laid for his testimony, and that his Rebuttal Testimony, Exhibit 7, should be admitted into evidence.

Exhibits 4 and 5: During the hearing Staff offered Exhibits 4 Exhibit 4 consists of the presently approved and effective Missouri interexchange tariff of NOSVA Limited Partnership, Missouri. P.S.C. No. 1. Exhibit 5 consists of the presently approved and effective Missouri interexchange tariff of NOS Communications, Inc., Missouri. P.S.C. No. 1. The Companies reserved the right to object to these exhibits in order to determine whether the documents were in fact the current tariffs. Companies filed a joint objection to Exhibits 4 and 5 on October 20, 1995, on the grounds that Staff failed to demonstrate relevancy, failed to show that introduction of the tariffs would not be unfairly prejudicial to the Companies, and failed to show that introducing the tariffs at this time is not an unconstitutional deprivation of the Companies' rights to due Staff filed its Response to Objection on October 23, 1995, arguing that the only ground for objection raised by the Companies at the hearing was that the exhibits offered by Staff might not be the Companies' currently approved tariffs. Since the Companies did not allege that Exhibits 4 and 5 are not what they are purported to be, Staff argues that the Companies have conceded their only ground for objection. of the Public Counsel (OPC) filed a Response to Objections on November 6, 1995, making the same argument. OPC pointed out that Staff requested the Commission to take official notice of the currently approved tariffs of NOS and NOSVA and the Companies made no objection. OPC also stated that the Companies made no objection when the exhibits were presented to Mr. Arnau for identification other than to reserve a possible objection based on the documents not being the tariffs on file for NOS and NOSVA.

The record reflects that the Companies reserved the right to object to Exhibits 4 & 5 only on the basis that counsel wished to determine whether the exhibits were the currently approved tariffs of NOSVA and NOS. The Companies' objection, filed on October 20, 1995, made no allegation that these exhibits are not what they are represented to be. Objections not made in a timely fashion are waived. Even had the Companies not waived the right to other objections, these exhibits are relevant to the issues in this case. Further, the Commission is unable to imagine how the admission into evidence of the Companies' own tariffs, approved by the Commission, on file with the Commission, and available as public records, could be unfairly prejudicial to the Companies or in any way impinge upon the Companies' rights to due process. The Commission finds that Exhibits 4 and 5 should be admitted into evidence.

C. Exhibit 6: Exhibit 6 consists of a magazine article: How to Save on Long Distance Calls, Volume 60, No. 9, Consumer Reports, pages 570-574, September 19, 1995. Exhibit 6 was late-filed on October 20, 1995, and no objections were filed. The Commission finds that Exhibit 6 should be admitted into evidence.

II. Proposed tariffs

The Companies have developed a method of calculating their customer charges which is based on the duration of a call, plus a charge for the non-transport costs of the call. Examples of non-transport costs include overhead, account setup and administration, installation, and regulatory compliance. Non-transport costs are only recovered during the first ten minutes of each call. The Companies calculate the charge for a call by beginning with the minutes of use (Transport Usage Minutes or TUMs), determining how many units (Equivalent Call Units or ECUs) should be added to cover non-transport costs, and combining TUMs and ECUs to give

a unit called the Total Call Unit (TCU). The resulting TCU will have a value greater than the minutes of use. ANI's current tariff, approved in July of 1994, is substantially similar to the proposed tariffs presented in this case. According to Staff's witness ANI's current tariff permits billing by TCUs rather than by minutes of use.

Staff and OPC oppose the proposed tariffs because of the complexity and possibility of confusion posed by the tariffs as filed, and because of the possibility of misleading the consumer by not indicating on the bill the minutes of use (MOU) for each call.

Α. Effect of prior approval of ANI's 1994 tariff: ANI's current, Commission-approved, tariff permits the rate structure and billing practices at dispute here. Staff's witness, Mr. Zerillo, was not employed at the Commission when that tariff was approved and had no personal knowledge of why the Staff made no objection in July of 1994 but recommended that the tariff be approved. None of the parties offered evidence as to the circumstances surrounding approval of ANI's 1994 tariff. The fact that this rate and billing structure has been approved is at least some evidence that the Commission considered it reasonable in July of 1994, although the tariff was not litigated. Even in a contested case, the Courts of Appeal have found that the doctrine of stare decisis does not apply to administrative tribunals. City of Columbia v. Mo. State Bd. Of Mediation, 605 S.W.2d 192, 195 (Mo.App. 1980). A regulatory agency must be free to respond to changing conditions and, even when conditions do not change, to change its policy or approach. State ex rel. GTE v. P.S.C., 537 S.W.2d 655, 661-662 (Mo.App. 1976). The Commission finds that the prior approval of ANI's tariff in July of 1994 is not binding on the Commission in this contested case.

