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Issues: In the matter of Mid-Missouri Group's Filing to Revise its Access Service Tariff, P.S.C. Mo. No. 2.
Witness: Anthony S. Clark
Sponsoring Party:
Type of Exhibit:
Case No.: TT-99-428, et. al.

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

ANTHONY S. CLARK

CASE NO. TT-99-428, et. al.

Jefferson City, Missouri
September 23, 1999

Exhibit No. 5
Date 10-12-99 Case No. TT-99-428, et al
Reporter DUPRIN

REBUTTAL TESTIMONY

OF

ANTHONY CLARK

MID-MISSOURI GROUP

CASE NO. TT-99-428, et al.

Q. Please state your name, employer and business address.

A. My name is Anthony Clark, and I am employed on the Telecommunications Department Staff (Staff) of the Missouri Public Service Commission (Commission). My business address is 301 West High Street, Jefferson City, MO, 65101.

Q. Please describe your educational and professional background and current work responsibilities.

A. I received my B.S. in Business and M.A. in Economics from the University of Missouri, Columbia. I have taught courses in microeconomics, macroeconomics, money and banking and accounting. Since beginning my employment as an economist with the Commission in December 1996, I have been involved in a wide array of cases and projects relating to the regulation and deregulation of the telecommunications industry. Currently, I am the Staff's primary witness in matters relating to telecommunications costing, NPA conservation and relief, and the Missouri Universal Service Fund.

Q. Have you testified previously before the Commission?

A. Yes, six times.

Q. What is the purpose of your testimony in this case?

A. The purpose of my testimony is to respond to the Direct Testimony of Mr. Donald D. Stowell of the Mid-Missouri Group (MMG). In responding to Mr. Stowell's testimony I will present Staff's recommendation in regards to the issues in this case.

Q. Can you please briefly describe your understanding of Mr. Stowell's position in this case, based on his Direct Testimony?

A. Yes. Mr. Stowell believes it is appropriate to apply access rates to all traffic terminated on the MMG's network, including non-interexchange ("local") traffic originated on a carrier that is indirectly connected to the MMG's network. Specifically, Mr. Stowell addresses competition local exchange carrier (CLEC) traffic and wireless traffic transmitted indirectly, e.g., through Southwestern Bell Telephone Company's (SWBT's) network, to the MMG.

Mr. Stowell supports his position on two fronts: legal and technical. Mr. Stowell maintains the Commission has indicated that CLECs should pay switched access rates to secondary carriers (SCs) until they have an approved agreement for reciprocal compensation. Mr. Stowell also refers to the Commission's Order in Case No. TT-97-524, *In the Matter of Southwestern Bell Telephone Company's Tariff Filing to Revise Its Wireless Carrier Interconnection Service Tariff, P.S.C. Mo.-No. 40.*, as well as the related

Cole County Circuit Court decision in Case Nos. CV198-178CC and CV198-261CC. Mr. Stowell believes, in regards to Case No. TT-97-524, the Commission contemplated a structure by which wireless carriers would be "incented" to enter into reciprocal compensation agreements by reciprocal compensation rates that are lower than switched access rates. Mr. Stowell further states, "The Court held that SCs were not foreclosed from applying their access tariffs to the termination of wireless traffic" (Stowell Direct p.6).

Regarding the technical issues, Mr. Stowell maintains that traffic originated by wireless carriers or CLECs terminates to the MMG over identical facilities as normal toll traffic. Mr. Stowell states, "Other than the reciprocal compensation obligations imposed by the 1996 Act for exchanging local traffic, there is no reason to treat a minute of terminating CLEC or wireless traffic differently from a minute of terminating toll traffic" (Stowell Direct p. 5).

Q. Do you agree with Mr. Stowell's basic premise to treat CLEC traffic and wireless traffic the same?

A. From the MMG's point of view technically, the two traffic types may be the same or very similar; however, because of differing case history and relationship to current cases, the two traffic types should be considered separately. Accordingly, I will first address Mr. Stowell's position in relation to wireless traffic and then I will address his position regarding CLEC traffic.

WIRELESS TRAFFIC

Q. Mr. Stowell implies that, in its decision in Case No. TT-97-524, the Commission contemplates the use of switched access rates by SCs as an incentive for wireless carriers to enter into compensation agreements (Stowell Direct p 6). Do you agree with Mr. Stowell's implication?

