2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u>
 - 2.1.1 <u>Scope</u>
 - (A) Services provided to an IC under the provisions of this tariff may be connected to facilities used by the IC for the purpose of extending such facilities of the IC between certain locations and thereby constitute a portion of an end-to-end Intrastate telecommunications service furnished by the IC for its own use or for the use of End Users.
 - (B) The Telephone Company does not undertake to transmit messages under this tariff.
 - (C) The Telephone Company shall be responsible only for the installation, operation and maintenance of its services. The responsibility of the Telephone Company shall be limited to the provision of services under this tariff and to the maintenance and operation of such services in a proper manner.
 - (D) The Telephone Company will, for maintenance purposes, test its services only to the extent necessary to detect and/or clear troubles and will not perform a complete technical parameter verification when not deemed necessary by the Telephone Company.
 - (E) Services are provided 24 hours daily, seven days per week, except as set forth in other applicable sections of this tariff.

2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)
 - 2.1.2 Limitations
 - (A) The IC may not assign or transfer the use of services provided under this tariff; however, where there is no interruption of use or relocation of the services, such assignment or transfer may be made to:
 - (1) another IC, whether an individual, partnership, association or corporation, provided the assignee or transferee assumes all outstanding indebtedness for such services, and the unexpired portion of the minimum period and the termination liability applicable to such services, if any; or
 - (2) a court-appointed receiver, trustee or other person acting pursuant to law in bankruptcy, receivership, reorganization, insolvency, liquidation or other similar proceedings, provided the assignee or transferee assumes the unexpired portion of the minimum period and the termination liability applicable to such services, if any.

In all cases of assignment or transfer, the written acknowledgment of the Telephone Company is required prior to such assignment or transfer which acknowledgment shall be made within 15 days from the receipt of notification. All regulations and conditions contained in this tariff shall apply to such assignee or transferee.

The assignment or transfer of services does not relieve or discharge the assignor or transferor from remaining jointly or severally liable with the assignee or transferee for any obligations existing at the time of the assignment or transfer.

(B) The use and restoration of services shall be in accordance with Part 64, Subpart D, Appendix A, of the Federal Communications Commission's Rules and Regulations, which specifies the priority system for such activities.

2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)
 - 2.1.2 <u>Limitations</u> (Cont'd)
 - (C) Subject to compliance with the rules mentioned in (B) preceding, where a shortage of facilities or equipment exists at any time, either for temporary or protracted periods, the services offered herein will be provided to ICs on a first-come, first-served basis.

2.1.3 Liability

- (A) The Telephone Company's liability, if any, for its willful misconduct is not limited by this tariff. With respect to any other claim or suit, by an IC, End User or by any others, for damages associated with the installation, provision, termination, maintenance, repair or restoration of service, and subject to the provisions of (B) through (H) following, the Telephone Company's liability except as set forth in 8.1.3 following, if any, shall not exceed an amount equal to the proportionate charge for the service for the period during which the service was affected. This liability for damages shall be in addition to any amounts that may otherwise be due the IC or End User under this tariff as a Credit Allowance for a Service Interruption.
- (B) No carrier furnishing a portion of a service shall be liable for any act or omission of any other carrier furnishing a portion of that service.
- (C) The Telephone Company is not liable for damages associated with service or facilities which it does not furnish.
- (D) The Telephone Company is not liable for damages to the IC terminal location or End User premises resulting from the furnishing of a service, including the installation and removal of equipment and associated wiring, unless the damage is caused by the Telephone Company's negligence.
- (E) The Telephone Company shall be indemnified, defended and held harmless by the End User against any claim, loss or damage arising from the use of services offered under this tariff, involving:

