

RECEIVED
DEC 26 1995

ACCESS SERVICE

MISSOURI

Public Service Commission

13. Additional Engineering, Additional Labor and Miscellaneous Services

13.1 addresses Additional Engineering. 13.2 addresses Additional Labor (which is comprised of Overtime Installation, Overtime Repair, Stand by, Testing and Maintenance with Other Telephone Companies, and Other Labor). 13.3 addresses Additional Programming. 13.4 addresses Miscellaneous Services (which are comprised of Testing Services, Maintenance of Service and Telecommunications Service Restoration Priority). 13.5 addresses Presubscription. 13.6 addresses verification of orders for long distance telemarketing. 13.7 addresses unauthorized PIC changes. 13.8 addresses Blocking Service and 13.9 addresses Billing Name and Address Service.

In this section, normally scheduled working hours are an employee's scheduled work period in any given calendar day (e.g., 8:00 a.m. to 5:00 p.m.) for the application of rates based on working hours. Basic time is that time during normally scheduled working hours on scheduled work days. Premium time is that time outside of normally scheduled working days.

A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Work subject to premium time is always subject to a minimum charge of four hours.

A Miscellaneous Service Order charge as described in 5.4.2 preceding may be applicable to services ordered from this section.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.1 Additional EngineeringMISSOURI
Public Service Commission

Additional Engineering, including engineering reviews as set forth in 5.4.3 preceding, will be undertaken only after the Telephone Company has notified the customer that additional engineering charges apply as set forth in 17.5.2(A) following, and the customer agrees to such charges.

Additional Engineering will be provided by the Telephone Company at the request of the customer only when:

- (A) A customer requests additional technical information after the Telephone Company has already provided the technical information normally included on the Design Layout Report (DLR) as set forth in 6.1.5 and 7.1.6 preceding.
- (B) Additional engineering time is incurred by the Telephone Company to engineer a customer's request for a customized service as set forth in 7.1.2 preceding.
- (C) A customer requested Design Change requires the expenditure of additional engineering time. Such additional engineering time is incurred by the Telephone Company for the engineering review as set forth in 5.4.3(B) preceding. The charge for additional engineering time relating to the engineering review, which is undertaken to determine if a design change is indeed required, will apply whether or not the customer authorizes the Telephone Company to proceed with the Design Change. In this case the Design Change charge, as set forth in 17.5.1(C) following, does not apply unless the customer authorizes the Telephone Company to proceed with the Design Change.

FILED

DEC - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Complete)13.2 Additional LaborMISSOURI
Public Service Commission

Additional Labor is that labor requested by the customer on a given service and agreed to by the Telephone Company as set forth in 13.2.1 through 13.2.5 following. The Telephone Company will notify the customer that additional labor charges as set forth in 17.5.2(B) following will apply before any additional labor is undertaken. When provisioning or restoring Telecommunications Service Priority services, the Telephone Company will, when possible, notify the customer of the applicability of these Additional Labor charges.

13.2.1 Overtime Installation

Overtime installation is that Telephone Company installation effort outside of normally scheduled working hours.

13.2.2 Overtime Repair

Overtime repair is that Telephone Company effort performed outside of normally scheduled working hours.

13.2.3 Stand by

Stand by includes all time in excess of one-half (1/2) hour during which Telephone Company personnel stand by to make installation acceptance tests or cooperative tests with a customer to verify facility repair on a given service.

13.2.4 Testing and Maintenance with Other Telephone Companies

Additional testing, maintenance or repair of facilities which connect other telephone companies is that which is in addition to the normal effort required to test, maintain or repair facilities provided solely by the Telephone Company.

13.2.5 Other Labor

Other labor is that additional labor not included in 13.2.1 through 13.2.4 preceding and labor incurred to accommodate a specific customer request that involves only labor which is not covered by any other section of this tariff.

FILED

JAN - 1 1996
9 6 - 1 4 7MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cm)

DEC 26 1995

13.3 Programming Services

MISSOURI
Public Service Commission

(A) Programming charges apply when a request by a customer for information concerning the access services provided to the customer result in the creation of new computer software or the modification of existing software in order to provide the requested information.

The Telephone Company will notify the customer that additional programming charges will apply before any additional programming is undertaken.

FILED

96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

DEC 26 1995

13.4 Miscellaneous Services13.4.1 Testing ServicesMISSOURI
Public Service Commission

Testing Services offered under this section of the tariff are optional and subject to rates and charges as set forth in 17.5.2(D) following. A call out of a Telephone Company employee at a time not consecutive with the employee's scheduled work period is subject to a minimum charge of four hours. Other testing services, as described in 6.2.4 and 7.1.7 preceding, are provided by the Telephone Company in association with Access Services and are furnished at no additional charge.

Testing services are normally provided by Telephone Company personnel at Telephone Company locations. However, provisions are made in (B)(2) following for a customer to request Telephone Company personnel to perform testing services at the customer designated premises.

The offering of Testing Services under this section of the tariff is made subject to the availability of the necessary qualified personnel and test equipment at the various test locations mentioned in (A) and (B) following.

(A) Switched Access Service

Testing Services for Switched Access are comprised of (a) tests which are performed during the installation of a Switched Access Service, i.e., Acceptance Tests, (b) tests which are performed after customer acceptance of such access services and which are without charge i.e., routine testing and (c) additional tests which are performed during or after customer acceptance of such access services and for which additional charges apply, i.e., Additional Cooperative Acceptance Tests and in-service tests.

FILED

96 - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

13. ~~Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)~~

DEC 28 1995

13.4 Miscellaneous Services (Cont'd)MISSOURI
Public Service Commission13.4.1 Testing Services (Cont'd)(A) Switched Access Service (Cont'd)

Routine tests are those tests performed by the Telephone Company on a regular basis, as set forth in 6.2.4 preceding which are required to maintain Switched Access Service. Additional in-service tests may be done on an automatic basis (no Telephone Company or customer technicians involved), on a manual basis [Telephone Company technician(s) involved at Telephone Company office(s) and Telephone Company or customer technician(s) involved at the customer designated premises].

Testing services are ordered to the Dial Tone Office for FGA, to the access tandem or end office for FGB (wherever the FGB service is ordered) and to the end office for FGs C and D.

(1) Additional Cooperative Acceptance Testing

Additional Cooperative Acceptance Testing of Switched Access Service involves the Telephone Company provision of a technician at its office(s) and the customer provision of a technician at its premises, with suitable test equipment to perform the required tests.

Additional Cooperative Acceptance Tests may, for example, consist of the following tests:

- o Impulse Noise
- o Phase Jitter
- o Signal to C-Notched Noise Ratio
- o Intermodulation (Nonlinear) Distortion
- o Frequency Shift (Offset)
- o Envelope Delay Distortion
- o Dial Pulse Percent Break

FILED

96 - 147
MISSOURI
Public Service Commission

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Miscellaneous Services (Cont'd)

13.4.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(2) Additional Automatic Testing

Additional Automatic Testing (AAT) of Switched Access Services (Feature Groups B, C and D), is a service where the customer provides remote office test lines and 105 test lines with associated responders or their functional equivalent. The customer may order, at additional charges, gain-slope and C-notched noise testing and may order the routine tests (1004 Hz loss, C-Message Noise and Balance) on an as needed or more than routine schedule.

The Telephone Company will provide an AAT report that lists the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on an as-occurs basis.

The Additional Tests, (i.e., gain slope, C-notched noise, 1004 Hz loss, C-message noise and balance) may be ordered by the customer at additional charges, 60 days prior to the start of the customer prescribed schedule. The rates for Additional Automatic Tests are as set forth in 17.5.2(D) following.

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

FILED

96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.4 Miscellaneous Services (Cont'd)

13.4.1 Testing Services (Cont'd)

(A) Switched Access Service (Cont'd)

(3) Additional Manual Testing

Additional Manual Testing (AMT) of Switched Access Services (Feature Groups A, B, C, and D is a service where the Telephone Company provides a technician at its office(s) and the Telephone Company or customer provides a technician at the customer designated premises, with suitable test equipment to perform the required tests. Such additional tests will normally consist of gain-slope and C-notched noise testing. However, the Telephone Company will conduct any additional tests which the customer may request.

The Telephone Company will provide an AMT report listing the test results for each trunk tested. Trunk test failures requiring customer participation for trouble resolution will be provided to the customer on a per occurrence basis.

The Additional Manual Tests may be ordered by the customer at additional charges, 60 days prior to the start of the testing schedule as mutually agreed to by the customer and the Telephone Company.

The rates for Additional Manual Testing are as set forth in 17.5.2(D) following.

RECEIVED

DEC 28 1995

MISSOURI
Public Service Commission

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services ~~68 24 1995~~

13.4 Miscellaneous Services (Cont'd)

13.4.1 Testing Services (Cont'd)

MISSOURI
Public Service Commission

(A) Switched Access Service (Cont'd)

(4) Obligations of the Customer

- (a) The customer shall provide the Remote Office Test Line priming data to the Telephone Company, as appropriate, to support routine testing as set forth in 6.2.4(B) preceding or AAT as set forth in 13.4.1(A)(2) preceding.
- (b) The customer shall make the facilities to be tested available to the Telephone Company at times mutually agreed upon.

FILED

96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

13. ~~Additional Engineering, Additional Labor and Miscellaneous Services~~ **DEC 28 1995**

13.4 Miscellaneous Services (Cont'd)

13.4.1 Testing Services (Cont'd)

MISSOURI
Public Service Commission

(B) Special Access Service

The Telephone Company will provide assistance in performing specific tests requested by the customer.

(1) Additional Cooperative Acceptance Testing

When a customer provides a technician at its premises or at an end user's premises, with suitable test equipment to perform the requested tests, the Telephone Company will provide a technician at its office for the purpose of conducting Additional Cooperative Acceptance Testing on Voice Grade Services. At the customer's request, the Telephone Company will provide a technician at the customer's premises or at the end user premises. These tests may, for example, consist of the following:

- Attenuation Distortion
(i.e., frequency response)
- Intermodulation Distortion
(i.e., harmonic distortion)
- Phase Jitter
- Impulse Noise
- Envelope Delay Distortion
- Echo Control
- Frequency Shift

FILED

96-147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) **DEC 26 1995**

13.4 Miscellaneous Services (Cont'd)

MISSOURI
Public Service Commission

13.4.1 Testing Services (Cont'd)

(B) Special Access Service (Cont'd)

(2) Additional Manual Testing

The Telephone Company will provide a technician at its premises, and the Telephone Company or customer will provide a technician at the customer's designated premises with suitable test equipment to perform the requested tests.

(3) Obligation of the Customer

When the customer subscribes to Testing Service as set forth in this section, the customer shall make the facilities to be tested available to the Telephone Company at time mutually agreed upon.

FILED

~~DEC~~ - 1 1996
96 - 147
MISSOURI

Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.4 Miscellaneous Services (Cont'd)MISSOURI
Public Service Commission13.4.2 Maintenance of Service

- (A) When a customer reports a trouble to the Telephone Company for clearance and no trouble is found in the Telephone Company's facilities, the customer shall be responsible for payment of a Maintenance of Service charge as set forth in 17.5.2(D) following for the period of time from when Telephone Company personnel are dispatched, at the request of the customer, to the customer designated premises to when the work is completed. Failure of Telephone Company personnel to find trouble in Telephone Company facilities will result in no charge if the trouble is actually in those facilities, but not discovered at the time.
- (B) The customer shall be responsible for payment of a Maintenance of Service charge when the Telephone Company dispatches personnel to the customer designated premises, and the trouble is in equipment or communications systems provided by other than the Telephone Company or in detariffed CPE provided by the Telephone Company.

In either (A) or (B) preceding, no credit allowance will be applicable for the interruption involved if the Maintenance of Service Charge applies.

FILED

DEC - 1 1996

96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.4 Miscellaneous Services (Cont'd)MISSOURI
Public Service Commission13.4.3 Telecommunications Service Priority - TSP

- (A) Priority installation and/or restoration of National Security Emergency Preparedness (NSEP) telecommunications services shall be provided in accordance with Part 64.401, Appendix A, of the Federal Communications Commission's (FCC's) Rules and Regulations.

In addition, TSP System service shall be provided in accordance with the guidelines set forth in "Telecommunications Service Priority (TSP) System for National Security Emergency Preparedness (NSEP) Service Vendor Handbook" (NCSH 3-1-2) dated July 9, 1990, and "Telecommunications Service Priority System for National Security Emergency Preparedness Service User Manual" (NCSM 3-1-1).

The TSP System is a service, developed to meet the requirements of the Federal Government, as specified in the Service Vendor's Handbook and Service User's Manual which provides the regulatory, administrative and operational framework for the priority installation and/or restoration of NSEP telecommunications services. These include both Switched and Special Access Services. The TSP System applies only to NSEP telecommunications services, and requires and authorizes priority action by the Telephone Company providing such services.

For Switched Access Service, the TSP System's applicability is limited to those services which the Telephone Company can discreetly identify for priority provisioning and/or restoration.

FILED

DEC - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) **DEC 26 1995**

13.4 Miscellaneous Services (Cont'd)

MISSOURI

13.4.3 Telecommunications Service Priority - TSP (cont'd)

Public Service Commission

(B) A Telecommunications Service Priority charge applies as set forth in 17.5.2(E) when a request to provide or change a Telecommunications Service Priority is received subsequent to the issuance of an Access Order to install the service.

Additionally, a Miscellaneous Service Order Charge as set forth in 17.5.1(D) will apply to Telecommunications Service Priority requests that are ordered subsequent to the initial installation of the associated access service.

A Telecommunications Service Priority charge does not apply when a Telecommunications Service Priority is discontinued or when ordered coincident with an Access Order to install or change service.

In addition, Additional Labor rates as set forth in 17.5.2(B) may be applicable when provisioning or restoring Switched or Special Access Services with Telecommunications Service Priority.