- В. Method of calculation: Witnesses for Staff and OPC testified that the proposed tariffs were complex and confusing. The Companies' witness, Mr. Arnau, did not deny that the tariff was confusing but argued it was no more confusing than the tariffs of competitors. In response to questions from the bench, Mr. Arnau stated that the tariff proposed by Staff and attached to Mr. Zerillo's testimony as Schedule 3 would be acceptable to the Companies. OPC's witness, Dr. Adams, stated that Schedule 3 would be an appropriate resolution of the tariffing issue. Staff and OPC stated that they did not object to the methodology per se but to the way it was described in the tariff. Since the parties are in agreement that the proposed rate structure is acceptable if clarified in accordance with Mr. Zerillo's Schedule 3, the Commission will adopt Schedule 3 in resolution of the rate structure issue.
- Companies should be required to include the minutes of use for each call on customer bills. Staff's witness, Mr. Zerillo, and OPC's witness, Mr. Adams, testified that the billing is confusing and misleading to customers. Mr. Zerillo and Mr. Adams both stated that billing per minutes of use is the standard in the telecommunications industry. Customers who are accustomed to seeing minutes of use reflected on their bills might not realize that the TCU used by Companies is not the same as MOU. Because a TCU will have a value greater than the call's minutes of use, the price per TCU would be lower than the price per minute of use. Should a customer divide the charges for calls by the TCUs, thinking it represented minutes of use, the customer would be given a misleading impression of what his calls cost per minute.

Mr. Adams included an actual customer bill calculated using this method as Schedule 1 to his testimony (Attachment C to this Report and

Order.) Using as an example a call listed on this bill that was made on February 2, 1995, the customer was charged \$1.83 for this call equaling 12.6 TCUs. The customer could use the conversion chart to find that the number of ECUs applicable to a 12.6 TCU call equals .7. Subtracting .7 from 12.6 the customer would learn that the call duration was 11.9 minutes. The customer could then divide the charge of \$1.83 by 11.9 to find that the cost of the call equals 15.4 cents per minute. A customer who was unaware that TCUs are not equivalent to MOUs would assume that the time duration of the call was 12.6 minutes and divide the \$1.83 charge by 12.6, giving a purported cost per minute of 14.5 cents.

The Companies offered to include a conversion chart with each bill and provided a copy of the conversion chart as Exhibit A to Mr. Arnau's Direct testimony (Attachment B to this order). Both Staff and OPC witnesses, in preparing for hearing, worked with the conversion chart. Both testified that it was time-consuming and complicated. In addition, Mr. Zerillo pointed out that a customer would have to make the conversion for each call on his bill in order to determine his average cost per MOU. Mr. Arnau testified that it was simple to use and would be an appropriate solution. However, in Mr. Arnau's prefiled testimony he had made mistakes in the calculation which had to be corrected at the hearing and, on the stand, admitted that he could not run the calculation without a calculator.

Mr. Arnau testified that price per minute should not be the controlling factor in a customer's selection of telecommunications provider, but also testified that the Companies base their marketing approach on price per minute or use. Mr. Arnau testified that the cost of adding the MOU to the bill would be prohibitive. The Companies offered no factual evidence at the hearing to support Mr. Arnau's testimony on the issue of cost. The Companies filed untimely surrebuttal testimony on the

cost of implementation on October 16, 1995, one day before the day of hearing, prepared by an unavailable witness. The testimony was due on September 29, 1995. The Companies had not made a timely request for a continuance to assure the attendance of the witness, and objections by OPC and Staff to the admission of the late-filed testimony were granted.

The Commission finds that the industry standard is to bill by minutes of use and that failing to include MOU on the bill could be misleading to customers. The Commission finds that the conversion chart proposed by the Companies is not an adequate solution in that it would require numerous calculations and considerable time for a customer to find the average rate per minute he is being charged. The Commission further finds that the Companies' evidence that the cost would be prohibitive is lacking in evidentiary support and contradicts the uncontroverted fact that the information requested, i.e. minutes of use, is currently available to the Companies and forms the basis for the calculations involved in the proposed rate structure. The Commission finds that the Companies should include a column on each bill indicating the MOU for each call. The Commission further finds that the standard for customer bills for interexchange telecommunications service in Missouri includes a requirement that the minutes of use of each call be included on the face of the bill.

IV. Failure of the Companies to obtain approval for its billing methodology

Mr. Arnau testified that ANI has a Commission approved tariff setting out the TCU methodology. He also testified that NOSVA and NOS have been using the TCU methodology since 1994 but have not obtained Commission approval to use it. NOSVA and NOS have no tariffs on file that give customers notice that their bills are calculated using this method. Although interexchange carriers are subject to a lesser degree of regulation in Missouri than are local exchange Companies, they are required

to file their rates with the Commission and obtain Commission approval before putting them into effect. § 392.220 RSMo 1994¹. Exhibits 4 & 5 are the currently effective tariffs of NOSVA and NOS respectively and neither of these tariffs reflects the TCU methodology. It is without dispute that these two Companies have been operating in contravention of Missouri law and Commission order since 1994. The Commission finds that NOSVA and NOS are currently charging customers by means of an unapproved rate structure in violation of Missouri law. The Commission finds that an investigation into this matter by the Commission's Staff would be appropriate to determine whether a complaint should be filed.