2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)
 - 2.1.3 <u>Liability</u> (Cont'd)
 - (E) (Cont'd)
 - (1) Claims for libel, slander, invasion of privacy, or infringement of copyright arising from any communications;
 - (2) Claims for patent infringement arising from combining or using the service furnished by the Telephone Company in connection with facilities or equipment furnished by the IC or End User or;
 - (3) All other claims arising out of any act or omission of the End User in the course of using services provided pursuant to this tariff.
 - (F) The Telephone Company does not guarantee or make any warranty with respect to its services when used in an explosive atmosphere. The Telephone Company shall be indemnified, defended and held harmless by the IC or End User from any and all claims by any person relating to the services so provided.
 - (G) No license under patents (other than the limited license to use) is granted by the Telephone Company or shall be implied or arise by estoppel, with respect to any service offered under this tariff. The Telephone Company will defend the IC or End User against claims of patent infringement arising solely from the use by the IC or End User of services offered under this tariff and will indemnify such IC or End User for any damages awarded based solely on such claims.
 - (H) The Telephone Company's failure to provide or maintain services under this tariff shall be excused by labor difficulties, governmental orders, civil commotions, criminal actions taken against the Telephone Company, acts of God and other circumstances beyond the Telephone Company's reasonable control, subject to the Credit Allowance for a Service Interruption as set forth in 2.4.4 following.

2. General Regulations

2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)

2.1.4 <u>Provision of Services</u>

The Telephone Company, to the extent that such services are or can be made available with reasonable effort, and after provision has been made for the Telephone company's telephone exchange services, will provide to the IC upon reasonable notice services offered in other applicable sections of this tariff at rates and charges specified therein.

2.1.5 Installation and Termination of Services

The services provided under this tariff (A) will include any entrance cable or drop wiring and wire or intrabuilding network cable to that point where provision is made for termination of the Telephone company's outside distribution network facilities at a location of minimum penetration inside of the IC terminal location or End User premises and (B) will be installed by the Telephone Company to such point of termination. This point of termination is defined as the Point of Interface at the IC terminal location and the Network Interface at the End User premises. Wire, required to extend the location of the interface from one location to another location within a building in order to extend Access Service facilities to the IC's or End User's premises equipment, will be provided, at the IC's or End User's request, on a time sensitive charge basis. The labor rates for the installation of such wire are the same as those set forth in 13.2.6(C) following for Other Labor.

2.1.6 Maintenance of Services

The services provided under this tariff shall be maintained by the Telephone Company. The IC or others may not rearrange, move, disconnect, remove or attempt to repair any facilities provided by the Telephone Company except with the specific written consent of the Telephone Company. The IC shall maintain all facilities provided by it. The Telephone Company shall not be responsible to End Users for end-to-end service of which the services provided under this tariff are part.

2. General Regulations

2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)

2.1.7 Changes and Substitutions

The Telephone Company may, where such action is reasonably required in the operation of its business, (A) substitute, change or rearrange any facilities used in providing service under this tariff, including but not limited to, (1) substitution of different metallic facilities, (2) substitution of carrier or derived facilities for metallic facilities used to provide other than metallic facilities and (3) substitution of metallic facilities for carrier or derived facilities used to provide other than metallic facilities, (B) change minimum protection criteria, (C) change operating or maintenance characteristics of facilities or (D) change operations or procedures of the Telephone Company. In case of any such substitution, change or rearrangement, the transmission parameters will be within the range as set forth in 6. And 7. Following. The Telephone Company shall not be responsible if any such substitution, change or rearrangement renders any IC furnished services obsolete or requires modification or alteration thereof or otherwise affects their use or performance. If such substitution, change or rearrangement materially affects the operating characteristics of the facility, the IC will be given adequate notice in writing. Reasonable time will be allowed for any redesign and implementation required by the change in operating characteristics.

2.1.8 <u>Refusal and Discontinuance of Service</u>

(A) Unless the provisions of 2.2.2 (B) following apply, if the IC or End User fails to comply with the provisions of this tariff, including any payments to be made by it on the dates and times herein specified, the Telephone Company may, on ten (10) days written notice of noncompliance, refuse additional applications for service and/or refuse to complete any pending orders for service at any time thereafter. If the Telephone Company does not refuse additional applications for service on the date specified in the ten (10) day notice, and the IC's or End User's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to refuse additional applications for service without further notice.