When the customer requests an audit or a reconciliation of the Telephone Company's Telecommunications Service Priority records, a Miscellaneous Service Order Charge as set forth in 17.5.1 (D) and Additional Labor rates as set forth in 17.5.2(B) are applicable.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd) DEC 26 1995

13.4 Miscellaneous Services (Cont'd)

13.4.4 Miscellaneous Equipment

MISSOURI
Public Service Commission

(A) Controller Arrangement

This arrangement enables the customer to control up to 48 transfer functions at a Telephone Company central office via a remote keyboard terminal capable of either 300 or 1200 bps operation. Included as part of the Controller Arrangement is a dial-up data station located at the Telephone Company Central Office to provide access to the Controller Arrangement. This dial-up data station consists of a 212A DATAPHONE data set and an appropriate Telephone Company provided channel.

The Controller Arrangement must be located in the same Telephone Company central office as the transfer functions which it controls.

Charges for the Controller Arrangement are set forth in 17.5.2(F) following.

FILED

96 - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

JUN 22 1999

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.5 InterLATA Presubscription

MO. PUBLIC SERVICE COMMISSION

(T)

Pursuant to the Federal Communications Commission's Memorandum Opinion and Order, CC Docket No. 83-1145, Phase I, adopted May 31, 1985, and released June 12, 1985, the Allocation Plan, outlined in the Appendix B of this Order, will be available for inspection in the Public Reference Room of the Tariff Division at the Federal Communications Commission's Washington, D.C., location or may be obtained from the Commission's commercial contractor.

- (A) Presubscription is the process by which end user customers may select and designate to the Telephone Company an IC to access, without an access code, for interLATA, Intrastate calls. This IC is referred to as the end user's predesignated IC.
- (B) On the effective date of this tariff, all existing end users have access to Intrastate MTS/WATS. No later than 85 days prior to conversion to Feature Group D in a serving end office, the Telephone Company will notify end users of the availability of equal access in their particular area. The notification will include the names of all ICs wishing to participate in the presubscription process. This notification will be sent via U.S. Mail to each end user of record served by the end office to be converted.
- (C) End users may select one of the following options at no charge:
- indicate a primary IC for all of its lines,
 - indicate a different IC for each of its lines.

Only one IC may be selected for each line or lines terminating in the same hunt group.

End users may designate that they do not want to presubscribe to any IC. The end user must arrange this designation by directly notifying the Telephone Company's business office. This choice will require the end user to dial an access code (10XXX) for all Intrastate calls.

After the end user's initial selection of a predesignated IC or the designation that they do not want to presubscribe to any IC, for any change in selection after conversion to Equal Access in the serving end office, a nonrecurring charge, as set forth in 17.5.2(G) following applies.

Missouri Public
Service Commission

JUN 22 1999

RECEIVED

ACCESS SERVICE

JUN 22 1999

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.5 InterLATA Presubscription (Cont'd)

MO. PUBLIC SERVICE COMMISSION (T)

- (D) End users not responding to the initial notification will be sent a second notification for the selection of a predesignated IC no earlier than 40 days prior to or no later than 90 days after the conversion to Equal Access in a serving end office. This second notification will indicate the primary IC that has been assigned to them if they fail to respond to the second notification.

After the allocation process has been completed, end users assigned to an IC via the allocation process may change their IC one time within six months after conversion to Equal Access in the serving end office at no charge.

Following the six month period after conversion to Equal Access for any change in selection, a nonrecurring charge as set forth in 17.5.2(G) following, applies.

- (E) When an end user indicates more than one IC selection on the return notification or returns an illegible return notification, the Telephone Company will contact the end user for clarification. If the end user indicates an IC selection on the return notification that does not match with information provided by an IC and both notifications indicate the same authorization date, the end user's notification takes precedence and the Telephone Company will process the end user's selection. In the event that two or more ICs provide to the Telephone Company notifications with the same authorization date and neither notification has been processed, the Telephone Company will contact the end user for clarification. A list of these end users in conflict must be sent to the affected IC by the Telephone Company.

In the event that two or more ICs have provided to the Telephone Company notifications with the same authorization date(s), and one IC notification has already been processed by the Telephone Company, those IC notifications not yet processed would be returned to the ICs.

Missouri Public
Service Commission

JUN 22 1999

RECEIVED

ACCESS SERVICE

JUN 22 1999

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.5 InterLATA Presubscription (Cont'd)

MO. PUBLIC SERVICE COMMISSION (T)

(F) New end users who are served by end offices equipped with Feature Group D will be asked to presubscribe to an IC at the time they place an order with the Telephone Company for Telephone Exchange Service. They may select either of the following options. There will be no charge for this initial selection.

- designate a primary IC for all of its lines,
- designate a different IC for each of its lines.

Only one IC may be selected for each individual line, or lines terminating in the same hunt group. Subsequent to the installation of Telephone Exchange Service and after the end user's initial selection of a predesignated IC, for any change in selection, a nonrecurring charge, as set forth in 17.5.2(G) following, applies.

(G) If the new end user fails to designate an IC as its predesignated IC prior to the date of installation of Telephone Exchange Service, the Telephone Company will (1) allocate the end user to an IC based upon current IC presubscription ratios, (2) require the end user to dial an access code (10XXX) for all Intrastate calls, or (3) block the end user from Intrastate calling. The end user will be notified which option will be applied if they fail to presubscribe to an IC. An allocated or blocked end user may designate another, or initial, IC as its predesignated IC one time at no charge, if it is requested within six months after the installation of Telephone Exchange Service.

For any change in selection after 6 months from the installation of Telephone Exchange Service, a nonrecurring charge, as set forth in 17.5.2(G) following applies.

Missouri Public Service Commission

JUN 22 1999

ACCESS SERVICE

RECEIVED

13. Additional Engineering, Additional Labor and Miscellaneous Services JUN 22 199913.5 InterLATA Presubscription (Cont'd)

- (H) If an IC elects to discontinue its Feature Group D Service offering prior to or within 2 years of the conversion, the IC will notify the Telephone Company of the cancellation. The IC will also notify all end users which selected them that they are cancelling their service and that they should contact the Telephone Company to select a new primary IC. The IC will also inform the end user that it will pay the presubscription change charge. The cancelling IC will then be billed by the Telephone Company the appropriate charge for each end user for a period of two years from the discontinuance of Feature Group D service.

13.6 Verification of Orders for Long Distance Telemarketing

No IC shall submit to the Telephone Company a Primary Interexchange Carrier (PIC) change order generated by telemarketing unless and until the order has first been confirmed in accordance with one of the following procedures:

- (A) The IC obtains the billed party's (e.g., an end user or the designator of the PIC for a pay telephone) written authorization to submit the PIC change order and confirms:
- The billed party's billing name and address and each telephone number to be covered by the PIC change order;
 - The billed party's decision to change the PIC to the IC; and
 - The billed party's understanding of the PIC change fee; or
- (B) The IC obtains the billed party's electronic authorization to submit the PIC change order. The billed party will place a call, from the telephone number(s) on which the PIC is to be changed, to a toll free telephone number that is dedicated to the IC's PIC verification process. The verification number will connect the billed party to a voice response unit that records the originating ANI and the required information described in (A) preceding; or

Missouri Public
Service Commission

JUN 22 1999

RECEIVED

ACCESS SERVICE

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services13.6 Verification of Orders for Long Distance Telemarketing

(C) An appropriately qualified and independent third party, operating in a location physically separate from the telemarketing representative, obtains the billed party's oral authorization to submit the PIC change order. This authorization must confirm the order and include appropriate verification data (e.g., the billed party's date of birth or social security number); or

(D) Within three business days of the billed party's request for a PIC change, the IC must send them an information package by first class mail which includes:

- a statement that the enclosed information is being sent to confirm a telemarketing order placed by the billed party within the previous week,
- the name of the current and soliciting ICs,
- the terms, conditions or charge for the PIC change,
- the name of the person who ordered the change,
- the name, address and telephone number of both the customer and the soliciting IC,
- a statement advising the billed party that, absent their response, the change will be implemented 14 days from the date the information package was mailed to them,
- the name, address and telephone number of a contact point at the FCC for customer complaints.

The IC must provide a post paid postcard which the billed party can use to deny, cancel or confirm the order. The IC must wait 14 days after the information package is mailed to the billed party before submitting the PIC change order to the telephone company.

FILED

DEC - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.7 Unauthorized PIC Change

MISSOURI
Public Service Commission

If an IC requests a Primary Interchange Carrier (PIC) change on behalf of a billed party (e.g., an end user or the designator of the PIC for a pay telephone), and the billed party subsequently denies requesting the change, and the IC is unable to substantiate the change with a letter of authorization signed by the billed party; then:

- The billed party will be reassigned to their previously selected IC. No change charge will apply to the billed party for this reassignment.
- The Unauthorized Presubscription Change Charge as set forth in 17.5.2(H) will apply to the IC that requested the unauthorized PIC change. This charge is applied in addition to the PIC change charge.

FILED

JRW - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.8 Blocking ServicesMISSOURI
Public Service Commission

Blocking Services provided under this tariff include International Blocking and 900 Blocking. Blocking Services are available to customers who obtain local exchange service from the Telephone Company under its general or local exchange tariffs and to customers who obtain Feature Group A Switched Access service under this tariff.

Blocking Services are only offered at appropriately equipped Telephone Company end offices. Those offices providing International and/or 900 Blocking Service are identified in NATIONAL EXCHANGE CARRIER ASSOCIATION, INC. TARIFF F.C.C. NO. 4.

13.8.1 International Blocking Service

International Blocking Service (IBS) is an optional service that allows customers to restrict all direct dialed international calls with the dialing sequence of 011+ or 10XXX-011+ from being placed over an End User Common Line or FGA Switched Access Line. Where capable, the Telephone Company will route international blocked calls to a recorded message.

IBS is a nonchargeable service. For service order activity associated with installing or removing IBS on an existing end user common line or Feature Group A Switched Access line, a Miscellaneous Service Order Charge as set forth in 17.5.1(D) will apply.

FILED

JAN - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

JEC 261995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.9 Billing Name and Address (BNA) Service

MISSOURI
Public Service Commission

13.9.1 General Description

(A) Billing Name and Address (BNA) Service is the provision to an Intrastate telecommunications service provider (ITP) by the Telephone Company of the complete billing name, street address, city or town, state and zip code for a telephone number or calling card account number assigned by the Telephone Company.

(B) BNA Service is provided for the purpose of

- (1) allowing customers to bill their end users for telephone services provided by the customer,
- (2) activities associated with the introduction of equal access (e.g. verification of presubscribed end users)
- (3) verification of service orders of new customers, identification of customers that have moved to a new address, fraud prevention, and similar non marketing purposes.

BNA information may not be resold or used for any other purpose than indicated above.

(C) BNA information used in connection with 13.9.1(B)(1) preceding will be provided, upon request, for

- listed/published telephone numbers
- unlisted/nonpublished telephone numbers where the Telephone Company has not been directed by the unlisted/nonpublished customer to restrict release of BNA information.

BNA information used in connection with 13.9.1(B)(2) and (3) preceding will be provided, upon request, for all telephone numbers assigned by the Telephone Company.

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

RECEIVED

DEC 26 1995

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

13.9 Billing Name and Address (BNA) Service (Cont'd)

MISSOURI
Public Service Commission

13.9.2 Undertaking of the Telephone Company

- (A) A standard format for the receipt of BNA requests and the provision of BNA information will be established by the Telephone Company.
- (B) Standard response to BNA requests will be by First Class Mail. Standard format will be on paper. Provision of BNA information in electronic format (i.e., magnetic tape or computer diskette) is optional.
- (C) Where facilities are available, the customer may request an optional specialized output format required to meet a specific customer need.
- (D) The Telephone Company will make every effort to provide accurate and complete BNA data. The Telephone Company makes no warranties, expressed or implied, as to the accuracy or completeness of this information.
- (E) The Telephone Company will not disclose BNA information, as defined in 13.9.1 preceding, to parties other than ITPs and their authorized billing agents. BNA disclosure is limited to the activities detailed in 13.9.1(B) preceding.
- (F) The Telephone Company reserves the right to request from an ITP, who has placed an order for BNA service, a statement concerning the intended use of the BNA information. This request is made to ensure that BNA information is to be used for legitimate purposes. The Telephone Company will not process the order until such time as the ITP provides the requested information, where applicable.

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

JEC 26 1995

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.9 Billing Name and Address (BNA) Service (Cont'd)MISSOURI
Public Service Commission13.9.3 Obligations of the Customer

- (A) The customer shall order BNA Service on a separate BNA Order. The order must identify both the customer's authorized representative and the address to which the information is to be sent.
- (B) The customer shall treat all BNA information as confidential. The customer shall insure that BNA information is used only for the purposes described in 13.9.1 preceding.
- (C) The customer shall not publicize or represent to others that the Telephone Company jointly participates with the customer in the development of the customer's end user records it assembles through the use of BNA Service.
- (D) Upon request, the customer will provide to the Telephone Company the reason BNA information is required. The Telephone Company will not process the order until such time as the customer provides the requested information.

13.9.4 Rate Regulations

- (A) For each order for BNA information received by the Telephone Company, a BNA Order Charge applies. In addition, a charge applies for each customer specific record requested by the ITP. The BNA Order Charge and the Per Record Charge are specified in 17.5.2(I) following.
- (B) The customer may order the response from the Telephone Company formatted on magnetic tape or computer diskette. The Optional Electronic Format Charge, specified in 17.5.2(I) following, will apply in addition to the BNA Order Charge and the BNA Record Charge.

FILED

JAN 1 1996
96 - 147MISSOURI
Public Service Commission

RECEIVED

ACCESS SERVICE

NOV 24 1997

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

MO. PUBLIC SERVICE COMMISSION

13.10 Access Services Billing

Billing Mediums

The customer shall select the primary medium in which its official access service bills and customer service records are to be provided. This selection shall be on an account level basis, and shall be submitted in writing to the Telephone Company.

(A) Primary Bill

At no charge to the customer, the customer shall select as the primary billing medium one of the following billing formats: standard paper, magnetic tape, or data transmission. The primary billing medium shall serve as the customer's official bill. Should the customer fail to make a selection, the official copy of the customer's access service bills and customer service records will be provided in the standard paper format.

Upon acceptance by the Telephone Company of an order for electronic data transfer, the Telephone Company will determine the period of time to implement the transmission of such material on an individual order basis.

When magnetic tape or data transmission is requested as the primary monthly bill, the customer must sign a Document of Understanding.