Conclusions of Law

The Missouri Public Service Commission has arrived at the following conclusions of law:

The Commission has jurisdiction over the operations and rates charged by NOS Communications, Inc., Affinity Network Incorporated, and NOSVA Limited Partnership pursuant to Chapters 386 and 392 of the Revised Statues of Missouri. The Commission, pursuant to § 392.220, suspended the proposed tariffs designed to establish a new method for calculating customer charges for interexchange telecommunications services to February 29, 1996, and set the matter for an evidentiary hearing. The Commission conducted a hearing and received evidence and has made the above findings of fact based on a review of all the competent and substantial evidence on record, the exhibit filed after hearing, and the pleadings and briefs of the parties. The burden of proof to show that a proposed tariff is just and reasonable is upon the telecommunications company. § 386.430. The Commission concludes that the tariff sheets proposed by NOS Communications, Inc., Affinity Network Incorporated, and NOSVA Limited

¹All statutory references are to the Revised Statutes of Missouri 1994.

Partnership that underlie cases numbered TR-95-331, TR-95-332, and TR-95-333, are unnecessarily complex and confusing, and therefore unreasonable. Thus, the tariffs should be rejected and the Companies should file tariffs in compliance with the Commission's findings above. In addition, any new tariffs must include the provision that a column indicating minutes of use for each call will be included on customer bills. Telecommunications Companies are required to conform their conduct to that required by Missouri law and Commission order. § 386.580. The Commission is authorized by statute to institute an investigation whenever it is possible that a company subject to its jurisdiction has not complied with its orders or the applicable statutes. § 386.330. The Commission's findings indicate that, since 1994, NOS Communications, Inc., Affinity Network Incorporated, and NOSVA Limited Partnership have been charging their customers rates that are not tariffed or approved by the Commission in contravention of § 392.220. An investigation is indicated to determine to what extent these Companies are not in compliance with Missouri law and Commission order and to determine whether a complaint case should be filed. The Commission's Staff should also review all currently effective tariffs to determine if there are any other companies using customer bills that do not include an indication of the minutes of use for each call and, if so, whether complaint cases should be initiated.

IT IS THEREFORE ORDERED:

- 1. That this Report and Order is issued in resolution of all issues in Cases numbered TR-95-331, TR-95-332, and TR-95-333.
 - 2. That the following exhibits be received into the record:
 - Exhibit 4
 - Exhibit 5
 - Exhibit 6
 - Exhibit 7.

3. That the tariff sheets submitted by Affinity Network Incorporated on April 26, 1995, are rejected. The tariff sheets rejected are:

P.S.C. MO. No. 2

Original Title Sheet
Original Sheets No. 1 through 27.

4. That the tariff sheets submitted by NOSVA Limited Partnership on April 26, 1995, are rejected. The tariff sheets rejected are:

P.S.C. MO. No. 2

Original Sheet No. 22 Original Sheet No. 23 Original Sheet No. 24 Original Sheet No. 25.

5. That the tariff sheets submitted by NOSVA Communications, Inc., on April 26, 1995, are rejected. The tariff sheets rejected are:

P.S.C. MO. No. 2

Original Sheet No. 22 Original Sheet No. 23 Original Sheet No. 24 Original Sheet No. 25 Original Sheet No. 26 Original Sheet No. 27.

- 6. That the Companies shall file tariffs in compliance with Schedule 3 of Exhibit 7 (Attachment A to this order) within 30 days of the effective date of this Report and Order.
- 7. That the Staff of the Commission is directed to conduct an investigation into any possible violations by NOS Communications, Inc. or NOSVA Limited Partnership of Missouri law or Commission order and determine whether a complaint case should be filed. Staff shall file with the Commission a report indicating the results of its investigation and its

recommendation regarding institution of a complaint case no later than May 6, 1996.

- 8. That the Staff of the Commission is directed to conduct an investigation into any possible violations of the minutes of use billing standard set out above by any interexchange carrier subject to Commission jurisdiction, to determine whether a complaint case should be initiated.
- 9. That this Report and Order shall become effective on February 6, 1996.

BY THE COMMISSION

David L. Rauch Executive Secretary

(SEAL)

Mueller, Chm., McClure, Kincheloe, Crumpton and Drainer, CC., Concur and certify compliance with the provisions of Section 536.080, RSMo 1994.

Dated at Jefferson City, Missouri, on this 24th day of January, 1996.

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P.S.C. MO. No. ORIGINAL SHEET No.

SECTION 1 - TECHNICAL TERMS AND ABBREVIATIONS

Call Unit - a Call Unit is either Initial, Incremental, Equivalent, or Total as defined herein.

Bill Second - One-sixtieth of a minute of use rounded to the next highest tenth of a minute of use.

Initial Call Unit (InCU) - The minimum for which charges are incurred for all completed calls and, except as otherwise provided for in this tariff, equals 18 seconds measured from the first Bill Second through the sixth Bill Second. Initial Call Units are added to other call units to determine Total Call Units.