A. No, I do not. In fact, in its Order in Case No. TT-97-524, the Commission recognizes an inherent problem in allowing the SCs to charge switched access for terminating wireless traffic. The Commission states on p. 20 of its Order,

> The problem of incentives is a two-sided question, and the Commission must also consider how its decision in this case will affect the third-party LECs' incentive to engage in the negotiation of agreements with the wireless carriers. If third-party LECs are allowed to bill SWBT access charges for the termination of wireless traffic in their exchanges, the third-party LECs will have little or no incentive to negotiate reciprocal compensation agreements with wireless carriers.

Actually, the Commission found that an indemnity structure between the wireless carrier, the SC and SWBT would provide "[t]he maximum incentives on the part of all parties for the negotiation of reciprocal compensation agreements" Report and Order at p. 20.

Q. In referring to the Circuit Court case upholding the Commission's decision in TT-97-524, Mr. Stowell states that, "The Court held that SCs were not foreclosed from applying their access tariffs to the termination of wireless traffic" (Stowell Direct p. 6). Does Mr. Stowell's statement require clarification?

A. Yes. The Court actually stated, on page 8 of its Findings in Case Nos. CV198-178CC and CV198-261CC ,

> The PSC did not foreclose Relators from applying their existing inter- or intrastate access tariffs as appropriate on inter-MTA (MTA = Major Trading Area) wireless traffic; developing and filing their own tariff charges for terminating wireless-originated traffic . . .; or negotiating agreements with wireless carriers that would compensate Relators for intra- and inter-MTA wireless-originated traffic as appropriate.

Nowhere in its Findings does the Court affirm the use of switched access rates for the termination of intra-MTA wireless traffic.

Q. Is the intra-MTA/inter-MTA distinction pertinent in this case?

A. Yes. As has been discussed in previous cases, LECs may charge switched access rates for terminating inter-MTA wireless traffic, just as they would with all long-distance traffic. But the FCC has indicated that it is not appropriate to apply switched access rates to the termination of intra-MTA wireless traffic. The FCC states at ¶1036 of its Interconnection Order[1]:

> Accordingly, traffic to or from a CMRS (Commercial Mobile Radio Service) network that originates and terminates within the same MTA (defined based on the parties' locations at the beginning of the call) is subject to transport and termination rates under Section 251(b)(5), rather than interstate and intrastate access charges.

Q. Can you please review the provisions of Section 251(b)(5)?

A. Yes. Section 251(b)(5) of the 1996 Act imposes upon each local exchange carrier the duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications services. Charges for transport and termination of traffic are covered under Section 252(d)(2), which states,

[1] FCC 96-325, *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996* and *Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket Nos. 96-98 and 95-185, respectively.

For the purpose of compliance by an incumbent local exchange carrier with section 251(b)(5), a State commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless— (i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.

Section 252(d)(2) goes on to clarify that it does not preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, e.g., bill and keep arrangements.

Q. Based on your interpretation of federal standards along with previous Commission decisions/Court rulings, what does this imply for rates for terminating wireless traffic?

A. Clearly rates for the termination of intra-MTA wireless traffic should not be switched access. Instead the rates should be cost-based.

Q. With regard to the termination of wireless traffic, how should the MMG companies modify their tariffs to make them compliant with federal rules?

A. The MMG companies should file proposed rates specifically for the termination of intra-MTA wireless traffic. The MMG companies should provide cost support data for the rates. The MMG companies may specify in their proposed tariff sheets that switched access rates apply to inter-MTA wireless traffic.

In lieu of ordering the MMG companies to submit proposed rates for the termination of intra-MTA wireless traffic, the Commission could order that a generic default rate be applied in cases involving the MMG companies where an agreement or approved tariff does not exist. This approach would still allow the MMG companies to file tariffs containing appropriate rates or enter into their own agreements with wireless carriers for the termination of intra-MTA wireless traffic.

Q. If the Commission were to adopt your second approach, how would the generic default rate be determined?

A. The generic default rate could be determined in a number of ways, and I shall present four options the Commission may wish to consider. For labeling purposes I will call my first approach in the previous question Option 1, and my second approach Option 2. Thus, Option 1 is that the MMG's proposed tariffs could be rejected and the companies could be ordered to file revised tariffs with proposed rates for the termination of intra-MTA wireless traffic. Under this approach, the companies should provide cost support for their proposed rates. Option 2 would involve the Commission establishing a generic default rate that would be used in situations where an agreement or approved tariff does not exist. I will present four options for deriving the generic default rate for the termination of intra-MTA wireless traffic, and I will label them Option 2a, 2b, 2c and 2d, as follows:

Option 2a: FCC Proxies

In the FCC's Interconnection Order, under Section XI., OBLIGATIONS IMPOSED ON LECS BY SECTION 251(b), Part A, Reciprocal Compensation for Transport and Termination of Telecommunications, the FCC discusses default proxy rates for transport and termination. The Interconnection Order states at ¶ 1060:

> [w]e adopt a default price range of 0.2 cents ($0.002) to 0.4 ($0.004) per minute of use for calls handed off at the end-office switch. . . .