When magnetic tape or data transmission is requested as the primary monthly bill, the customer will receive an abbreviated bill in paper format. The abbreviated bill will contain the following sections: All Page, Balance Due, Meet Point Billing Cross Reference, Detail of Payments Applied, Detail of Balance Due, Detail of Late Payment Charges, and Other Charges and Credits.

The Telephone Company will accept a request for change from one form of primary billing medium to another at no charge to the customer.

(N)

FILED

DEC 24 1997

MISSOURI
Public Service Commission

Issued: November 24, 1997

Effective: December 24, 1997

ACCESS SERVICE

13. Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)13.10 Access Services Billing (Cont'd)(B) Secondary/Additional Bills

At the customer's written request, a secondary bill, in addition to the customer's primary bill will be provided on a monthly basis. The customer may choose as the medium for the secondary bill one of the following formats: standard paper, magnetic tape, or data transmission. Charges for the provision of a secondary bill are set forth in 17.5.2 following.

Additional copies of a customer's previous monthly access service bills will be provided in paper format, or magnetic tape/data transmission if the original bill was generated in this format. Requests for additional copies of previous monthly bills must be submitted in writing and shall specify the bill dates requested. Such a request, when not the result of a Telephone Company error will be subject to charges as set forth in 17.5.2 following. Unless specified otherwise, additional copies of the customer's access service bills and/or magnetic tapes will be sent via U.S. Mail Service.

13.11 IntraLATA Presubscription

(A) Presubscription is an arrangement whereby an end user may select and designate to the Telephone Company an interexchange Carrier (IC) to access, without an access code, for intraLATA intrastate toll calls. This IC is referred to as the end user's predesignated IC.

(B) Existing end users may exercise an initial free presubscription choice, within 180 days following implementation of ILP. If a customer has not decided upon an intraLATA IC at the conclusion of 90 days from implementation, the customer will default to their interLATA IC for intraLATA toll calls. If the customer's interLATA IC has not opted to be an intraLATA IC the customer will be assigned to a "no-pic" status and will have to dial an access code to make intraLATA toll calls. Any changes made 180 days after implementation will be subject to a nonrecurring charge as set forth in Section 17.5.2 following.

New end users who subscribe to service after the presubscription implementation date will be asked to select an intraLATA IC when they place an order for Telephone Company Exchange Service, at no charge. If a customer cannot decide upon an intraLATA IC, the customer will be assigned to a "no-pic" status and will have to dial an access code to make intraLATA toll calls. Any change made after the initial selection will be subject to a nonrecurring charge as set forth in Section 17.5.2 following.

(C) If a customer has selected more than one intraLATA IC, the Telephone Company will process the PIC with the latest customer authorization date.

(D)

(D)

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

ACCESS SERVICE

14. Reserved For Future Use

FILED

96 - 147

MISSOURI
Public Service Commission

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications

15.1 contains Switched Access Service Options (which are comprised of Interface Groups, Supervisory Signaling, Entry Switch Receive Level and Local Transport Termination) and Transmission Specifications. 15.2 describes Special Access Service Network Channel (NC) codes and Network Channel Interface (NCI) codes.

15.1 Switched Access Service

Ten Interface Groups are provided for terminating the Local Transport Entrance Facility at the customer's designated premises. Each Interface Group provides a specified premises interface (e.g., two-wire, four-wire, DS1, etc.). Where transmission facilities permit, and at the option of the customer, the Entrance Facility may be provided with optional features as set forth in 15.1.1 following.

As a result of the customer's access order and the type of Telephone Company transport facilities serving the customer designated premises, the need for signaling conversions or two-wire to four-wire conversions, or the need to terminate digital or high frequency facilities in channel bank equipment may require that Telephone Company equipment be placed at the customer designated premises. For example, if a voice frequency interface is ordered by the customer and the Telephone Company facilities serving the customer designated premises are digital, then Telephone Company channel bank equipment must be placed at the customer designated premises in order to provide the voice frequency interface ordered by the customer.

15.1.1 Local Transport Interface Groups

Interface Groups are combinations of technical parameters which describe the Telephone Company handoff at the point of termination at the customer designated premises. The technical specifications concerning the available interface groups are set forth in (A) through (D) following.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)MISSOURI
Public Service Commission15.1 Switched Access Service (Cont'd)15.1.1 Local Transport Interface Groups (Cont'd)

Interface Group 1 is Provided with Type C Transmission Specifications, as set forth in 15.1.2(C) following, and Interface Groups 2 through 10 are provided with Type A or B Transmission Specifications, as set forth respectively in 15.1.2(E) and (F) following, depending on the Feature Group and whether the Access Service is routed directly or through an access tandem. All Interface Groups are provided with Data Transmission Parameters.

Only certain premises interfaces are available at the customer designated premises. The premises interfaces associated with the Interface Groups may vary among Feature Groups.

(A) Interface Group 1

Interface Group 1, except as set forth in the following, provides two-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

Interface Group 1 is not provided in association with FGC and FGD when the first point of switching is an access tandem. In addition, Interface Group 1 is not provided in association with FGB, FGC or FGD when the first point of switching provides only four-wire terminations.

FILED

DEC - 1 1996
96 - 147MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

JEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.1 Local Transport Interface Groups (Cont'd)

(A) Interface Group 1 (Cont'd)

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of 300 to 3000 Hz.

The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(B) Interface Group 2

Interface Group 2 provides four-wire voice frequency transmission at the point of termination at the customer designated premises. The interface is capable of transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

The transmission path between the point of termination at the customer designated premises and the customer's serving wire center may be comprised of any form or configuration of plant capable of and typically used in the telecommunications industry for the transmission of voice and associated telephone signals within the frequency bandwidth of approximately 300 to 3000 Hz.

FILED

96 - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(B) Interface Group 2 (Cont'd)

The interface is provided with loop supervisory signaling. When the interface is associated with FGA, such signaling will be loop start or ground start signaling. When the interface is associated with FGB, FGC or FGD, such signaling, except for two-way calling which is E&M signaling, will be reverse battery signaling.

(C) Interface Groups 3 through 5

Interface Groups 3 through 5 provide analog transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the frequencies illustrated following, with the capability to channelize voice frequency transmission paths. Certain frequencies within the bandwidth of the Interface Groups are reserved for Telephone Company use, e.g., pilot and carrier group alarm tones. Before the first point of switching, the Telephone Company will provide multiplex equipment to derive the transmission paths of frequency bandwidth of approximately 300 to 3000 Hz.

The interfaces are provided with individual transmission path SF supervisory signaling.

Interface Group Identification No.	Transmission Frequency Bandwidth	Analog Hierarchy Level	Maximum No. of Channelized Voice Freq. Trans.Paths
3	60 - 108 kHz	Group	12
4	312 - 552 kHz	Supergroup	60
5	564 - 3084 kHz	Mastergroup	600

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.1 Local Transport Interface Groups (Cont'd)

Public Service Commission

(D) Interface Groups 6 through 10

Interface Groups 6 through 10 provide digital transmission at the point of termination at the customer designated premises. The various interfaces are capable of transmitting electrical signals at the nominal bit rates illustrated following, with the capability to channelize voice frequency transmission paths. Before the first point of switching, when analog switching utilizing analog terminations is provided, the Telephone Company will provide multiplex and channel bank equipment to derive transmission paths of a frequency bandwidth of approximately 300 to 3000 Hz. When digital switching or analog switching with digital carrier terminations is provided, the Telephone Company will provide a DS1 signal(s) in D3/D4 format.

The interfaces are provided with individual transmission path bit stream supervisory signaling.

Interface Group Identification No.	Nominal Bit Rate (Mbps)	Digital Hierarchy Level	Max. No. of Channelized Voice Freq. Trans. Paths
6	1.544	DS1	24
7	3.152	DS1C	48
8	6.312	DS2	96
9	44.736	DS3	672
10	274.176	DS4	4032

FILED

1996 - 1996
96 - 147

MISSOURI

Public Service Commission
Effective: January 1, 1996

Issued: December 26, 1995

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.1 Local Transport Interface Groups (Cont'd)

Public Service Commission

(E) Local Transport Optional Features

Where transmission facilities permit, the Telephone Company will, at the option of the customer, provide the following features in association with Local Transport. An Access Order Charge as specified in 17.5.1(A) following is applicable on a per order basis when nonchargeable optional features are added subsequent to the installation of service.

- Customer Specified Entry Switch Receive Level

Customer Specified Entry Switch Receive Level allows the customer to specify the receive transmission level at the first point of switching. The range of transmission levels which may be specified is described in Technical Reference TR-NWT-000334. This feature is available with Interface Groups 2 through 10 for Feature Groups A and B.

- Customer Specification of Local Transport Termination

Customer Specification of Local Transport Termination allows the customer to specify, for Feature Group B routed directly to an end office or access tandem, a four-wire termination of the Local Transport at the first point of switching in lieu of a Telephone Company selected two-wire termination. This option is available only when the Feature Group B arrangement is provided with Type B Transmission Specifications.

- Supervisory Signaling

Supervisory Signaling allows the customer to order an optional supervisory signaling arrangement for each transmission path provided where the transmission parameters permit, and where signaling conversion is required by the customer to meet its signaling capability.

FILED

96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

Missouri Public
Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

REC'D SEP 16 1999

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(E) Local Transport Optional Features (Cont'd)

The Interface Groups, as described in (A) through (D) preceding, represent industry standard arrangements. Where transmission parameters permit, the customer may select the following optional signaling arrangements in place of the signaling arrangements normally associated with the Interface Groups.

- For Interface Groups 1 and 2 associated with FGB, FGC or FGD
 DX Supervisory Signaling,
 E&M Type I Supervisory Signaling,
 E&M Type II Supervisory Signaling, or
 E&M Type III Supervisory Signaling
- For Interface Group 2 associated with FGB, FGC or FGD and in addition to the preceding
 SF Supervisory Signaling, or
 Tandem Supervisory Signaling
- For Interface Groups 3 through 5
 Optional Supervisory Signaling Not Available
- For Interface Groups 6 through 10

These Interface Groups may, at the option of the customer, be provided with individual transmission path SF supervisory signaling where such signaling is available in Telephone Company central offices. Generally such signaling is available only where the first point of switching provides an analog (i.e., non digital) interface to the transport termination.

These optional supervisory signaling arrangements are not available in combination with the SS7 optional feature as described in 6.8.2(C)(2) preceding.

(T)

Additionally, in (F) following, there is a matrix of available Premises Interface Codes as a function of Interface Group, Telephone Company Switch Supervisory Signaling and Feature Group.

Missouri Public
Service Commission
00 - 268
FILED OCT 20 1999

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes

Following is a matrix showing premises interface codes which are available for each Interface Group. Their availability is a function of the Telephone Company switch supervisory signaling and Feature Group. For explanations of these codes, see the Parameter Codes and Options as set forth in 15.2.2(A) following.

Interface Group	Telephone Company Switch Super. Signaling	Premises Interface Code	Feature Group			
			A	B	C	D
1	LO	2LS2	X			
	LO	2LS3	X			
	GO	2GS2	X			
	GO	2GS3	X			
	LO, GO,	2DX3	X			
	LO, GO,	4EA3-E	X			
	LO, GO	4EA3-M	X			
	LO, GO	6EB3-E	X			
	LO, GO	6EB3-M	X			
	RV, EA, EB, EC	2DX3		X	X	X
	RV, EA, EB, EC	4EA3-E		X	X	X
	RV, EA, EB, EC	4EA3-M		X	X	X
	RV, EA, EB, EC	6EB3-E		X	X	X
	RV, EA, EB, EC	6EB3-M		X	X	X
	EA, EB, EC	6EC3			X	X
	RV	2RV3-0		X	X	X
	RV	2RV3-T		X	X	X
	SS7	2NO2			X	X

FILED

DEC 26 1995

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company Switch Super. Signaling	Premises Interface Code	Feature Group			
			A	B	C	D
2	LO, GO	4SF2	X			
	LO, GO	4SF3	X			
	LO	4LS2	X			
	LO	4LS3	X			
	LO	6LS2	X			
	GO	4GS2	X			
	GO	4GS3	X			
	GO	6GS2	X			
	LO, GO	4DX2	X			
	LO, GO	4DX3	X			
	LO, GO	6EA2-E	X			
	LO, GO	6EA2-M	X			
	LO, GO	8EB2-E	X			
	LO, GO	8EB2-M	X			
	LO, GO	6EX2-B	X			
	RV, EA, EB, EC	4SF2		X	X	X
	RV, EA, EB, EC	4SF3	X			
	RV, EA, EB, EC	4DX2		X	X	X
	RV, EA, EB, EC	4DX3	X			
	RV, EA, EB, EC	6DX2			X	
	RV, EA, EB, EC	6EA2-E		X	X	X
	RV, EA, EB, EC	6EA2-M		X	X	X
	RV, EA, EB, EC	8EB2-E		X	X	X
	RV, EA, EB, EC	8EB2-M		X	X	X
	EA, EB, EC	8EC2-M			X	X
	RV	4RV2-O		X	X	X
	RV	4RV2-T		X	X	X
	RV	4RV3-O		X	X	
	RV	4RV3-T		X	X	
	SS7	4NO2			X	X
3	LO, GO	4AH5-B	X			
	RV, EA, EB, EC	4AH5-B		X	X	X
	SS7	4AH5-B			X	X
4	LO, GO	4AH6-C	X			
	RV, EA, EB, EC	4AH6-C		X	X	X
	SS7	4AH6-C			X	
5	LO, GO	4AH6-D	X			
	RV, EA, EB, EC	4AH6-D		X	X	X
	SS7	4AH6-D			X	X

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

RECEIVED

DEC 26 1995

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

MISSOURI
Public Service Commission

15.1 Switched Access Service (Cont'd)

15.1.1 Local Transport Interface Groups (Cont'd)

(F) Available Premises Interface Codes (Cont'd)

Interface Group	Telephone Company		Premises Interface Code	Feature Group			
	Switch	Supervisory Signaling		A	B	C	D
6	LO, GO		4DS9-15	X			
	LO, GO		4DS9-15L	X			
	RV, EA, EB, EC		4DS9-15		X	X	X
	RV, EA, EB, EC		4DS9-15L		X	X	X
	SS7		4DS9-15			X	X
7	LO, GO		4DS9-31	X			
	LO, GO		4DS9-31L	X			
	RV, EA, EB, EC		4DS9-31		X	X	X
	RV, EA, EB, EC		4DS9-31L		X	X	X
	SS7		4DS9-31			X	X
8	LO, GO		4DS0-63	X			
	LO, GO		4DS0-63L	X			
	RV, EA, EB, EC		4DS0-63		X	X	X
	RV, EA, EB, EC		4DS0-63L		X	X	X
	SS7		4DS0-63			X	X
9	LO, GO		4DS6-44	X			
	LO, GO		4DS6-44L	X			
	RV, EA, EB, EC		4DS6-44		X	X	X
	RV, EA, EB, EC		4DS6-44L		X	X	X
	SS7		4DS6-44			X	X
10	LO, GO		4DS6-27	X			
	LO, GO		4DS6-27L	X			
	RV, EA, EB, EC		4DS6-27		X	X	X
	RV, EA, EB, EC		4DS6-27L		X	X	X
	SS7		4DS6-27			X	X

FILED

DEC - 1 1996

96 - 147

MISSOURI
Public Service Commission

RECEIVED

ACCESS SERVICE

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

MISSOURI

Public Service Commission

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications

Descriptions of the transmission specifications available with each Feature Group as a function of the Interface Group selected by the customer, are set forth in (A) through (D) following. Descriptions of each of these Standard Transmission Specifications and the two Data Transmission Parameters mentioned are set forth respectively in (E) through (G) and 15.1.3(A) and (B) following:

(A) Feature Group A

FGA is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the first point of switching. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGA to the first point of switching.