Incremental Call Unit (ICU) - The minimum additional period after an Initial Call Unit for which charges are incurred for a completed call and, except as otherwise provided in this tariff, equals six (6) seconds. Incremental Call Units are added to other call units to determine Total Call Units.

Usage Second Interval Equivalent Call Unit (USI ECU) - A call unit equivalent to one or more Incremental Call Units, designed to recover the "non-transport" costs incurred by Carrier in providing service. Usage Second Interval Equivalent Call Units are based on seconds of use. Usage Second Interval Equivalent Call Units are added to other call units to determine Total Call Units.

Minute Of Usage Equivalent Call Unit (MOU ECU) - A call unit equivalent to one or more Incremental Call Units, designed to recover the "non-transport" costs incurred by Carrier in providing service. Minute Of Usage Equivalent Call Units are based on minutes of use. Minute Of Usage Equivalent Call Units are added to other call units to determine Total Call Units.

Total Call Unit (TCU) - The number of applicable call units which when added together determine the charges for a completed call. Total call units are the sum of all call units divided by ten, listed on a customer's bill for each call (e.g., 1.4 TCUs, 5.6 TCUs, etc.).

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P.S.C. Mo. No. Original Sheet No.

SECTION 3 - DESCRIPTION OF SERVICES, continued

3.3 Methodologies for Calculating Charges

To calculate Total Call Units and charges under this tariff, one of the three following methodologies apply.

3.3.1 InCU Only Calls - Calls using this methodology have a time duration of 18 seconds or less. Total Call Units and charges for calls for which no incremental Call Units are incurred are calculated as follows:

ECU TABLE No. 1

CALL UNIT VALUES USED IN EXAMPLES

Call Duration (Seconds)	USİ ECUs		Call Unit	Duration	Charge
0-6	0	•	InCU	18 seconds	\$0.09005
7-9	1		ICU	6 seconds	\$0.03002
10-12	2		ECU	6 seconds	\$0.03002
13-15	3				
16-18	4				

3.3.1.1 STEPS:

- 1) Determine the number of USI ECUs from ECU Table 1 using call duration in seconds.
- 2) Add the following: one (1) InCU and the charge and Table 1 USI ECUs and charges.
- 3) After adding call units, divide by ten (10) to get TCUs.
- 4) After adding the charges, round up charges if necesssary.

3.3.1.2 Example: for a call of 14 second duration.

- 1) For 14 second call duration, Table 1 gives 3 USI ECUs.
- 2) Adding call units and charges:

3 USI ECUs @ \$0.03002 cach = \$0.09006 + 1 lnCU @ \$0.09005 = \$0.09005 4 call units pre-rounded charge = \$0.18011

3) 4/10 = 0.4 TCUs.

4) \$0.18011 rounds up to \$0.19, which is the charge for the call.

DATE OF ISSUE:

DATE EFFECTIVE:

ISSUED BY:

Original Sheet No.

SECTION 3 - DESCRIPTION OF SERVICE, confined

3.3 Methodologies for Calculating Charges, continued

3.3.2 InCU + ICU + ECU Calls - Calls using this methodology have a duration greater than 18 seconds and less than or equal to 10.15 minutes. Total Call Units for calls which have 99 ICUs or less, plus ECUs up to a cap of nine (9), are calculated as follows:

ECU TABLE No. 2

Duration in	,
minutes	MOU ECUs
0.4 - 2.15	1
2.16 - 4.15	2 ;
4.16 - 6.15	3
6.16 - 8.15	4 ;
8.16 - 10.15	5

3.3.2.1 Steps

1) Determine ICUs using the following fomula:

ICUs = [(Call Duration in Minutes) x (60) - (InCU duration in seconds)] / (ICU duration in seconds)

- A) multiply call duration in minutes by 60 to get call duration in seconds.
- B) subtract the InCU duration.
- C) divide by the ICU duration.
- D) this number, rounded up to the next whole number if necessary, is the number of ICUs.
- 2) Determine MOU ECUs using Table 2 and the call duration in minutes.
- 3) The number of USI ECUs is capped at 4.
- 4) Add the following call units and charges: 1 InCU and the charge, the number of ICUs (from 1 above) and charge, 4 capped USI ECUs and charge, and the number of MOU ECUs (from 2 above) and charge.
- 5) After adding the call units, divide by 10 to get the TCUs.
- 6) After adding charges, round up if necessary.

3.3.2.2 Example: for a call of 6.15 minute duration.

- 1) ICU Calculation, A) 6.15 x 60 = 369, B) 369 18 = 351, C) 351 / 6 = 58.5, D) ICUs = 59.
- 2) For a 6.15 minute call, Table 2 gives 3 MOU ECUs.
- 3) USI ECUs = 4 (capped from Table 1).
- 4) Adding call units and charges:

	⊥ InCU	@ \$	0.09005	=	\$0.0900	5
	<u>59</u> ICUs	@ \$	0.03002 each	=	\$1.7711	8
	4 USI ECUs	. <u>@</u> \$	0.03002 each	=	\$0.1200	8
-	+ 3 MOU ECT	Js @\$	0.03002 each	=	\$0.0900	6
,	67 call unts	_	pre-rounded	charge =	\$2.0713	7

- 5) 67 / 10 = 6.7 TCUs.
- 6) \$2.07137 rounds up to \$2.08, which is the charge for the call.