The FCC also establishes a default rate ceiling of $0.0015 for tandem switching (including tandem-switched transport).[2] Thus, the Commission could rely on the FCC proxies and establish a default rate within FCC ranges.

Option 2b: Extrapolation from Rates of Approved Wireless Interconnection Agreements

The Commission has approved numerous negotiated interconnection agreements between incumbent LECs and wireless carriers. Each of these agreements contains provisions for compensation between the companies for the termination of traffic. As Schedule 1 to my Rebuttal Testimony I have included a large sample of the rates contained in Commission-approved wireless interconnection agreements for transport and termination of traffic between LECs and wireless carriers.[3] From observation one can see that the rates range from $0.004 to $0.013 per minute, with the majority of rates less than $0.01 per minute.

[2] see Interconnection Order at ¶824
[3] Although I refer to Schedule 1 as a large sample, it actually includes the vast majority of Commission-approved wireless interconnection agreements to date.

Schedule 1 represents the rates that companies are actually utilizing in Missouri, and so this information may be more useful and relevant than FCC proxies. The Commission might choose to establish a default rate for the transport and termination of wireless traffic within this range of $0.004 to $0.013 per minute. Alternately, the Commission might choose to establish a default rate slightly higher than the high end of the range to account for possible cost differences between the MMG companies and the LECs listed in the schedule.

Option 2c: Modified Switched Access

The Commission could base a default rate on the MMG companies' existing switched access rates, with the current access rates modified by the removal of the Carrier Common Line (CCL) portion of the rates. Although the resulting rates would not necessarily be cost-based, at least the explicit subsidy associated with CCL would no longer be present. Under this approach, only the companies' rates for switching, line termination and transport (if applicable) would apply. If this approach were applied to each of the MMG companies individually, the rates for termination of intra-MTA wireless traffic would be as follows:[4]

[4] Based on Staff's Switched Access Rate Comparison chart

Modified Switched Access (Option 2c)

	w/o local transport	with transport
Alma	$0.0267	$0.0404
Chariton Valley	$0.0267	$0.0371
Choctaw	$0.0267	$0.0302
Mid-Missouri	$0.0267	$0.0548
Mo-Kan Dial	$0.0267	$0.0379
Peace Valley	$0.0267	$0.0508

Under this approach, each company could apply its own switched access rates less the CCL portion, or a blended generic rate could be established by averaging the modified access rates of the MMG companies or by averaging the modified access rates (switched access less CCL) of all the secondary carriers in Missouri.

Option 2d: Staff's Proposed Rate

Rather than relying upon any one of the above three options, a rate could be established taking into consideration all relevant factors. It appears that the FCC has contemplated forward-looking cost proxies that are, for the most part, lower than the rates being negotiated between LECs and wireless carriers in Missouri. Thus, although they provide some reference point, relying strictly upon the FCC proxies may not be the best approach for the purposes of the current case. I propose that the FCC proxy range serve as a bottom end for the range of possible Missouri generic default rates for transport and termination of intra-MTA wireless traffic.

Likewise, the modified switched access rate approach (switched access less CCL) provides some reference point, but with rates ranging from $0.0267 to $0.0508 per minute this approach also produces results somewhat out of line from what is occurring in the marketplace— in private negotiations between LECs and wireless carriers in Missouri. The rate for transport and termination of intra-MTA wireless traffic emerging from the wireless interconnection agreements is generally around or less than a penny per minute. I believe these negotiated rates serve as a reasonable estimate of cost-based rates for the transport and termination of intra-MTA wireless traffic. However, recognizing possible differences in cost characteristics between the MMG companies and the LECs listed in Scheduled 1, Staff proposes that the generic rate be set higher than the high end of the Schedule 1 range. Based on all relevant factors, Staff proposes a generic default rate for the transport and termination of intra-MTA wireless traffic of $0.02 per minute. Staff believes that, if given the opportunity, the marketplace would produce a rate at or within a reasonable range of $0.02 per minute for the transport and termination of intra-MTA wireless traffic for the MMG companies.