(B) Feature Group B

FGB is provided with either Type B or Type C Transmission Specifications. The specifications for the associated parameters are guaranteed to the end office when routed directly or to the first point of switching when routed via an access tandem. Type C Transmission Specifications are provided with Interface Group 1 and Type B is provided with Interface Groups 2 through 10. Type DB Data Transmission Parameters are provided with FGB to the first point of switching.

FILED

DEC - 1 1995
96 - 147

MISSOURI

Public Service Commission

Effective: January 1, 1996

Issued: December 26, 1995

RECEIVED

DEC 26 1995

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

MISSOURI
Public Service Commission

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(C) Feature Group C

FGC is provided with either Type B or Type C Transmission Specifications as follows:

- When routed directly to the end office either Type B or Type C is provided.
- When routed to an access tandem only Type B is provided.
- Type B or Type C is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1 when routed directly to an end office. Type B is provided with Interface Groups 2 through 10, whether routed directly to an end office or to an access tandem.

Type DB Data Transmission Parameters are provided with FGC for the transmission path between the customer designated premises and the end office when directly routed to the end office, and between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

FILED

96 - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(D) Feature Group D

FGD is provided with either Type A, Type B or Type C Transmission Specifications as follows:

- When routed to the end office either Type B or C is provided.
- When routed to an access tandem only Type A is provided.
- Type A is provided on the transmission path from the access tandem to the end office.

Type C Transmission Specifications are provided with Interface Group 1. Type A and Type B Transmission Specifications are provided with Interface Groups 2 through 10.

Type DB Data Transmission Parameters are provided with FGD for the transmission path between the customer designated premises and the end office when directly routed to the end office. Type DA Data Transmission Parameters are provided for the transmission path between the customer designated premises and the access tandem and between the access tandem and the end office when routed via an access tandem.

(E) Type A Transmission Specifications

Type A Transmission Specifications is provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.0 dB

FILED

1996 - 1 1996
96 - 147

MISSOURI
Public Service Commission

RECEIVED

DEC 26 1995

ACCESS SERVICE

Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.2 Standard Transmission Specifications (Cont'd)

(E) Type A Transmission Specifications (Cont'd)

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to the loss at 1004 Hz is -1.0 dB to +3.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise</u>
less than 50	32 dBrnCO
51 to 100	34 dBrnCO
101 to 200	37 dBrnCO
201 to 400	40 dBrnCO
401 to 1000	42 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBmO holding tone, is less than or equal to 45 dBrnCO.

FILED

1996 - 1
96 - 147

MISSOURI
Public Service Commission
Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

15.1.2 Standard Transmission Specifications (Cont'd)

(E) Type A Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Equal Level Echo Path Loss, and expressed as Echo Return Loss and Singing Return Loss, is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	21 dB	14 dB
POT to End Office		
- Direct	N/A	N/A
- Via Access Tandem	16 dB	11 dB

(6) Standard Return Loss

Standard Return Loss expressed as Echo Return Loss and Singing Return Loss on two-wire ports of a four-wire point of termination shall be equal to or greater than:

<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
5 dB	2.5 dB

FILED

NOV - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.2 Standard Transmission Specifications (Cont'd)

Public Service Commission

(F) Type B Transmission Specifications

Type B Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 2.5 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +4.0 dB.

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type B1</u>	<u>Type B2</u>
less than 50	32 dBrnCO	35 dBrnCO
51 to 100	33 dBrnCO	37 dBrnCO
101 to 200	35 dBrnCO	40 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Groups C and D only Type B2 will be provided. For Feature Groups A and B, Type B1 or B2 will be provided as set forth in Technical Reference TR-NPL-000334.

FILED

96 - 1,996
96 - 147

MISSOURI

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.2 Standard Transmission Specifications (Cont'd)

Public Service Commission

(F) Type B Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Impedance Balance for FGA and FGB and Equal Level Echo Path Loss for FGC and FGD, and expressed as Echo Return Loss (ERL) and Singing Return Loss (SRL), is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. The ERL and SRL also differ by Feature Group, type of termination, and type of transmission path. They are greater than or equal to the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem		
- Terminated in		
4-Wire trunk	21 dB	14 dB
- Terminated in		
2-Wire trunk	16 dB	11 dB
POT to End Office		
- Direct	16 dB	11 dB
- Via Access Tandem		
. For FGB access	8 dB	4 dB
. For FGC access		
(Effective		
4-Wire trans-		
mission path		
at end office)	16 dB	11 dB
. For FGC access		
(Effective		
2-Wire trans-		
mission path		
at end office)	13 dB	6 dB

FILED

1995 - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.2 Standard Transmission Specifications (Cont'd)

(F) Type B Transmission Specifications (Cont'd)

(6) Standard Return Loss

Standard Return Loss, expressed as Echo Return Loss and Singing Return Loss, on two-wire ports of a four-wire point of termination shall be equal to or greater than:

Echo Return Loss

Singing Return Loss

5 dB

2.5 dB

(G) Type C Transmission Specifications

Type C Transmission Specifications are provided with the following parameters:

(1) Loss Deviation

The maximum Loss Deviation of the 1004 Hz loss relative to the Expected Measured Loss (EML) is ± 3.0 dB.

(2) Attenuation Distortion

The maximum Attenuation Distortion in the 404 to 2804 Hz frequency band relative to loss at 1004 Hz is -2.0 dB to +5.5 dB.

FILED

96 - 1 1996
96 - 1 47

MISSOURI

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.2 Standard Transmission Specifications (Cont'd)

(G) Type C Transmission Specifications (Cont'd)

(3) C-Message Noise

The maximum C-Message Noise for the transmission path at the route miles listed is less than or equal to:

<u>Route Miles</u>	<u>C-Message Noise*</u>	
	<u>Type C1</u>	<u>Type C2</u>
less than 50	32 dBrnCO	38 dBrnCO
51 to 100	33 dBrnCO	39 dBrnCO
101 to 200	35 dBrnCO	41 dBrnCO
201 to 400	37 dBrnCO	43 dBrnCO
401 to 1000	39 dBrnCO	45 dBrnCO

(4) C-Notch Noise

The maximum C-Notch Noise, utilizing a -16 dBm0 holding tone is less than or equal to 47 dBrnCO.

* For Feature Groups C and D only Type C2 will be provided. For Feature Groups A and B, Type C1 or C2 will be provided as set forth in Technical Reference TR-NWT-000334.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.2 Standard Transmission Specifications (Cont'd)

Public Service Commission

(G) Type C Transmission Specifications (Cont'd)

(5) Echo Control

Echo Control, identified as Return Loss and expressed as Echo Return Loss and Singing Return Loss is dependent on the routing, i.e., whether the service is routed directly from the customer's point of termination (POT) to the end office or via an access tandem. It is equal to or greater than the following:

	<u>Echo Return Loss</u>	<u>Singing Return Loss</u>
POT to Access Tandem	13 dB	6 dB
POT to End Office		
- Direct	13 dB	6 dB
- Via Access Tandem	8 dB	4 dB
(for FGB only)		

15.1.3 Data Transmission Parameters

Two types of Data Transmission Parameters, i.e., Type DA and Type DB, are provided for the Feature Group arrangements. Type DB is provided with Feature Groups A, B and C and also with Feature Group D when Feature Group D is directly routed to the end office. Type DA is only provided with Feature Group D and only when routed via an access tandem. Following are descriptions of each.

(A) Data Transmission Parameters Type DA

(1) Signal to C-Notched Noise Ratio

The Signal to C-Notched Noise Ratio is equal to or greater than 33 dB.

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.3 Data Transmission Parameters (Cont'd)

Public Service Commission

(A) Data Transmission Parameters Type DA (Cont'd)

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles 500 microseconds

equal to or greater than
50 route miles 900 microseconds

1004 to 2404 Hz

less than 50 route miles 200 microseconds

equal to or greater than
50 route miles 400 microseconds

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 65 dBrnC0 threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2) 33 dB

Third Order (R3) 37 dB

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.1 Switched Access Service (Cont'd)

MISSOURI

15.1.3 Data Transmission Parameters (Cont'd)

Public Service Commission

(A) Data Transmission Parameters Type DA (Cont'd)

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 5° peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

(B) Data Transmission Parameters Type DB

(1) Signal to C-Notched Noise Ratio

The signal to C-Notched Noise Ratio is equal to or greater than 30 dB.

(2) Envelope Delay Distortion

The maximum Envelope Delay Distortion for the frequency bands and route miles specified is:

604 to 2804 Hz

less than 50 route miles	800 microseconds
equal to or greater than 50 route miles	1000 microseconds

1004 to 2404 Hz

less than 50 route miles	320 microseconds
equal to or greater than 50 route miles	500 microseconds

FILED

1995 - 1 1996

96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.1 Switched Access Service (Cont'd)

MISSOURI
Public Service Commission

15.1.3 Data Transmission Parameters (Cont'd)

(B) Data Transmission Parameters Type DB (Cont'd)

(3) Impulse Noise Counts

The Impulse Noise Counts exceeding a 67 dBmCO threshold in 15 minutes is no more than 15 counts.

(4) Intermodulation Distortion

The Second Order (R2) and Third Order (R3) Intermodulation Distortion products are equal to or greater than:

Second Order (R2)	31 dB
Third Order (R3)	34 dB

(5) Phase Jitter

The Phase Jitter over the 4-300 Hz frequency band is less than or equal to 7° peak-to-peak.

(6) Frequency Shift

The maximum Frequency Shift does not exceed -2 to +2 Hz.

FILED

96 - 1 1996
96 - 1 47

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Continued)

DEC 26 1995

15.2 Special Access Service

MISSOURI
Public Service Commission

This section explains and lists the codes that the customer must specify when ordering Special Access Service, Switched Access Entrance Facilities, and Voice Grade and High Capacity Direct Trunked Transport. These codes provide a standardized means to relate the services being ordered to Special Access Service offerings contained in Section 7. preceding.

When ordering, the type of Special Access Service or Switched Access Entrance Facility or Direct Trunked Transport is described by two code sets, the Network Channel (NC) code and the Network Channel Interface (NCI) codes.

The Network Channel (NC) code consists of two elements. Element one is a Channel Service Code (character positions 1 and 2) that describes the channel service type in an abbreviated form. Element two is an Optional Feature Code (character positions 3 and 4) that identifies option codes available for each channel service code, such as C-conditioning or Improved Return Loss.

The Network Channel Interface (NCI) is used to identify interface specifications associated with a particular channel. This code describes the total wires, protocol, impedance, protocol options and transmission level point(s) reflecting physical and electrical characteristics between the Telephone Company and the customer.

On the following 3 pages are examples which explain the specific characters of the codes and which reference matrices and charts used in developing the codes. Included in the matrices are Service Designator (SD) codes which are used to identify variations of service within service types (e.g., TGI = Telegraph). The SD and NC codes are displayed as components of the matrices designated as Technical Specifications packages in (A) through (G) following. Through the use of these matrices, SD codes may be converted to NC codes for service ordering purposes.

A chart is also provided in 15.2.2(A) following which contains information necessary to develop NCI codes.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

Comprehensive lists of allowed Network Channel (NC) and Network Channel Interface (NCI) codes are contained in Special Report SR-ISD-000307. However, not all services contained in this Special Report may be offered by the Telephone Company at this time.

Lastly, 15.2.2(C) following provides a list of compatible Network Channel Interfaces inasmuch as the Network Channel Interfaces associated with a given service need not always be the same, but all must be compatible.

Example No. 1: If the customer wishes to order a 4-wire voice grade circuit with 600 Ohms impedance, capable of data transmission, and with improved return loss, the customer might specify the following:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LG-R	04DB2	04DA2-S

NC Code:

LG = Voice Grade Channel Service, VG6
-R = Improved Return Loss

NCI Code:

04 = Number of physical wires at CDP
DB = Data stream in VF frequency band at the customer designated main terminal location
2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):

04 = Number of physical wires at CDP
DA = Data stream in VG frequency at the customer designated secondary terminal location
2 = 600 Ohms impedance
S = Sealing current option for 4-wire transmission

In the above example the NCI (Network Channel Interface) code is the interface requested at the customer's POT (Point of Termination) and the SECNCI (Secondary Network Channel Interface) code represents the interface at the end office serving the End User.