DATE OF ISSUE:

DATE EFFECTIVE:

P.S.C. MO. No. Original Sheet No.

SECTION 3 - DESCRIPTION OF SERVICES, continued

- 3.3 Methodologies for calculating charge, continued
- 3.3.3 Over the Cap Call Unit Calls Calls using this methodology have a duration of greater than 10.15 minutes. Total Call Units for which over 99 ICUs and the maximum number of ECUs apply are calculated as follows:

3.3.3.1 STEPS

- 1) Determine ICUs using the ICU formula on Sheet 23.
- 2) USI ECUs are capped at 4.
- 3) MOU ECUs are capped at 5.
- 4) Add the following call units and charges: 1 InCU and charge, ICUs and charge, capped USI ECUs (4) and charge, and capped MOU ECUs (5) and charge.
- 5) After adding call units, divide by 10 to get TCUs.
- 6) After adding the charges, round up if necessary.
- 3.3.3.2 Example: for a call of 12.0 minute duration
- 1) ICUs = A) $12 \times 60 = 720$, B) 720 18 = 702, C) 702 / 6 = 117, D) ICUs = 117.
- 2) USI ECUs = 4.
- 3) MOU ECUs = 5.
- 4) Adding call units and charges:

1 InCU	@\$0.09005	= \$0.09005
117 ICUs	@\$0.03002 each	= \$3.51234
4 USI ECUs	@\$0.03002 each	= \$0.12008
5 MOU ECUs	@\$0.03002 each	= \$0.1501
127 call units	pre-rounded ch	arges = \$3.87257

- 5) 127 / 10 = 12.7 TCUs.
- 6) \$3.87257 rounds up to \$3.88, which is the charge for the call.

DATE OF ISSUE:

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ISSUED BY:

How To Convert TCUs to TUMs

To convert TCUs to transport usage minutes (TMU), simpy apply the conversion factor to obtain the TUMs expressed in tenths of a minute. Example: A TCU of 5.5 is converted to a TUM of 5.0 using the table below. Find any TCU billed in the proper "TCU Range" as set foth below and subtract thereform the "Conversion Factor" to arrive at the proper TUM. For all TCUs greater than 8.9, the Conversion Factor will always be .7. Therefore, any TUM may be found for any TCU by using the following table. Example: A TCU of 30.6 has an TUM of 29.9 (30.6 - .7 = 29.9)

TCU/TUM Conversion Table

Billed T Range	CUs	Conversion Factor	TUM Range
.5	4	(.2)	.3
.7 to 2.4	:	(.3)	.4 to 2.1
2.6 to 4.5		(.4)	2.2 to 4.1
4.7 to 6.6	r r	(.5)	4.2 to 6.1
6.8 to 8.7		(.6)	6.2 to 8.1
8.9 to 10.8		(.7)	8.2 to 10.1
10.9 to 12.8	i j	(.7)	10.2 to 12.1
***	Ļ		***
30.6	4	(.7)	29.9
Etc.	1		