Staff recommends that a generic default rate of $0.02 per minute for the transport and termination of intra-MTA wireless traffic be established, and that the rate be used in the absence of an approved tariff or interconnection agreement. Further, Staff recommends that the MMG companies be allowed to file proposed rates, with cost justification, for the transport and termination of intra-MTA wireless traffic. Lastly, Staff is not opposed to the MMG companies filing proposed tariff sheets to specify that switched access rates *do* apply to inter-MTA wireless traffic, that is, wireless traffic that crosses a MTA boundary.

Q. Have other companies tariffed rates for the transport and termination of intra-MTA wireless traffic?

A. Yes. SWBT's Wireless Carrier Interconnection Service Tariff, P.S.C. Mo.-No. 40 (SWBT's tariff) contains rates for the transport and termination of such traffic. These tariffed rates are used in instances where a wireless interconnection agreement is not in place.

Q. Please discuss the rates contained in SWBT's tariff.

A. SWBT's tariff includes separate rates for each of three different types of interconnection arrangements: Type 1, Type 2A and Type 2B. Type 1 Interconnection involves connection to a LEC end office whereby wireless carriers can send and receive calls to and from landline customers served by that end office and any other end office within the LATA. Type 2A Interconnection is connection to a LEC tandem switch, with the wireless carrier able to send and receive calls to and from landline subscribers served by end offices that home off the tandem where the wireless carrier elects to interconnect. Type 2B is connection to a LEC end office switch whereby the wireless carrier can only send and receive calls to and from landline customers served by the end office where the wireless carrier elects to interconnect.[5]

SWBT's tariffed rates for the three interconnection types are as follows:

[5] I have attached a more detailed description of each interconnection type as Schedule 2 to my Direct Testimony.

Rates from SWBT Wireless Carrier Interconnection Service Tariff

Type 1	Rate Per Minute
0-1 miles	$0.02
Over 1 – 25 miles	$0.025
Over 25 – 50 miles	$0.03
Over 50 miles	$0.04
Type 2A	
0-1 miles	$0.016
Over 1 – 25 miles	$0.018
Over 25 – 50 miles	$0.02
Over 50 miles	$0.025
Type 2B	$0.01

I would note that the service provided by the MMG companies in transporting and terminating intra-MTA wireless traffic would most closely approximate a SWBT Type 2B or Type 2A interconnection. Thus, I believe the Type 1 interconnection rates should be disregarded, at least in terms of making comparisons between SWBT's service and rates and that of the MMG companies. The Type 2A and Type 2B rates range from $0.01 to $0.025, depending upon the distance the traffic is hauled. I would note that SWBT's rates for the transport and termination of intra-MTA wireless traffic have been in effect since before the 1996 Act and FCC pricing standards. Nonetheless, I would note that

SWBT's rates for Type 2A and Type 2B interconnection are within a reasonable range of the $0.02 per minute default rate Staff is proposing for the MMG companies in the current case.

CLEC TRAFFIC

Q. Mr. Stowell maintains in his Direct Testimony that the Commission has indicated that CLECs should pay switched access rates to SCs until they have an approved agreement for reciprocal compensation (Stowell Direct p. 4). Do you agree with Mr. Stowell's assertion?

A. Mr. Stowell is referring to the Commission's December 11, 1996 Order in Case Nos. TO-97-40 and TO-97-67[6]. The Commission's Order states at page 39,

> For the twelve SWBT exchanges that have mandatory EAS (Extended Area Service) routes with independent LECs, AT&T and MCI must obtain compensation agreements with the independent LECs. The independent LECs were not a party to this case and should not be affected by the results of this arbitration. Until such compensation agreements can be developed, the company's intrastate switched access rates should be used on an interim basis.

The Order goes on to apply similar reasoning to MCA (Metropolitan Calling Area) arrangements, stating that "[s]ince other LECs are not a party to this arbitration, traffic to and from them should be handled by existing switched access rates" Report and Order at p. 41.

[6] *In the Matter of AT&T Communications of the Southwest, Inc.'s Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Southwestern Bell Telephone Company* and *In the Matter of the Petition of MCI Telecommunications Corporation and Its Affiliates, Including MCImetro Access Transmission Services, Inc., for Arbitration and Mediation Under the Federal Telecommunications Act of 1996 of Unresolved Interconnection Issues With Southwestern Bell Telephone Company.*

Therefore, I would agree that the Commission has indicated that AT&T and MCI should pay switched access to SCs for traffic terminated under MCA and EAS arrangements. However, I would also note that the Commission intended that switched access rates be used on an interim basis, until other agreements are reached.