FILED

1995 - 1 1996
96 - 1 47

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

Example NO. 3: If the customer wishes to order a FX circuit to a station, with 600 Ohms impedance, loop start signaling, which is 4-wire at the CDP and 2-wire at the end-user, the customer might specify:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
LC--	04LO2	02LS2

NC Code:

LC = Voice Grade Channel Service, VG2
-- = No Optional Features

NCI Code:

04 = Number of physical wires at CDP
LO = Loop start, loop signaling - open end
2 = 600 Ohms impedance

SECNCI (Secondary NCI Code):

02 = Number of physical wires at CDP
LS = Loop start signaling - closed end
2 = 600 Ohms impedance

Example No. 3: If the customer wishes to order a 1.544 Mbps Hi-cap facility with no channel options such as CO multiplexing, the customer might specify the following:

<u>NC</u>	<u>NCI</u>	<u>SECNCI</u>
HC--	04DS9-15	04DS9-15

NC Code:

HC = High Capacity Channel Service, HC1
-- = No Optional Features

NCI, SECNCI Code:

04 = Number of physical wires at CDP
DS = Digital hierarchy interface
9 = 100 Ohms impedance
15 = 1.544 Mbps (DS1) format

The preceding three examples use information contained in Special Report SR-ISD-000307.

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission
Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.1 Network Channel (NC) Codes

In order to determine the NC code appropriate for the service to be ordered, the type of Special Access Service the customer wishes must be identified. This identification is accomplished by a Service Designator (SD) code. The broad categories of Service Designator codes (e.g., VG, MT, TG, etc.) are set forth in Section 7. preceding. Variations within service type (e.g., VG1, MTC, TG2, etc.) are described in the various Technical Publications cited in (A) through (G) following.

Having determined the specific service type to be ordered and its SD code, and having used the appropriate Technical Publication, the customer should match the SD code to the NC code using the following matrices. Once the NC code has been determined the Network Channel Interface (NCI) code may be developed using the information set forth in 15.2.2 following and the guidelines concerning specific parameters available for each service type as set forth in the specified Technical Publication.

(A) Technical Specifications Packages Metallic Service

	<u>Package</u>			
SD Code	<u>MTC*</u>	<u>MT1</u>	<u>MT2</u>	<u>MT3</u>
NC Code	<u>MO</u>	<u>NT</u>	<u>NU</u>	<u>NV</u>

Parameter

DC Resistance				
Between Conductors	X	X	X	
Loop Resistance	X			X
Shunt Capacitance	X			X

Optional Features and Functions

Three Premises				
Bridging	X	X		X
Series Bridging	X		X	

The technical specifications are described in Technical Reference TR-NPL-000336.

* All parameters are available within ranges selected by the customer where technically feasible.

FILED

DEC - 1 1995

96 - 147

MISSOURI

Public Service Commission
Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd) DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.1 Network Channel (NC) Codes (Cont'd)

Public Service Commission

(B) Technical Specifications Packages Telegraph Grade Service

	Package		
	TGC*	TG1	TG2
SD Code			
NC Code	NO	NW	NY

Parameter

Telegraph Distortion X X X

Optional Features and Functions

Telegraph Bridging X X X

The technical specifications are described in Technical Reference TR-NPL-000336.

FILED

* All parameters are available within ranges selected by the customer where technically feasible.

DEC 1 1995
96 - 147

MISSOURI

Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.1 Network Channel (NC) Codes (Cont'd)

Public Service Commission

(C) Technical Specifications Packages Voice Grade Service

SD Code	C*	Package VG-														W
		1	2	3	4	5	6	7	8	9	10	11	12	SE		
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE		

Parameter

Attenuation														
Distortion	X	X	X	X	X	X	X	X	X	X	X	X	X	X
C-Message Noise	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Echo Control	X	X	X	X		X		X	X			X	X	X
Envelope Delay														
Distortion	X						X	X	X	X	X	X	X	X
Frequency Shift	X						X	X	X	X	X	X	X	X
Impulse Noise	X					X	X	X	X	X	X	X	X	X
Intermodulation														
Distortion	X						X	X	X	X	X			X
Loss Deviation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phase Hits, Gain														
Hits, and Dropouts	X													
Phase Jitter	X						X	X	X	X	X			X
Signal-to-C														
Message Noise						X								
Signal-to-C														
Notch Noise	X					X	X	X	X	X	X	X	X	X

The technical specifications for these parameters (except for dropouts, phase hits, and gain hits) are described in Technical References TR-NPL-000334 and TR-NPL-000335. The technical specifications for dropouts, phase hits, and gain hits are described in Technical Reference PUB 41004, Table 4.

* The desired parameters are selected by the customer from the list of available parameters.

FILED

DEC - 1 1995
96 - 147

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(C) Technical Specifications Packages Voice Grade Service
(Cont'd)

SD Code	Package VG-														W
	C*	1	2	3	4	5	6	7	8	9	10	11	12		
NC Code	LQ	LB	LC	LD	LE	LF	LG	LH	LJ	LK	LN	LP	LR	SE	

Optional Features and Functions

Central Office Bridging Capability	X		X			X	X				X	X	X	
Central Office Multiplexing	X						X							
Conditioning:														
. C-Type	X					X	X	X	X	X	X			
. Improved Attenuation Distortion	X					X	X	X	X	X	X			
. Improved Envelope Delay Distortion	X					X	X	X	X	X	X			
. Sealing Current	X						X							
. Data Capability	X						X	X					X	
. Telephoto Capability	X												X	
Customer Specified Premises Receive Level	X		X	X				X	X	X				
Improved Return Loss for Effective Four-Wire Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	X
For Effective Two-Wire Transmission	X		X	X				X						
Improved Two-Wire Voice														X
PPSN Interface Arrangement	X										X			
Selective Signaling Arrangement	X		X			X	X							
Signaling Capability	X	X	X	X				X	X	X				
Transfer Arrangement	X	X	X	X	X	X	X	X	X	X				
Improved Termination	X	X	X	X	X	X	X	X	X	X	X	X	X	X

FILED

DEC - 1 1996
96 - 147

MISSOURI

Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.1 Network Channel (NC) Codes (Cont'd)

(D) Technical Specifications Packages Program Audio Service

SD Code NC Code	Package				
	APC*	AP1	AP2	AP3	AP4
	PQ	PE	PF	PJ	PK
<u>Parameter</u>					
Actual Measured Loss	X	X	X	X	X
Amplitude Tracking	X				
Crosstalk	X	X	X	X	X
Distortion Tracking	X				
Gain/Frequency					
Distortion	X	X	X	X	X
Group Delay	X				
Noise	X	X	X	X	X
Phrase Tracking	X				
Short-Term Gain					
Stability	X				
Short-Term Loss	X				
Total Distortion	X	X	X	X	X
<u>Optional Features and Functions</u>					
Central Office Bridging					
Capability	X	X	X	X	X
Gain Conditioning	X	X	X	X	X
Stereo	X				X

The technical specifications are described in Technical Reference PUB 62503 and associated Addendum.

* The desired parameters are selected by the customer from the list of available parameters.

FILED

1996 - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Technical Specifications Packages Video Service

	SD Code NC Code	Package		
		TVC* TO	TV1 TV	TV2 TW
<u>Video Parameters</u>				
Insertion Gain		X	X	X
Field-Time Distortion		X	X	X
Line-Time Distortion		X	X	X
Short-Time Distortion		X	X	X
Chrominance-Luminance Gain Inequality		X	X	X
Chrominance-Luminance Delay Inequality		X	X	X
Amplitude/Frequency Characteristic		X	X	X
Luminance Non-Linear Distortion		X	X	X
Chrominance Non-Linear Gain Distortion		X	X	X
Chrominance Non-Linear Phase Distortion		X	X	X
Transient Synchronizing Signal Non-Linear		X	X	X
Dynamic Gain Distortion				
- Picture Signal		X	X	X
- Synchronizing Signal		X	X	X
Differential Gain		X	X	X
Differential Phase		X	X	X
Chrominance-Luminance Intermodulation		X	X	X

FILED

* The desired parameters are selected by the customer from the list of available parameters.

DEC 26 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.1 Network Channel (NC) Codes (Cont'd)

(E) Technical Specifications Packages Video Service
(Cont'd)

	SD Code NC Code	TVC* TO	Package	
			TV1 TV	TV2 TW
<u>Audio Channel Parameters</u>				
<u>Associated with Video Service</u>				
Insertion Gain		X	X	X
Amplitude/Frequency Characteristic		X	X	X
Total Harmonic Distortion & Noise		X	X	X
Maximum Steady-State Test Levels		X	X	X
Gain Differential Between Channels		X	X	
Phase Differential Between Channels		X	X	
Crosstalk		X	X	X
Audio-To-Video Time Differential		X	X	X

The technical specifications are described in Technical Reference TR-NPL-000338.

* The desired parameters are selected by the customer from the list of available parameters.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission
Effective January 11, 1998

Issued: December 26, 1995

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd) **DEC 26 1995**

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.1 Network Channel (NC) Codes (Cont'd)

(F) Technical Specifications Packages Digital Data Service

	Package					
	D1	D2	D3	D4	D5	D6
SD Code	D1	D2	D3	D4	D5	D6
NC Code	XA	XB	XG	XH	XE	YN

Parameter

Error-Free Seconds X X X X X X

Optional Features and Functions

Central Office

Bridging Capability X X X X X X

PPSN Interface Transfer

Arrangement X X X X X X

Transfer Arrangement

X X X X X X

The Telephone Company will provide a channel capable of meeting a monthly average performance equal to or greater than 99.875% error-free seconds (if provided through a Digital Data hub) while the channel is in service, if it is measured through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62310.

Voltages which are compatible with Digital Data Service are delineated in Technical Reference PUB 62507.

FILED

1996 - 1
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.1 Network Channel (NC) Codes (Cont'd)

(G) Technical Specifications Packages High Capacity Service

	Package					
	HC0	HC1	HC1C	HC2	HC3	HC4
SD Code	HS	HC	HD	HE	HF	HG
NC Code						
<u>Parameters</u>						
Error-Free Seconds			X			
<u>Optional Features and Functions</u>						
Automatic Loop Transfer					X	
<u>Central Office Multiplexing:</u>						
DS4 to DS1						X
DS3 to DS1					X	
DS2 to DS1				X		
DS1C to DS1			X			
DS1 to Voice				X		
DS1 to DS0				X		
DS0 to Subrate*	X					
Transfer Arrangement				X		
Clear Channel Capability						X

A channel with technical specifications package HC1 will be capable of an error-free second performance of 98.75% over a continuous 24 hour period as measured at the 1.544 Mbps rate through a CSU equivalent which is designed, manufactured, and maintained to conform with the specifications contained in Technical Reference PUB 62411.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes

Public Service Commission

The electrical interface with the Telephone Company for Special Access Services, is defined by an interface code. There are interface codes for both the customer designated premises and the point of termination. Three examples of NCI codes are found in 15.2 preceding.

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options

Parameter

<u>Code</u>	<u>Option</u>	<u>Definition</u>
AB	-	accepts 20 Hz ringing signal at customer's point of termination
AC	-	accepts 20 Hz ringing signal at customer's end user's point of termination
AH	-	analog high capacity interface
	B	60 kHz to 108 kHz (12 channels)
	C	312 kHz to 552 kHz (60 channels)
	D	564 kHz to 3084 kHz (600 channels)
CT	-	Centrex Tie Trunk Termination
CS	-	digital hierarchy interface at Digital Cross Connect System (DCS)
	15	1.544 Mbps (DS1) ANSI Extended Superframe (ESF) Format and B8ZS Clear Channel Capability
	15	1.544 Mbps (DS1) Superframe (SF) format
	15B	1.544 Mbps (DS1) Superframe (SF) format and B8ZS Clear Channel Capability
	15K	1.544 Mbps (DS1) Extended Superframe (ESF)
DA	-	data stream in VF frequency band at customer's end user's point of termination
DB	-	data stream in VF frequency band at customer's point of termination
	10	VF for TG1 and TG2
	43	VF for 43 Telegraph Carrier type signals, TG1 and TG2
DC	-	direct current or voltage
	1	monitoring interface with series RC combination (McCulloh format)
	2	Telephone Company energized alarm channel
	3	Metallic facilities (DC continuity) for direct current/low frequency control signals or slow speed data (30 baud)
DD	-	DATAPHONE Select-A-Station (and TABS) interface at customer's point of termination
DE	-	DATAPHONE Select-A-Station (and TABS) interface at the customer's end user's point of termination

FILED

96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

Public Service Commission

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
DS	-	digital hierarchy interface
-	15	1.544 Mbps (DS1) format per PUB 41451 plus D4
-	15E	8-bit PCM encoded in one 64 kbps of the DS1 signal
-	15F	8-bit PCM encoded in two 64 kbps of the DS1 signal
-	15G	8-bit PCM encoded in three 64 kbps of the DS1 signal
-	15H	14/11-bit PCM encoded in six 64 kbps of the S1 signal
-	15J	1.544 Mbps format per PUB 41451
-	15K	1.544 Mbps format per PUB 41451 plus extended framing format
-	15L	1.544 Mbps (DS1) with SF signaling
-	27	274.176 Mbps (DS4)
-	27L	274.176 Mbps (DS4) with SF signaling
-	31	3.152 Mbps (DS1C)
-	31L	3.152 Mbps (DS1C) with SF signaling
-	44	44.736 Mbps (DS3)
-	44L	44.736 Mbps (DS3) with SF signaling
-	63	6.312 Mbps (DS2)
-	63L	6.312 Mbps (DS2) with SF signaling

FILED

1996 - 1996
96 - 147

MISSOURI

Public Service Commission

Issued: December 26, 1995

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

JEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

Public Service Commission

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

- DU - digital access interface
- 19 19.2 kbps
- 24 2.4 kbps
- 48 4.8 kbps
- 56 56.0 kbps
- 96 9.6 kbps
- 64 64.0 kbps
- A 1.544 Mbps format per PUB 41451
- B 1.544 Mbps format per PUB 41451 plus D4
- C 1.544 Mbps format per PUB 41451 plus extended farming format
- 1KN 1.544 Mbps ANSI Extended Superframe (ESF) Format without line power
- 1SN 1.544 Mbps ANSI Extended Superframe (ESF) Format with B8ZS CCC and without line power
- AN 1.544 Mbps free-framing format w/o line power (only avail. to U.S. Govt. agencies)
- BN 1.544 Mbps Superframe (SF) Format w/o line power
- DN 1.544 Mbps Superframe (SF) Format with B8ZS Clear Channel Capabiltiy without line power
- DX - duplex signaling interface at customer's point of termination
- DY - duplex signaling interface at customer's end user's point of termination