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Account: Customer N		ACCOUNTS MC					1+ Cal	l Detail						March Page	h 17, 1995 e: 4
Date	Time	City	ST	Number	Rate	tcu	Amount	Date	Time	City	ST	Number	Rate	TCU	Amount
Calls Ori	ginating Fr	om 417-739-5	065						11:44 am 3:36 pm	TROY	HO	816-471-1466 314-462-2331 816-292-5723	D D	3.1 3.0 1.4	0.64 0.62 0.29
02/01/95	9:08 am 9:23 am 9:31 am 11:02 am	FAYETTEVL BERRYVILLE BRITTON INDEPNDNCE	AR AR OK HO	501-521-5400 501-423-2182 405-751-6660 816-254-3860	. D	1.7 1.6 3.0 4.7	0.25 0.23 0.44 0.97	02/13/95	9:58 am 10:09 am 10:17 am 3:16 pm	KANSASCITY LEAD HILL LOUISVILLE LEAD HILL	MO AR KY AR	501-436-1448 502-649-7751 501-436-1448	D D	0.3 1.1 0.3	0.04 0.16 0.04
	12:33 pm 12:57 pm 12:58 pm	GLADSTONE NORTHBROOK BARRINGTON	MO IL IL	816-455-7939 708-772-6617 708-304-8211	D D D	0.9 0.9 6.4	0.19 0.13 0.93	02/14/95	3:17-pm 8:32 am 8:32 am	LOUISVILLE LOUISVILLE LOUISVILLE	KY KY KY	502-649-7751 502-267-9991 502-649-7751	N N	1.1 0.3 1.7	0.16 0.04 0.25 0.28
02/02/95	4:06 pm 4:14 pm 9:28 sm 11:01 sm	ELK GROVE BRECKENRDG PARK RIDGE KANSASCITY	NO IL IL	708-439-6990 303-453-8055 708-696-6550 816-292-5723	D D D	0.9 1.5 12.6 0.9	0.13 0.22 1.83 0.19		8:44 am 8:46 am 8:52 am 8:59 am	BARTLESVL PAWHUSKA LEAD BILL WICHITA	OK OK AR KS	918-661-6882 918-287-3448 501-436-1448 316-267-5397	N N	3.0 2.3 1.1	0.44 0.33 0.16
-	11:11 em 11:22 em 12:00 pm 12:43 pm	OAK GROVE KANSASCITY GLADSTONE OKLA CITY	AR MO MO OK	501-749-2393 816-757-4956 816-468-7799 405-672-8401	D D D	5.0 0.5 0.7 2.9	0.73 0.10 0.14 0.42		9:00 am 9:02 am 9:32 am 9:35 am	MCPHERSON STATESBORO DIR ASST KANSASCITY	KS GA AZ HO	316-241-6191 912-681-5327 602-555-1212 816-292-5723	N D N	0.3 1.5 1.0 1.1	0.04 0.22 0.60 0.23 0.25
	4:59 pm 6:09 pm 6:24 pm	OAK GROVE EUREKA SPG CHEYENNE BRECKENRDG	AR AR WY CO	501-749-2393 501-253-7048 307-778-8444 303-453-8055	D N N	1.6 6.8 1.7 1.7	0.23 0.99 0.25 0.25		9:35 am 9:36 am 9:38 am 9:40 am	DIR ASST GREEN FOR MOUNTJUDEA MOUNTJUDEA	AR AR AR	501-555-5121 501-438-5326 501-434-5353 501-434-5270	N N N	1.7 1.8 2.1 3.8	0.26 0.30 0.55
02/03/95	2:03 pm 2:05 pm 2:14 pm	DIR ASST SEDALIA SEDALIA	MO MO MO	816-555-1212 816-826-2222 816-827-4848 816-827-4924	D D D	1.0 9.4 2.1 1.4	0.60 1.95 0.43 0.29		12:17 pm 12:20 pm 12:28 pm 12:39 pm	MOUNTJUDEA KANSASCITY KANSASCITY KANSASCITY	AR MO MO MO	501-434-5270 816-292-5723 816-292-5723 816-292-5723	N N N	6.7 0.9 0.7 0.9	0.97 0.19 0.14 0.19
	2:18 pm 2:19 pm 2:21 pm 2:24 pm	SEDALIA SEDALIA SEDALIA	MO MO	816-827-2755 816-826-8320 816-826-2126 816-827-1880	0000	2.7 3.5 0.9 3.3	0.46 0.72 0.19 0.68		12:50 pm 1:11 pm 1:55 pm 2:09 pm	KANSASCITY KANSASCITY KANSASCITY HCPHERSON	MO MO KS	816-292-5723 816-292-5723 816-292-5723 316-241-6191	N N N	0.7 0.7 1.1 0.5	0.14 0.14 0.23 0.07