Q. Should the Commission allow the MMG companies to apply their switched access rates to CLEC traffic terminated under MCA and EAS arrangements?

A. AT&T and MCI have already been ordered to pay switched access to SCs in such cases, on an interim basis. However, I would recommend that the MMG companies not be allowed to tariff this arrangement at this time.

Q. Please explain why.

A. In my understanding there are only three possible scenarios under which a CLEC would potentially terminate local traffic to an independent LEC: 1) the CLEC operates in the independent LEC's exchange(s), 2) under a MCA arrangement, or 3) under an EAS arrangement. The first scenario is of no concern in this case since compensation would be handled under an approved interconnection agreement. The second scenario involves traffic terminated under a MCA arrangement. A docket is currently underway before the Commission—TO-99-483, *In the Matter of an Investigation for the Purpose of Clarifying and Determining Certain Aspects Surrounding the Provisioning of Metropolitan Calling Area Service after the Passage and Implementation of the Telecommunications Act of 1996*— which will examine inter-company compensation as it relates to MCA. The issue of inter-company compensation for MCA traffic would be more appropriately and fully

addressed in that docket. Thus, at least until TO-99-483 is resolved, I would urge the Commission to reject the MMG's proposal to apply switched access rates, in blanket fashion, to MCA traffic.

Q. You mentioned three possible scenarios under which a CLEC would potentially terminate local traffic to an independent LEC. How do you address the third scenario—termination of local traffic under an EAS arrangement?

A. Although there is no open docket to specifically study EAS, I would argue that the inter-company compensation arrangements that arise from the MCA may also be applied to EAS. Thus, for the purposes of the current case, I recommend the MMG companies not be allowed to include language in their tariffs applying switched access rates to the termination of EAS traffic.

Q. Can you please state succinctly your overall recommendation regarding the MMG's proposed tariffs?

A. Yes. My basic recommendation is that the MMG's proposed tariffs, in their current form, be rejected. The MMG companies could be ordered to file proposed tariffs with cost-justified rates for the termination of intra-MTA wireless traffic (Option 1). Additionally, the Commission could establish a generic default rate for the termination of intra-MTA wireless traffic that the MMG companies would use in the absence of negotiated agreements or approved tariffs. Staff has presented four options for the Commission to consider in setting the default rate (Options 2a-2d). Staff recommends the Commission adopt a generic default rate of $0.02 per minute for the transport and termination of intra-

MTA wireless traffic (Option 2d). Under Staff's proposal, the MMG companies would still be free to pursue separate agreements to or file cost-justified rates in their tariffs.

With regard to CLEC traffic, my recommendation is that the MMG companies not be allowed to include any language in their tariffs that would apply switched access rates to the termination of MCA or EAS traffic. The issue of inter-company compensation with regards to MCA will be addressed more comprehensively in Case No. TO-99-483. Lastly, I maintain that compensation arrangements similar to those that emerge from the MCA case may be applied to EAS arrangements as well.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

RECIPROCAL COMPENSATION RATES FOR TRANSPORT & TERMINATION OF INTRA-MTA WIRELESS TRAFFIC --- FROM APPROVED WIRELESS INTERCONNECTION AGREEMENTS

Interconnected CMRS Provider	Interconnected LEC	Rate Per Minute
Aerial	Sprint	0.00489 - 0.013
Aerial	SWBT	0.004 - 0.009
Ameritech	Alltel	0.011
Ameritech	GTE	0.0089
Ameritech	SWBT	0.004 - 0.01
ATT Wireless	SWBT	0.004 - 0.01
CMT Partners	SWBT	0.004 - 0.01
Dobson Cellular	SWBT	0.004 - 0.01
Mid-Mo Cellular	SWBT	0.004
Nextel Comm	GTE	0.012
Nextel West	GTE	0.0065 - 0.0089
Nextel West	SWBT	0.004 - 0.01
Pagenet, Inc.	Sprint	0.00489 - 0.013
Sprint Spectrum	SWBT	0.004 - 0.01
SWB Wireless	GTE	0.0089
SWB Wireless	SWBT	0.004 - 0.009
U.S. Cellular	GTE	0.0089
U.S. Cellular	SWBT	0.004 - 0.01
Western Wireless	SWBT	0.004 - 0.01

Note: The ranges in the Sprint, SWBT nad GTE agreements denote rates for different types of of interconnection. The bottom end of the ranges represents the rate for interconnection at an end office switch (Type 2B), while the top end represents interconnection at a tandem switch (Type 2A). Chart does not include any nonrecurring charges.