FILED

DEC - 1 1995
96 - 147

MISSOURI

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

<u>Code</u>	<u>Option</u>	<u>Definition</u>
EA -	E	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EA -	M	Type I E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EB -	E	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on E Lead.
EB -	M	Type II E&M Lead Signaling. Customer at POT or customer's end user at POT originates on M Lead.
EC -		Type III E&M signaling at customer POT
EX -	A	tandem channel unit signaling for loop start or ground start and customer supplies open end (dial tone, etc.) functions.
EX -	B	tandem channel unit signaling for loop start or ground start and customer supplies closed end (dial pulsing, etc.) functions.
GO -		ground start loop signaling - open end function by customer or customer's end user
GS -		ground start loop signaling - closed end function by customer or customer's end user
IA -		E.I.A. (25 pin RS-232)
LA -		end user loop start loop signaling - Type A OPS registered port open end
LB -		end user loop start loop signaling - Type B OPS registered port open end
LC -		end user loop start loop signaling - Type C OPS registered port open end
LO -		loop start loop signaling - open end function by customer or customer's end user
LR -		20 Hz automatic ringdown interface at customer with Telephone Company provided PLAR
LS -		loop start loop signaling - closed end function by customer or customer's end user
NO -		no signaling interface, transmission only

FILED

96 - 147

MISSOURI

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 21 1995

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

MISSOURI
Public Service Commission

(A) Parameter Codes and Options (Cont'd)

Parameter (Cont'd)

Code	Option	Definition
PG	-	program transmission - no dc signaling
	1	nominal frequency from 50 to 15000 Hz
	3	nominal frequency from 200 to 3500 Hz
	5	nominal frequency from 100 to 5000 Hz
	8	nominal frequency from 50 to 8000 Hz
PR	-	protective relaying*
RV	0	reverse battery signaling, one way operation, originate by customer
	T	reverse battery signaling, one way operation, terminate uncton by customer or customer's end user
SF	-	single frequency signaling with VF band at either customer POT or customer's end user POT
TF	-	telephotograph interface
TT	-	telegraph/teletypewriter interface at either customer POT or customer's end user POT
	2	20.0 milliamperes
	3	3.0 milliamperes
	6	62.5 milliamperes
TV	-	television interface
	1	combined (diplexed) video and one audio signal
	2	combined (diplexed) video and two audio signals
	5	video plus one (or two) audio 5 kHz signal(s) or one (or two) two wire
	15	video plus one (or two) audio 15 kHz signal(s)

* Available only for the transmission of audio tone protective relaying signals used in the protection of electric power systems during fault conditions.

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

JEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(B) Impedance

The nominal reference impedance with which the channel will be terminated for the purpose of evaluating transmission performance:

<u>Value (ohms)</u>	<u>Code(s)</u>
110	0
150	1
600	2
900	3+
135	5
75	6
124	7
Variable	8
100	9

+ For those interface codes with a 4-wire transmission path at the customer designated POT, rather than a standard 900 ohm impedance the code (3) denotes a customer provided transmission equipment termination. Such terminations were provided to customers in accordance with the F.C.C. Docket NO. 30099 Settlement Agreement.

FILED
JEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

JFC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

Public Service Commission

(C) Compatible Network Channel Interfaces

The following tables show the Network Channel Interface codes (NCIs) which are compatible:

(1) Metallic

Compatible CIs

2DC8-1	2DC8-2
2DC8-3	2DC8-3
4DS8-	2DC8-1
4DS8-	2DC8-2

(2) Telegraph Grade

Compatible CIs

Compatible CIs

2DB2-10	10IA8	4DB2-10	10IA8
	2TT2-2		2TT2-2
	4TT2-2		4TT2-2
2DB2-43*	10IA8	4DB2-43*	10IA8
	2TT2-2		2TT2-6
	2TT2-6		4TT2-2
	4TT2-2		
2TT2-2	2TT2-2	4DS8-	10IA8
			2TT2-2
			2TT2-6
2TT2-3	2TT2-2		4TT2-2
	4TT2-2		4TT2-6
2TT2-6	2TT2-6	4TT2-2	4TT2-2
	4TT2-6	4TT2-6	2TT2-6

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

* Supplemental Channel Assignment information required.

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2AB2	2AC2	2DB2	2DA2	2LR2	2LR2
2AB3	2AC2	2DB3	2DA2	2LR3	2LR2
2CT3	2DY2	2DX3	2LA2	2LS	2GS
	4DS8		2LB2		2LS
	4DX2		2LC2		4GS
	4DX3		2LO3		4LS
	4DY2		2LS2		
	4EA2-E		2LS3	2LS2	2LA2
	4EA2-M				2LB2
	4SF2	2GO2	2GS2		2LC2
	4SF3		2GS3		
	6DX2			2LS3	2LA2
	6DY2	2GO3	2GS2		2LB2
	6DY3		2GS3		2LC2
	6EA2-E				
	6EA2-M	2GS	2GS	2NO2	2DA2
	6EB2-E		2LS		2NO2
	6EB2-M		4GS		
	6EB3-E		4LS	2NO3	2NO2
	8EB2-E				2PR2
	8EB2-M	2L02	2LS2		
	8EC2		2LS3	2TF3	2TF2
	9DY2				
	9DY3	2L03	2LS2		
	9EA2		2LS3		
	9EA3				

FILED

DEC 26 1995

MISSOURI

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd) **JEC 26 1995**

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd) **Public Service Commission**

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4AB2	2AC2 4AB2 4AC2 4SF2		
4AB3	2AC2 4AC2 4SF2		
4AC2	2AC2 4AC2		
	4DS8-	2AC2 2DA2 2DY2 2GO2	4DS8- 4DG2 4LR2 4LS2 4NO2
4DA2	4DA2	2G03 2GS2	4PR2 4RV2-T
4DB2	2DA2 2NO2 2PR2 4DA2 4DB2 4NO2 4PR2 6DA2	2GS3 2LA2 2LB2 2LC2 2LO2 2LO3 2LR2 2LS2 2LS3	4SF2 4SF3 4TF2 6DA2 6DY2 6DY3 6EA2-E 6EA2-M 6EB2-E
4DD3	2DE2 4DE2	2NO2 2PR2 2RV2-T 2TF2 4AC2 4DA2 4DE2 4DX2 4DX3 4DY2 4EA2-E 4EA2-M	6EB2-M 6GS2 6LS2 8EB2-E 8EB2-M 9DY2 9DY3 9EA2 9EA3

FILED

JAN 1 1996
96 - 149

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

Public Service Commission

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4DX2	2DY2	4DX2	8EB2-E	4DX3	6DY2
	2LA2		8EB2-M		6DY3
	2LB2		9DY2		6EA2-E
	2LC2		9DY3		6EA2-M
	2LO3		9EA2		6EB2-E
	2LS2		9EA3		6EB2-M
	2LS3				6LS2
	2RV2-T	4DX3	2DY2		8EB2-E
	4DX2		2LA2		8EB2-M
	4DY2		2LB2		9DY2
	4EA2-E		2LC2		9DY3
	4EA2-M		2LO3		9EA2
	4LS2		2LS2		9EA3
	4RV2-T		2LS3		
	4SF2		2RV2-T	4DY2	2DY2
	4SF3		4DX2		4DY2
	6DY2		4DX3		
	6DY3		4DY2		
	6EA2-E		4EA2-E		
	6EA2-M		4EA2-M		
	6EB2-E		4LS2		
	6EB2-M		4RV2-T		
	6LS2		4SF2		
			4SF3		

FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4EA2-E	2DY2	4EA3-E	2DY2	4GO2	2GO2
	4DY2		4DY2		2GO3
	4EA2-E		4EA2-E		2GS2
	4EA2-M		4EA2-M		2GS3
	4SF2		4SF2		4GS2
	6DY2		6DY2		4SF2
	6DY3		6DY3		6GS2
	6EB2-E		6EA2-E		
	6EB2-M		6EA2-M	4GO3	2GO2
	8EB2-E		6EB2-E		2GS2
	8EB2-M		6EB2-M		2GS3
	9DY2		8EB2-E		4GS2
	9DY3		8EB2-M		4SF2
			9DY2		6GS2
4EA2-M	2DY2		9DY3		
	4DY2		9EA2		
	4EA2-M		9EA3	4GS	2GS
	4SF2				2LS
	6DY2				4GS
	6DY3				4LS
	6EB2-E				
	6EB2-M				
	8EB2-E				
	8EB2-M				
	9DY2				
	9DY3				

FILED

JAN - 1 1996
96 - 127

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

MISSOURI
Public Service Commission

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4LO2	2LS2	4LS3	2LA2	4SF2	2LO3
	2LS3		2LB2		2LR2
	4LS2		2LC2		2LS2
	4SF2		2LO2		2LS3
	6LS2		2LO3		2RV2-T
			4SF2		4AC2
4LO3	2LS2				4DY2
	2LS3	4NO2	2DA2		4LS2
	4LS2		2DE2		4RV2-T
	4SF2		2NO2		4SF2
	6LS2		4DA2		6DY2
			4DE2		6DY3
4LR2	2LR2		4NO2		6GS2
	4LR2		6DA2		9DY2
	4SF2				9DY3
		4RV2-0	2RV2-T		
4LR3	2LR2		4RV2-T	4SF3	2DY2
	4LR2		4SF2		2GO3
	4SF2				2GS2
					2GS3
4LS	2GS	4SF2	2AC2		2LA2
	2LS		2DY2		2LB2
	4GS		2GS2		2LC2
	4LS		2GS3		2LO3
			2LA2		2LR2
4LS2	2LA2		2LB2		
	2LB2		2LC2		
	2LC2				
	2LO2				
	2LO3				

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
4SF3	2LS2	6DA	4DA2	6DY3	2DY2
	2LS3		6DA2		4DY2
	2RV2-T				6DY2
	4DY2	6DX2	2DY2		6DY3
	4EA2-E		4DY2		
	4EA2-M		4EA2-E	6EA2-E	2AC2
	4GS2				
	4LR2		4EA2-M		2DY2
	4LS2		4SF2		2LA2
	4RV2-T		6DY2		2LB2
	4SF2		6DY3		2LC2
	4SF3		6EA2-E		2LO3
	6DY2		6EA2-M		2LS2
	6DY3		6EB2-E		2LS3
	6EB2-E		6EB2-M		2RV2-T
	6EB2-M		8EB2-E		4AC2
	6GS2		8EB2-M		4DY2
	6LS2		9DY2		4EA2-E
	9DY2		9DY3		4EA2-M
	9DY3		9EA2		4LS2
	9EA2		9EA3		4RV2-T
	9EA3				4SF2
		6DY2	2DY2		4SF3
4TF2	2TF2		4DY2		6DY2
	4TF2		6DY2		6DY3
					6EA2-E
					6EA2-M

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

FILED

JAN 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd)

DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
6EA2-E	6EB2-E	6EA2-M	6DY2	6EB3-E	2DY2
	6EB2-M		6DY3		4DY2
	6LS2		6EA2-M		4EA2-E
	8EB2-E		6EB2-E		4EA2-M
	8EB2-M		6EB2-M		4SF2
	9DY2		6LS2		6DY2
	9DY3		8EB2-E		6DY3
			8EB2-M		6EA2-E
6EA2-M	2AC2		9DY2		6EA2-M
	2DY2		9DY3		8EB2-E
	2LA2				8EB2-M
	2LB2	6EB2-E	2DY2		9DY2
	2LC2		4DY2		9DY3
	2LO3		4SF2		9EA2
	2LS2		6DY2		6EA3
	2LS3		6DY3		
	2RV2-T		6EB2-E	6EX2-A	2GS2
	4AC2		6EB2-M		2GS3
	4DY2		9DY2		2LS2
	4EA2-E		9DY3		2LS3
	4EA2-M				4GS2
	4LS2	6EB2-M	2DY2		4LS2
	4RV2-T		4DY2		4SF2
	4SF2		4SF2		6GS2
	4SF3		6DY2		6LS2
			6DY3		
			6EB2-M		
			9DY2		
			9DY3		

FILED

DEC 27 - 1 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
6EX2-B	2GO3	8EB2-E	2AC2	8EB2-M	2AC2
	2LA2		2DY2		2DY2
	2LB2		2LA2		2LA2
	2LC2		2LB2		2LB2
	2LO2		2LC2		2LC2
	2LO3		2LO3		2LO3
	2LR2		2LS2		2LS2
	4LR2		2LS3		2LS3
	4SF2		2RV2-T		2RV2-T
			4AC2		4AC2
			4DY2		4DY2
6GO2	2GO2	4LS2	4LS2	4RV2-T	4RV2-T
	2GS2		4SF2		4SF2
	2GS3		4SF3		4SF3
	4GS2		6DY2		6DY2
	4SF2		6DY3		6DY3
	6GS2		6EB2-E		6EB2-E
			6EB2-M		6EB2-M
6LO2	2LS2	6LS2	6LS2	8EB2-M	8EB2-M
	2LS3		8EB2-M		9DY2
	4LS2		9DY2		9DY3
	4SF2		9DY3		
	6LS2				
6LS2	2LA2				
	2LB2				
	2LC2				
	2LO2				
	2LO3				
	4SF2				

FILED

96 - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

MISSOURI
Public Service Commission

(C) Compatible Network Channel Interfaces (Cont'd)

(3) Voice Grade (Cont'd)

<u>Compatible CIs</u>		<u>Compatible CIs</u>		<u>Compatible CIs</u>	
8EC2	2DY2	9DY2	2DY2	9EA3	2DY2
	4DY2		4DY2		4DY2
	4EA2-E		6DY2		4EA2-E
	4EA2-M		6DY3		4EA2-M
	4SF2		9DY2		6DY2
	6DY2				6DY3
	6DY3	9DY3	2DY2		6EA2-E
	6EA2-E		4DY2		6EA2-M
	6EA2-M		6DY2		6EB2-E
	6EB2-E		6DY3		6EB2-M
	6EB2-M		9DY2		8EB2-E
	8EB2-E		9DY3		8EB2-M
	8EB2-M				9DY2
	9DY2	9EA2	2DY2		9DY3
	9DY3		4DY2		9EA3
	9EA2		4EA2-E		
	9EA3		4EA2-M		
			6DY2		
			6DY3		
			6EA2-E		
			6EA2-M		
			6EB2-E		
			6EB2-M		
			8EB2-E		
			8EB2-M		
			9DY2		
			9DY3		
			9EA2		
			9EA3		