	2:25 pm 2:28 pm 2:29 pm 2:30 pm	SEDALIA SEDALIA SEDALIA	MO MO MO	816-826-6313 816-827-5340 816-826-0719	D D D	0.5 0.5 0.7	0.10 0.10 0.14 0.23	02/15/95	3:00 pm 8:48 am 11:40 am 11:44 am	KANSASCITY KANSASCITY DAK GROVE KANSASCITY	MO MO AR MO	816-292-5723 816-292-5723 501-749-2393 816-292-5723	N D D	1.1 1.4 2.8 1.1	0.23 0.29 0.41 0.23
	2:31 pm 2:33 pm 2:35 pm 2:40 pm	SEDALIA SEDALIA SEDALIA SEDALIA	MO MO MO	816-826-6212 816-827-1043 816-827-4907 816-827-4477	D D D	1.1 2.8 5.5 3.5	0.58 1.14 0.72		11:49 am 11:50 am 11:58 am	DIR ASST DIR ASST DAK GROVE	HO KS AR	816-555-1212 316-555-1212 501-749-2393	D D	1.0 1.0 1.1	0.60 0.60 0.16
02404405	2:43 pm 2:45 pm 2:46 pm	SEDALIA SEDALIA SEDALIA	MO MO MO	816-827-4880 816-826-2700 816-827-2162 816-292-5723	0 0 0	1.5 1.5 11.5 1.5	0.31 0.31 2.38 0.31		12:00 pm 12:03 pm 12:17 pm 12:25 pm	KANSASCITY OAK GROVE KANSASCITY KANSASCITY	MO AR MO MO	816-292-5723 501-749-2393 816-292-5723 816-292-5723	0 0 0	1.1 8.4 0.9 1.1	0.23 1.22 0.19 0.23
02/06/95	12:06 pm 1:15 pm 3:19 pm 6:00 pm	KANSASCITY AUSTIN BRIITON OQUAWKA	TX OK IL	512-448-6913 405-751-6660 309-867-6300	D D N	1.8 3.1 2.2	0.26 0.45 0.32		12:26 pm 12:28 pm 12:31 pm	KANSASCITY OLATHE KANSASCITY	MO KS MO	816-292-5723 913-829-6000 816-292-5723	0	0.9 2.9 1.8	0.19 0.42 0.37
02/07/95	3:22 pm 3:54 pm	WX1551MMEE MCPHERSON	FL KS	407-396-4455 316-241-6191	D D	2.3 1.4	0.33 0.20	Ì	12:41 pm 12:42 pm	KANSASCITY	MO MO	816-292-5723 816-292-5723 816-292-5723	D .	0.7	0.23 0.14 0.19
02/08/95	12:33 pm 12:51 pm 3:31 pm	GLADSTONE WICHITA WOODWARD	HO KS OK	816-455-7939 316-267-5397 405-256-5523	D D D	0.3 1.5 4.4	0.06 0.22 0.64	<u> </u>	12:42 pm 12:50 pm 3:42 pm	KANSASCITY OLATHE BERRYVILLE	HO KS AR	913-829-6000 501-423-2182	D D D	0.9 2.0 0.7	0.29 0.10
02/09/95	3:31 pm 11:09 am 11:10 am 2:01 pm	HARRISON HARRISON GLATHE	AR AR KS	501-741-5101 501-741-5101 913-829-3551	D D	0.3 1.8 3.8	0.04 0.26 0.55		4:15 pm 4:22 pm 4:25 pm	BRECKENROG HUTCHINSON WEBSTRGRVS	KS HO	303-453-8055 316-669-0467 314-962-2815	D	1.1 4.2 0.9	0.16 0.61 0.19
	2:04 pm 2:05 pm 2:56 pm	HUTCHINSON HUTCHINSON KEARNS	KS KS UT	316-669-0461 316-669-0467 801-957-4353	D D D	0.5 5.8 1.5	0.07 0.84 0.22		5:44 pm 5:50 pm 5:51 pm	LEAD HILL STATESBORD STATESBORD	AR GA GA	501-436-1448 912-681-5327 912-681-7134	N N	1.5 0.3 3.5	0.22 0.04 0.51
02/10/95	4:18 pm 4:50 pm 9:27 am 10:11 am	LOUISVILLE BRECKENRDG LOUISVILLE SPRINGDALE	KY CO KY AR	502-649-7751 303-453-8055 502-649-7751 501-756-1833	D D D	1.4 1.5 1.1 2.1	0.20 0.22 0.16 0.30	02/16/95	9:22 sm 9:24 sm 10:19 sm 10:39 sm	BERRYVILLE HARRISON SYVNHLSHWD KEARNS	AR AR AR UT	501-423-2182 501-741-2301 501-834-5041 801-963-4109	D D D	1.1 4.6 0.3 4.1	0.16 0.67 0.04 0.59
	11:09 om 11:21 am	BERRYVILLE HARRISON	AR AR	501-423-2182 501-741-2301	D D	0.5 2.4	0.07 0.35		11:43 am 1:31 pm	LEAD HILL SALINA	AR KS	501-436-1448 913-827-4411	D D	3.3	0.48 1.52