Schedule 1

Cellular Interconnection

Type 1

The Type 1 interface is at the Point of Interconnection of a trunk between a Wireless Service Provider and a LEC end office switching system. The Wireless Service Provider establishes connections to the directory numbers served by this LEC end office and other carriers through this interconnection arrangement.

Incoming calls are handled through the Type 1 interconnection using MF trunk signaling protocols. However, with special software, generally referred to as Trunk with Line Treatment, the LEC switch is able to process and record the calls as if they are from an ordinary line side connection. With this Type 1 interconnection the Wireless Service Provider Wireless Switching Center can establish connections through the LEC network to valid office codes (NXX's) within the LEC local network, LEC Directory Assistance, LEC operator assistance, or services provided by Interexchange Carriers and other wireless services providers or LECs. In addition, via Feature Group D switched access services, an IC can be selected on each interexchange call by transmitting the proper IC identification code (e.g., 10XXX). If desired, presubscription to a specific IC can be made by the Wireless Service Provider on each trunk group. Then the LEC end office will route interexchange calls from the Wireless Service Provider to the presubscribed IC unless a different IC identification code is transmitted prior to the called customer address digits.

Outgoing calls from the LEC switched network to the Wireless Service Provider are handled through the Type 1 interconnection using multifrequency trunk signaling to identify the called wireless customer station number without manual or operator assistance. When using Type 1 interconnection, the Wireless Service Provider is responsible for handling calls to the NXX, or blocks of numbers assigned to the Wireless Service Provider.

Type 2A

Type 2A interface is at the Point of Interconnection of a trunk between a Wireless Service Provider and a LEC tandem switching system. Through this interconnection arrangement, the Wireless Service Provider can establish connections to LEC end offices and to other carriers accessible through the tandem.

Incoming calls are handled through the Type 2A interconnection using inband multifrequency trunk signaling and trunk address signaling protocols. With the Type 2A interconnection, the Wireless Service Provider can establish connections via the LEC network to valid local network area office codes (NXXs) accessible through the tandem or service provided by IC, and other wireless services providers or LECs associated with the local network area. In contrast to the Type 1 interconnection, there is no "line treatment" with Type 2A and the address signaling sequence for incoming wireless service provider calls through the LEC network to Feature Group D carriers will be a sequence used for Feature Group D switched access signaling. Services such as LEC directory assistance and LEC operator assistance (0- and 0+) are available through a Type 1 interface.

Outgoing calls from the LEC to the Wireless Service Provider are handled through the Type 2A interconnection using trunk address signaling protocols and multifrequency signaling for identification of the called wireless user's station. Calls are routed to the Point of Interconnection based on the NPA and NXX, or 1000s block, if required and available.

Type 2B

The Type 2B interface is at the Point of Interconnection of a trunk between a Wireless Service Provider and LEC end office switching system. The Type 2B interconnection may only provide connections between the WSP and Directory Numbers served by the one end office to which it is interconnected. A Type 2B interconnection may be used in conjunction with the Type 2A interconnection on a high-usage alternate routing basis to serve high-volume traffic between the Wireless Service Provider and the LEC end office.

The Type 2B is also used to provide interconnection directly to a LEC end office when there is no local LEC tandem. In this case, Type 2B is a direct final trunk interface.

Incoming calls are handled through the Type 2B interconnection using trunk address signaling protocols and multifrequency signaling to identify the called station number. With this interconnection, the Wireless Service Provider can establish connections with customers served by directory numbers in the LEC end office to which it is interconnected.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the matter of Mid-Missouri Group's Filing to Revise its Access Service Tariff, P.S.C. Mo. No. 2.	)))	Case No. TT-99-428, et. al.

AFFIDAVIT OF ANTHONY S. CLARK

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Anthony S. Clark, of lawful age, on his oath states: that he has participated in the preparation of the foregoing written testimony in question and answer form, consisting of 17 pages of testimony to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Anthony S. Clark

Subscribed and sworn to before me this 23rd day of September, 1999.

Notary Public

My commission expires_____

SHARON S WILES
NOTARY PUBLIC STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. AUG. 23,2002