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

15. Access Service Interfaces and Transmission Specifications (Cont'd) DEC 26 1995

15.2 Special Access Service (Cont'd)

MISSOURI

15.2.2 Network Channel Interface (NCI) Codes (Cont'd) Public Service Commission

(C) Compatible Network Channel Interfaces (Cont'd)

(4) Program Audio

<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2PG2-1	2PG1-1 2PG2-1	4DS8-15E	2PG1-3 2PG2-3
2PG2-3	2PG1-3 2PG2-3	4DS8-15F	2PG1-5 2PG2-5
2PG2-5	2PG1-5 2PG2-5	4DS8-15G	2PG1-8 2PG2-8
2PG2-8	2PG1-8 2PG2-8	4DA8-15H	2PG1-1 2PG2-1

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

MISSOURI
Public Service Commission

(C) Compatible Network Channel Interfaces (Cont'd)

(5) Video

<u>Compatible CIs</u>		<u>Compatible CIs</u>	
2TV6-1	4TV6-15 4TV7-15	4TV7-5	4TV6-5 4TV7-5
2TV6-2	6TV6-15 6TV7-15	4TV7-15	4TV6-15 4TV7-15
2TV7-1	4TV6-15 4TV7-15	6TV6-5	6TV6-5 6TV7-5
2TV7-2	6TV6-15 6TV7-15	6TV6-15	6TV6-15 6TV7-15
4TV6-5	4TV6-5 4TV7-5	6TV7-5	6TV6-5 6TV7-5
4TV6-15	4TV6-15 4TV7-15	6TV7-15	6TV6-15 6TV7-15

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

ACCESS SERVICE

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(6) Digital Data

<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>	<u>Compatible CIs</u>
4DS8-15	4DS8-15+	4DU5-19	4DU5-19	6DU5-19	6DU5-19
	4DU5-19	4DU5-24	4DU5-24	6DU5-24	6DU5-24
	4DU5-24				
	4DU5-48				
	4DU5-56	4DU5-48	4DU5-48	6DU5-48	6DU5-48
	4DU5-96				
	6DU5-24	4DU5-96	4DU5-96	6DU5-56	6DU5-56
	6DU5-48				
	6DU5-96	4DU8-56	4DU5-56	6DU5-96	6DU5-96

FILED

MAR - 1 1996
96 - 147

MISSOURI
Public Service Commission

+ Available only as a cross connect of two digital channels at appropriate digital speeds at a Telephone Company hub.

ACCESS SERVICE

RECEIVED

DEC 28 1995

15. Access Service Interfaces and Transmission Specifications (Cont'd)

15.2 Special Access Service (Cont'd)

MISSOURI
Public Service Commission

15.2.2 Network Channel Interface (NCI) Codes (Cont'd)

(C) Compatible Network Channel Interfaces (Cont'd)

(7) High Capacity

Compatible CIs

Compatible CIs

4DS0-63	4DS0-63 4DU8-A,B or C 6DU8-A,B or C	4DS8-15J	4DU8-A 6DU8-A
4DS6-27	4DS6-27 4DU8-A,B or C 6DU8-A,B or C	4DS8-15K	4DU8-B 4DU8-C 6DU8-B 6DU8-C
4DS6-44	4DS6-44 4DU8-A,B or C 6DU8-A,B or C	4DS8-31	4DS8-31 4DU8-A,B or C 6DU8-A,B or C
4DS8-15	4DS8-15+ 4DU8-B 6DU8-8	4DU8-A,B or C	4DU8-A,B or C

FILED

DEC 1 1996
96 - 147

MISSOURI
Public Service Commission

+ Available only as a cross connect of two individual channels of 1.544 Mbps facilities at a Telephone Company hub.

ALLTEL MISSOURI, INC.

MO. P.S.C. NO. 3

INTRASTATE ACCESS TARIFF
Original Page 407

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

16. Reserved for Future Use

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

One Allied Drive
Little Rock, Arkansas 72203

ACCESS SERVICE

17. Rates and Charges17.1 Common Line Access Service17.1.1 Carrier Common Line Access Service

Regulations concerning Carrier Common Line Access are set forth in Section 3 preceding.

	<u>Originating Rate</u>	<u>Terminating Rate</u>
(A) Interlata		
- Applied Per Access Minute		\$0.000000
Non-8YY Traffic	\$0.039916	
8YY Traffic	\$0.000000 (R)	
(B) Intralata		
- Applied Per Access Minute		\$0.000000
Non-8YY Traffic	\$0.016521	
8YY Traffic	\$0.000000 (R)	

ACCESS SERVICE

- 17. Rates and Charges (Cont'd)
- 17.1 Common Line Access Service (Cont'd)
- 17.1.2 Reserved for Future Use

RECEIVED
DEC 26 1995
MISSOURI
Public Service Commission

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

One Allied Drive
Little Rock, Arkansas 72203

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service

17.2.1 Nonrecurring Charges

(A) Local Transport

Regulations concerning Local Transport are set forth in 6.4.1(B)(1) preceding.

Nonrecurring
Charge

- Installation Per Line or Trunk Connected \$112.00 (R)

(B) Interim NXX Installation

Regulations concerning Local Transport are set forth in 6.4.1(B)(2) preceding.

Charge

- Per Order N/A

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.2 Local Transport

(A) Local Transport

Regulations concerning Local Transport are set forth in 6.1.3(A) preceding.

	<u>Rate</u>	
(1) Per minute	\$0.000000	(R)

(B) Network Blocking Per Blocked Call

Regulations concerning Network Blocking are set forth in 6.8.6 preceding. Network Blocking applies to FGD only.

Monthly Charge	N/A
----------------	-----

(C) Carrier Identification Parameter (CIP)

<u>Per Trunk</u>	<u>Rate</u>
- Voice Grade	\$2.94
- DS1	\$70.56
- DS3	\$1,975.68

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.2 Local Transport (Con't)

(C) FGC and FGD SS7\MF Signaling Trunk Group Conversion Charge

Regulations concerning SS7\MF Signaling Trunk Group Conversion are set forth in 6.4.1(B)(4) preceding. Charges are applied per 24 trunks converted or fraction thereof.

Rate

N/A

(D) 800/888/877 Data Base Access Service Queries

Regulations concerning 800/888/877 Data Base Access Service are set forth in 6.10.2 preceding. 800/888/877 Data Base Query charges apply on a per completed query basis.

	<u>Basic Query</u>	<u>Enhanced Query</u>
	\$0.003713	\$0.00000 (R)
Effective July 1, 2022	\$0.0019565 (R)	
Effective July 1, 2023	\$0.0002000 (R)	

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.2 Local Transport (Con't)

(E) Entrance Facility Per Termination

	Monthly Charge	Nonrecurring Charge
Voice Grade 2 Wire	\$ 13.96	\$215.00
Voice Grade 4 Wire	22.34	215.00
DS1	110.97	303.00
DS3	1149.55	333.00

(F) Direct Trunk Transport

	Facility Per Mile	Termination Per Termination
Voice Grade	\$ 0.63	\$ 8.28
DS1	9.38	11.36
DS3	84.99	908.66

(G) Multiplexing Per Arrangement

	Monthly Charge
DS1 - Voice	\$149.70
DS3 - DS1	302.10

(H) Tandem Switched Transport

	Originating		Terminating	
	Non-8YY	8YY		
Tandem Switched Facility	\$0.0073192	*	*	(C)
Tandem Switched Termination per Minute	\$0.0001980	*	*	
Tandem Switching per Minute	\$0.0092560	*	*	
Tandem Switched Multiplexing per Minute, per Multiplexer	\$0.0000500	*	*	(C)

(I) Tandem Direct Trunk Port

	Monthly Charge
Voice Grade	\$14.62
DS1	5.12

*Rates are billed as set forth in the Windstream Telephone System's FCC Tariff No. 6 found at: <https://apps.fcc.gov/etfs/public/lecTariffs.action?idLec=154>

ACCESS SERVICE

- 17. Rates and Charges (Cont'd)
- 17.2 Switched Access Service (Cont'd)
- 17.2.3 End Office

(A) Local Switching

Regulations concerning Local Switching are contained in 6.1.3(B)(1) preceding.

(1) <u>Rates</u>	Rate per Access Minute			
	<u>Originating</u>	<u>Terminating</u>		
	Non-8YY	8YY		(C)
(a) LS1 - Originating and Terminating access minutes for Feature Groups A & B except:	\$0.026651	*	*	(C)
Feature Group B utilized for the provision of MTS/WATS service. Feature Groups A and B when utilized for the provision of terminating inward WATS and WATS-type services at an equal access WATS Serving Office.				
(b) LS2 - Originating and Terminating Access minutes for Feature Groups C & D including:	\$0.026651	*	*	(C)
Feature Group B utilized for the provision of MTS/WATS service. Feature Groups A and B when utilized for the provision of terminating inward WATS and WATS-type services at an equal access WATS Serving Office.				

*Rates are billed as set forth in the Windstream Telephone System's FCC Tariff No. 6 found at: <https://apps.fcc.gov/etfs/public/lecTariffs.action?idLec=154>

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.3 End Office

(B) <u>End Office Common Trunk Port</u>	<u>Rate</u>	
Per Terminating Access Minute	*	(C)
(C) <u>Directory Assistance Information Surcharge</u>		
Regulations concerning Information Surcharge are contained in 6.1.3(B) (3) preceding.	<u>Rate per 100 Access Minutes</u>	
The Information Surcharge is applied per 100 Access Minutes.	\$0.0000	
(E) <u>End Office Direct Trunk Port</u>		
	<u>Monthly Charge</u>	
Voice Grade	*	(C)
DS1	*	(C)

*Rates are billed as set forth in the Windstream Telephone System's FCC Tariff No. 6 found at: <https://apps.fcc.gov/etfs/public/lecTariffs.action?idLec=154> (C)

Issued: June 26, 2017

Effective: July 1, 2017

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.2 Switched Access Service (Cont'd)

17.2.4 Assumed Minutes of Use

Assumed minutes of use are applicable to all issuing carriers referencing Section 6 of this tariff.

	<u>Assumed Minutes Per Month</u>	<u>Tariff Section Reference</u>
(A) Feature Group A, Two Way Calling	N/A	6.5.4
(B) Feature Group A, Originating Only	N/A	6.5.4
(C) Feature Group A, Terminating Only	N/A	6.5.4
(D) Feature Group B, Two Way Calling	N/A	6.6.4
(E) Feature Group B, Originating Only	N/A	6.6.4
(F) Feature Group B, Terminating Only	N/A	6.6.4

17.2.5 Toll VoIP-PSTN Traffic

	<u>Rate</u>	
(A) <u>Tandem Switched Facility</u> - per access minute per mile	*	(C)
(B) <u>Tandem Switched Termination</u> - per access minute per Termination	*	(C)
(C) <u>Tandem Switching</u> - per access minute per Tandem	*	(C)
(D) <u>Tandem Switched Multiplexing</u> - per access minute per Multiplexer	*	(C)
(E) <u>Local Switching</u> - per access minute	*	(C)
(F) <u>End Office Common Trunk Port</u> - per access minute	*	(C)

17.3 Special Access Service

17.3.1 Surcharge for Special Access Service

The Special Access Surcharge is applicable to all issuing carriers referencing Section 7 of this tariff.

	<u>Monthly Rate</u>	<u>Tariff Section Reference</u>
- Per Voice Grade Equivalent	\$25.00	7.3

*Rates are billed as set forth in the Windstream Telephone System's FCC Tariff No. 6 found at: <https://apps.fcc.gov/etfs/public/lecTariffs.action?idLec=154> (C)
 (C)

ACCESS SERVICE

RECEIVED

- 17. Rates and Charges (Cont'd)
- 17.3 Special Access Service (Cont'd)
- 17.3.2 Metallic Service

JUN 10 1996

MISSOURI
Public Service Commission

Regulations concerning Metallic Service are set forth in 7.4 preceding.

(A) Channel Termination Per Termination

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(1) Two-Wire	\$15.99	\$80.02
	<u>Facility Per Mile</u>	<u>Termination Per Termination</u>
(B) <u>Channel Mileage</u>	\$1.70	\$31.54

17.3.3 Telegraph Grade Service

Regulations concerning Telegraph Grade Service are set forth in 7.5 preceding.

(A) Channel Termination Per Termination

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(1) Two-Wire	N/A	N/A
(2) Four-Wire	N/A	N/A
	<u>Facility Per Mile</u>	<u>Termination Per Termination</u>
(B) <u>Channel Mileage</u>	N/A	N/A

(C) Optional Features and Functions

	<u>Monthly Rate</u>
(1) Telegraph Bridging Per Port	N/A
- Two Wire/Four Wire	N/A

FILED

JUL 11 1996

Issued: June 11, 1996

Effective: MO. PUBLIC SERVICE COMM.

ACCESS SERVICE

RECEIVED

- 17. Rates and Charges (Cont'd)
- 17.3 Special Access Service (Cont'd)
- 17.3.4 Voice Grade Service (Cont'd)

JUN 10 1996

MISSOURI
Public Service Commission

Regulations concerning Voice Grade Service are set forth in 7.6 preceding.