SCHEDULE

SCHEDULE 1-2

ustomer N		00001-4420-00			<u> </u>			ll Detail						Page	
Date	Time	City	ST	Number	Rate	TCU	Amount	Date	Time	City	ST	Number	Rate	TCU	Amount
<u>Calls Ori</u>	ginating Fr	-оп 417-739-	065	(cont)				1	5:23 pm 6:06 pm		KY IL	502-649-7751 309-867-6300	N N	1.5 2.0	0.22 0.29
02/17/95	10:22 am	EUREKA SPG	AR	501-253-7048 501-253-7048	D	0.3	0.04		6:09 pm	HARRISON	AR	501-743-3578 303-453-8055 501-253-7048 602-555-1212 501-423-3470	и.	1.6	0.23
	10:23 am 12:47 pm	TROY	AR MO	314-462-2331	D D	0.9 0.3	0.13 0.06		6:41 pm 6:56 pm	I BRECKENRDG I EUREKA SPG	EO AR	501-253-7048	N N	9.9 0.3	1.44 0.04
	1:55 pm	EUREKA SPG	ΑR	314-462-2331 501-253-7048	D	0.3	0.04		7:06 pm	DIR ASST	AZ	602-555-1212	D	1.0	0.60
02/19/95	1:55 pm 2:05 pm 12:08 pm	CHEYENNE OLATHE	. WY	307-778-8444 913-764-7773	D	0.3	0.23 0.04	02/28/95	7:13 pm 9:05 am		. AR.	501-423-3470 501-253-7048	N D	0.5	0.07
	12:11 pm	ULATRE	KS	913-764-7773 913-764-7734	Ñ	9.1	1.32	1,,	9:37 am	DIR ASST	KS	501-253-7048 316-555-1212	Ď	1.0	0.60
02/20/95	8:49 am 10:02 am	BERRYVILLE LEAD HILL	AR AR	501-423-2182 501-436-1448	D D	3.4 3.0	0.49 0.44		9:41 am 9:42 am		KS OK	316-687-1310 405-555-1212	D D	0.3 1.0	0.04 0.60
	10:05 am	LOUISVILLE	ΚY	502-649-7751	D	0.9	0.13		9:42 em	DIR ASST	OK	405-555-1212 918-555-1212 918-786-9449	D	1.0	0.60
	10:06 am 4:06 pm		KY AR	502-267-9991 501-253-7048	D D	0.3 1.1	0.04 0.16		9:45 em 9:46 em		OK KS	116-111	D D	1.1	0.16 0.60
02 (24 (05	4:07 pm	OKLA CITY	OK	405-672-8401	D	2.2	0.32		11:01 am	BERRYVILLE	AR	501-423-2182	D	0.9	0.13
02/21/95	11:10 em 11:11 em	BERRYVILLE BETHEL	AR KS	501-423-3470 913-788-7881	D D	1.4 0.7	0.20 0.10		11:40 am	HARRISON	AR	501-741-2301	D	1.8	0.26
	11:12 am	GLADSTONE	MO	816-455-7939	D	2.1	0.43		ubtotals f	or 417	-739 <u>-</u>				
	. 11:23 am 11:32 am		il Il	708-696-6550 708-696-6550	D D	4.0 10.9	0.58 1.58	1 9	cails : Total Call	Unite :	19 40	2 0.3		٠.	
	11:43 am	KANSASCITY	MO	816-471-1466	D	4.5	0.93		Amount :			8.46			
02/22/95	10:06 am 10:07 am	LOUISVILLE	KY KY	502-649-7751 502-267-9991	D D	0.3	0.16 0.04								
	11:23 am	SPRINGDALE	AR	501-756-1833	D	2.1	0.30		Subtotals f	or 1 +					
	11:25 am 2:26 pm		AR KY	501-521-5400 502-267-9991	D D	1.8 0.3	0.26 0.04		Calls : Fotal Call	lloite :	19	2 0.3			
	2:28 pm 2:29 pm	MCPHERSON	KS	316-241-6191	D	0.9	0.13		\mount :	VIII (3 .		8.46			
	2:29 pm 2:30 pm	WICHITA WICHITA	KS KS	316-267-5397 316-267-5397	D D	0.5 0.5	0.07 0.07								
	2:30 pm	WICHITA	KS	316-267-5397	D	2.6	0.38								
	2:32 pm 2:36 pm		AR AR	501-423-2334 501-741-3838	D D	2.3 0.5	0.33 0.07								
	2:44 pm	BRECKENRDG	CO	303-453-8055	D	1.4	0.20								
	2:45 pm	BERRYVILLE HARRISON	AR AR	501-423-2414 501-741-8900	D D	0.3 1.9	0.04 0.28								
	2:46 pm 2:47 pm	BERRYVILLE		501-423-3470	D	0.3	0.04								
	2:50 pm	SPRINGDALE	AR AR	501-750-1080	Ď	2.1	0.30	İ							
	2:53 pm 2:58 pm	EUREKA SPG LITTLEROCK	AR	501-253-7048 501-562-1262	D D	0.3 3.3	0.04 0.48								
	4:00 pm	WASHINGTON	DC	501-562-1262 202-942-4832	D	0.9	0.13						•		
02/23/95	4:26 pm 3:54 pm		AR KS	501-423-6636 316-241-6191	D D	1.6 0.7	0.23 0.10								
	3:55 pm	SALIHA	KS	913-825-6348	D	15.8	2.29	+							
02/24/95	9:57 am 9:58 am		T N T N	901-345-0559 901-345-0559	D D	0.3 0.5	0.04 0.07	1					ţ,		
	10:01 am	KEARNS	UT	801-963-4109 502-267-9991	D	2.1	0.30								
02/27/95	2:08 pm 9:03 am		KY Ar	502-267-9991 501-756-5666	D D	0.3 0.7	0.04 0.10	1		~			•		
02/21/93		SPRINGDALE	AR	501-756-1833	Ď	2.9	0.42								
	9:42 am	BENTONVL	AR	501-273-9421	D	0.3	0.04								
	9:44 am 11:33 am		AR MO	501-271-3465 314-368-2111	D D	0.5 0.3	0.07 0.06	1							
	11:34 am	ROLLA	MO	314-368-2173 501-521-5400	D	8.5	1.76	1							
	2:58 pm 3:42 pm		AR KS	501-521-5400 316-669-0467	D D	2.0 0.9	0.29	i							
	4:01 pm	HUTCHINSON		316-669-0467	D	0.9	0.13 0.10								
•	4:24 pm	OMAHA	AR	501-426-3480	D	1.8	0.26								
	4:26 pm 4:33 pm	OQUAWKA	IL IL	309-867-6300 309-867-6300	D D	0.3 0.3	0.04 0.04								
		LOUISVILLE		502-267-9991	Ň	0.3	ŏ.ŏ4	i							