(A) Channel Termination Per Termination

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(1) Two-Wire	\$23.40	\$82.40
(2) Four-Wire	\$37.45	\$82.40

(B) Channel Mileage

<u>Facility Per Mile</u>	<u>Termination Per Termination</u>
\$1.70	\$31.54

(C) Optional Features and Functions

	<u>Monthly Rate</u>
(1) Bridging Per Port	
- Two-Wire/Four-Wire	\$4.03
(2) Conditioning Per Termination	
- C-Type	\$6.01
(3) Conditioning Per Termination	
- D-Type (Data Capability)	\$1.34
(4) Conditioning Per Termination	
- Telephoto Capability	N/A
(5) Improved Return Loss for Effective Two-Wire or Four-Wire Transmission.	
Rate applied per Channel Termination.	\$1.78
(6) Customer Specified Receive Level per Two-Wire Termination.	N/A
(7) Multiplexing per Arrangement Voice to Telegraph grade per Channel Termination.	N/A

FILED

JUL 11 1996

Issued: June 11, 1996

Effective: **MO. PUBLIC SERVICE COMM.**

ACCESS SERVICE

RECEIVED

JUN 10 1996

**MISSOURI
Public Service Commission**

17. Rates and Charges (Cont'd)

17.3 Special Access Service (Cont'd)

17.3.4 Voice Grade Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

	<u>Monthly Rate</u>
(8) Signaling Capability per Termination	\$13.87
(9) Selective Signaling Arrangement per Arrangement.	\$14.83
(10) Transfer Arrangement per four port Arrangement.	N/A
(11) Public Packet Switching Network (PPSN) Interface Arrangement. Rate applied per Arrangement.	N/A
(12) Improved Termination Option for Termination.	N/A

17.3.5 Program Audio Service

Regulations concerning Program Audio Service are set forth in 7.7 preceding.

(A) Channel Termination Per Termination

(1) 50 to 15,000 Hz	<u>Monthly Rate</u>	<u>Daily Rate</u>	<u>Nonrecurring Charge</u>
	\$44.82	\$4.48	\$189.00

(B) Channel Mileage

(1) 50 to 15,000	<u>Facility Per Mile</u>		<u>Termination Per Termination</u>	
	<u>Monthly Rate</u>	<u>Daily Rate</u>	<u>Monthly Rate</u>	<u>Daily Rate</u>
	\$13.84	\$1.38	\$125.80	\$12.51

FILED

JUL 11 1996

MO. PUBLIC SERVICE COMM

Issued: June 11, 1996

Effective: July 11, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges (Cont'd)

17.3 Special Access Service (Cont'd)

17.3.5 Program Audio Service (Cont'd)

(C) Optional Features and Functions

	<u>Monthly Rate</u>	<u>Daily Rate</u>
(1) Bridging, Distribution Amplifier - Per Port	N/A	N/A
(2) Gain Conditioning. Rate applied per Channel Termination.	\$11.23	\$1.12
(3) Stereo per Service.	\$18.24	\$1.82

17.3.6 Video Service

Regulations concerning Video Service are set forth in 7.8 preceding.

Video Service rates and charges for issuing carriers referencing ALLTEL MISSOURI, INC. INTRASTATE ACCESS TARIFF for Special Access Service will be determined on an individual case basis and filed in Section 17.3.9 following.

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

- 17. Rates and Charges (Cont'd)
- 17.3 Special Access Service (Cont'd)
- 17.3.7 Digital Data Service

Regulations concerning Digital Data Service are set forth in 7.9 preceding.

(A) Channel Termination Per Termination

<u>Monthly</u>	<u>Nonrecurring</u>
<u>Rate</u>	<u>Charge</u>

(1) 56 Kbps	\$171.35	\$355.00
-------------	----------	----------

(B) Channel Mileage

<u>Facility</u>	<u>Termination</u>
<u>Per Mile</u>	<u>Per Termination</u>

(1) 56 Kbps	\$3.60	\$80.33
-------------	--------	---------

(C) Optional Features and Functions

<u>Monthly</u>
<u>Rate</u>

(1) Bridging per port	N/A
-----------------------	-----

(2) Loop Transfer Arrangement Per four port arrangement Key activated or Dial-Up	N/A
--	-----

(D) Channel Service Unit

- Per Termination	2.4	4.8, 9.6, 19.2	56.0
	<u>Kbps</u>	<u>Kbps</u>	<u>Kbps</u>

Reserved for Future Use

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

- 17. Rates and Charges (Cont'd)
- 17.3 Special Access Service (Cont'd)
- 17.3.8 High Capacity Service

Regulations concerning High Capacity Service are set forth in 7.10 preceding.

(A) Channel Termination Per Termination

	<u>Monthly Rate</u>	<u>Nonrecurring Charge</u>
(1) 1.544 Mbps	\$225.00	\$685.00

(B) Channel Mileage

	<u>Facility Per Mile</u>	<u>Termination Per Termination</u>
(1) 1.544 Kbps	\$60.00	\$40.00

(C) Optional Features and Functions

	<u>Monthly Rate</u>
(1) Multiplexing, per arrangement	
(a) DS4 to DS1	N/A
(b) DS3 to DS1	N/A
(c) DS1 to Voice	N/A
(d) DS1 to DS0	N/A
(e) DS0 to Subrates	
	Up to 20 Up to 10 Up to 5 Up to 2
	2.4 4.8 9.6 19.2
	<u>Kbps</u> <u>Kbps</u> <u>Kbps</u> <u>Kbps</u>

Reserved For Future Use

FILED

DEC 1 1995
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.3 Special Access Service (Cont'd)

17.3.8 High Capacity Service (Cont'd)

(C) Optional Features and Functions (Cont'd)

Monthly
Rate

(2) Automatic Loop Transfer
Per arrangement

N/A

(3) Transfer Arrangement
(key activated or dial up)
- Per four port arrangement including
control channel termination

N/A

(D) Network Channel Terminating Equipment
(NCTE) Per Termination

Monthly Rate

	Automatic
1.544	Loop
<u>Mbps</u>	<u>Transfer</u>

N/A

N/A

FILED

1996 - 1 47

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

- 17. Rates and Charges (Cont'd)
- 17.3 Special Access Service (Cont'd)
- 17.3.9 Individual Case Filings

Rate and charges for Special Access Service provided on an individual case basis are filed following:

Reserved for Future Use

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges (Cont'd)

17.3 Special Access Service (Cont'd)

17.3.10 Service Discount Plans

a) High Capacity 1.544 Mbps (DS1)

Plan Length

36 Months

60 Months

Discount %

N/A

N/A

b) High Capacity 44.736 Mbps (DS3)

Plan Length

36 Months

60 Months

Discount %

N/A

N/A

FILED

180 - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges (Cont'd)

17.4 Billing and Collection Service

Regulations concerning Billing and Collection Service are set for in Section 8.2.1 preceding.

	<u>Rates</u>	<u>Tariff Section Reference</u>
(A) Recording , per customer message	\$0.0483	8.1.1(A)
(B) Provision of Message Detail, per message	ICB	8.1.1(C)
(C) Magnetic Tape, per tape	\$17.48	8.1.1(C) and 8.2.1(E)
(D) Rating Service, per message	\$0.0134	8.2.1(A)
(E) Bill Processing Svc., per message	\$0.0459	8.2.1(B)
(F) Special Billing Service, per bill	\$0.82	8.2.1.(C)
(G) Data Transmission, per message	\$0.0084	8.2.1(D)
(H) Provision of Sample Message Data, per record processed	\$0.0163	8.2.1(E)
(I) Program Development Basic per hour Premium per hour	\$57.74 \$80.07	8.2.1(F) 8.2.1(F)
(J) Message Billed Service, in which one or more messages or message service related rate elements are billed, per bill rendered to a customer end user account per month	\$0.82	8.2.1(G)

8.2.1(G)
FILED

DEC - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges

17.5 Other Services

17.5.1 Access Ordering

(A) Access Order Charge

- Per Order

Charge
N/A

Tariff
Section
Reference
N/A

(B) Service Date Change Charge

A Service Date Change Charge will apply, on a per order per occurrence basis, for each service date changed. The Access Order Charge as specified in 17.5.1(A) predecing does not apply. The applicable charge is:

N/A

N/A

(C) Design Change Charge

The Design Change Charge will apply on a per order per occurrence basis, for each order requiring design change. Tariff:

Charge
N/A

Section
Reference
N/A

(D) Miscellaneous Service Order Charge

- Per Occurrence

N/A

N/A

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges (Cont'd)

17.5 Other Services (Cont'd)

17.5.2 Additional Engineering, Additional Labor and Miscellaneous Services

Regulations regarding Additional Engineering, Labor and Miscellaneous Services are set forth in 13 preceding.

(A) Additional Engineering

Regulations regarding Additional Engineering are set forth in 13.1 preceding.

	Basic Time	Over Time
- Each Half Hour or Fraction Thereof	\$17.32	\$20.55

(B) Additional Labor

Regulations regarding Additional Labor are set forth in 13.2 preceding.

	Basic Time	Over Time
- Each Half Hour or Fraction Thereof	\$14.15	\$19.05

(C) Programming Services

Regulations regarding Additional Programming are set forth in 13.3 preceding.

	Basic Time	Over Time
- Each Half Hour or Fraction Thereof	\$28.87	\$40.04

FILED

JAN - 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996

ACCESS SERVICE

RECEIVED

DEC 26 1995

MISSOURI
Public Service Commission

17. Rates and Charges (Cont'd)

17.5 Other Services (Cont'd)

17.5.2 Additional Engineering, Additional Labor and Miscellaneous Services (Con't)

(D) Testing and Maintenance of Service

Regulations concerning Testing and Maintenance of Service are set forth in 13.4.1 and 13.4.2 preceding.

<u>Basic</u>	<u>Over</u>
<u>Time</u>	<u>Time</u>
\$14.15	\$19.05

(E) Telecommunications Service Priority

Regulations concerning Telecommunications Service Priority are set forth in 13.4.3 preceding.

Nonrecurring
Charge

Per service arranged N/A

(F) Miscellaneous Equipment

Regulations concerning Controller Arrangements are set forth in 13.4.4 preceding.

(1) Controller Arrangement

Monthly
Rate

Per arrangement N/A

FILED

JAN - 1 1996
96 - 147

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.5 Other Services (Cont'd)

17.5.2 Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

(G) InterLATA Presubscription

(T)

Regulations concerning InterLATA Presubscription are set forth in 13.5 preceding. Charge is applied per Telephone Exchange Service Line or Trunk.

(T)

Nonrecurring
Charge

Charges will be billed based on the Company's interstate tariff and assigned to the interstate jurisdiction.

(C)

(C)

(H) Unauthorized PIC Changes

Regulations concerning unauthorized PIC changes are set forth in 13.7 preceding. Charge is applied per Telephone Exchange Service Line or Trunk.

Nonrecurring
Charge

\$30.00

(N)

(I) Billing Name and Address Service

Regulations concerning Billing Name and Address Service are set forth in 13.9 preceding.

NRC

Record
Charge

N/A

N/A

BNA Electronic
Format Charges

Magnetic
Tape

Computer
Diskette

N/A

N/A

Missouri Public
Service Commission

FEB 22 1999

ACCESS SERVICE

17. Rates and Charges (Cont'd)

17.5 Other Services (Cont'd)

17.5.2 Additional Engineering, Additional Labor and Miscellaneous Services (Cont'd)

(J) Access Services Billing

Regulations concerning Access Services Billing are set forth in 13.10 preceding.

(1) Secondary Bill

	<u>Monthly Rate</u>
Standard Paper(per page)	\$0.03
Magnetic Tape(per tape)	\$39.50
Data Transmission(per transmission)	\$20.25

(2) Additional Copies

	<u>Non Recurring Charge</u>
Standard Paper(per page)	\$0.06
Magnetic Tape(per tape)	\$48.00
Data Transmission(per transmission)	\$28.00

(K) Reserved For Future Use

(D)

(D)

(L) IntraLATA Presubscription

Regulations concerning IntraLATA Presubscription are set forth in 13.11 preceding. Charge is applied per Telephone Exchange Service Line or Trunk.

<u>Non Recurring Charge</u>
\$5.00

ACCESS SERVICE

RECEIVED

DEC 26 1995

Mo PSC

- 17. Rates and Charges (Cont'd)
- 17.5 Other Services (Cont'd)
- 17.5.3 Special Federal Government Access Services
- (A) Voice Grade Special Access Service

<u>Voice Grade Secure Communications</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>Termination Charges</u>
Type I, each T-3 Conditioning,			ICB rates and charges apply
Additional Conditioning, per service termination			ICB rates and charges apply
Type II, each G-1 Conditioning,			ICB rates and charges apply
Type III, each G-2 Conditioning,			ICB rates and charges apply
Additional Conditioning, per service termination			ICB rates and charges apply
Type IV, each G-3 Conditioning,			ICB rates and charges apply
Additional Conditioning, per service termination			ICB rates and charges apply

(B) Wideband Digital Special Access Service

<u>Wideband Secure Communications</u>	<u>Monthly Rates</u>	<u>Nonrecurring Charges</u>	<u>Termination Charges</u>
Type I, each			ICB rates and charges apply
Type II, each			ICB rates and charges apply
Type III, each			ICB rates and charges apply

FILED

JAN 1 1996
96 - 147

MISSOURI

Issued: December 26, 1995

Effective Public Service Commission

ACCESS SERVICE

RECEIVED

- 17. Rates and Charges (Cont'd)
- 17.5 Other Services (Cont'd)
- 17.5.4 Special Facilities Routing of Access Services

DEC 26 1996

MO. PUBLIC SERVICE COMM.

(A) Diversity

For each service provided in accordance with 11.1.1 preceding, the rates and charges will be developed on an individual case basis.

Reserved for Future Use

(B) Avoidance

For each service provided in accordance with 11.1.2 preceding, the rates and charges will be developed on an individual case basis.

Reserved for Future Use

(C) Diversity and Avoidance Combined

For each service provided in accordance with 11.1.3 preceding, the rates and charges will be developed on an individual case basis.

Reserved for Future Use

(D) Cable-Only Facilities

For each service provided in accordance with 11.1.4 preceding, the rates and charges will be developed on an individual case basis.

Reserved for Future Use

FILED

JAN - 1 1996
96 - 147

MISSOURI

ACCESS SERVICE

RECEIVED

17. Rates and Charges (Cont'd)

17.5 Other Services (Cont'd)

DEC 26 1996

17.5.5 Specialized Service or Arrangements

MO. PUBLIC SERVICE COMM.

Specialized Service or Arrangements are provided in accordance with 12.1 preceding on an individual case basis as set forth following:

FILED

JAN 1 1996
96 - 147

MISSOURI
Public Service Commission

Issued: December 26, 1995

Effective: January 1, 1996