2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)
- 2.1.8 <u>Refusal and Discontinuance of Service</u> (Cont'd)
 - (B) Unless the provisions of 2.2.2(B) following apply, if the IC or End User fails to comply with the provisions of this tariff, including any payments to be made by it on the dates and times herein specified, the Telephone Company may, on a twenty (20) days written notice, discontinue the provision of the services involved at any time thereafter. In the case of such discontinuance, all applicable charges, including termination charges, shall become due. If the Telephone company does not discontinue the provision of the services involved on the date specified in the twenty (20) days notice, and the IC's or End User's noncompliance continues, nothing contained herein shall preclude the Telephone Company's right to discontinue the provision of the services involved without further notice.

2.1.9 Quotation Charge

Except as set forth in 10.7 following, a nonrecurring charge (USOC QPA) for the preparation of a quotation applies whenever an IC requests an estimate of rates and charges for any service for which the rates and charges are determined on an individual case basis prior to placing an order for service. The charge includes the costs associated with the development and preparation of the quotation. A bill for the quotation preparation will be rendered. The quotation is valid for 90 days and will identify all estimated costs associated with the provision of the facilities needed to satisfy the IC's service requirements. Within this 90 day period, if the IC orders the service as quoted and service is subsequently provided, the Quotation Charge will be credited to the IC's account. If the IC cancels the request for a quotation prior to its completion, the IC will be billed for the costs incurred, for quotation preparation, through the cancellation date.

2. General Regulations

- 2.1 <u>Undertaking of the Telephone Company</u> (Cont'd)
 - 2.1.10 Limitation of Use of Metallic Facilities

Except for ground start, duplex (DX) and McCulloh-Loop (Alarm System) type signaling, metallic facilities shall not be used for ground return or split pair operation. Signals applied to the metallic facility shall be voice or sub-voice and shall conform to the limitations set forth in 2.5.10 following. In the case of application of dc telegraph signaling systems, the IC shall be responsible, at its expense, for the provision of current limiting devices to protect the Telephone Company facilities from excessive current due to abnormal conditions and for the provision of noise mitigation networks when required to reduce excessive noise.

2.1.11 Notification of Service-Affecting Activities

The Telephone Company intends to provide the IC timely notification of service-affecting activities.

2.1.12 Coordination with Respect to Network Contingencies

The Telephone Company intends to work cooperatively with the IC to develop network contingency plans in order to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.1.13 <u>Provision and Ownership of Telephone Numbers</u>

The IC and the End User have no property rights to telephone number assignments or any other call number designations associated with Access Services. The Telephone Company reserves the right to assign, designate or change such numbers, or the Telephone Company serving central office prefixes associated with such numbers, when reasonably necessary in the conduct of its business.

- 2. <u>General Regulations</u> (Cont'd)
 - 2.2 <u>Use</u>
 - 2.2.1 <u>Purpose</u>
 - (A) Services provided under this tariff shall be used by the IC for its own use or in furnishing its authorized interstate services to End Users and for operational purposes directly related to the furnishing of the IC's authorized services. Operational purposes include testing and maintenance of circuits, demonstration and experimental services and spare services. Telephone Exchange Services required by the IC for its administrative use are furnished under other applicable tariffs of the Telephone Company.
 - (B) Where facility conditions permit, the IC may use the entire transmission capability of a service provided under this tariff as a single channel or create additional communication channels within or below the voice frequency band, except that the IC may not create additional communication channels from video cable facilities or audio facilities other than diplexing associated audio signals on the video cable facility. The Telephone Company does not warrant that its facilities and services meet standards other than those set forth in this tariff.
 - 2.2.2 Interference or Impairment
 - (A) The characteristics and methods of operation of any circuits, facilities or equipment provided by other than the Telephone Company and associated with the facilities utilized to provide services under this tariff shall not interfere with or impair service over any facilities of the Telephone Company, its affiliated companies, or its connecting and concurring carriers involved in its services, cause damage to their plant, impair the privacy of any communications carried over their facilities or create hazards to the employees of any of them or the public.

- 2. <u>General Regulations</u> (Cont'd)
 - 2.2 <u>Use</u> (Cont'd)
 - 2.2.2 <u>Interference or Impairment</u> (Cont'd)
 - (B) If such characteristics or methods of operation are not in accordance with (A) preceding, the Telephone Company will, where practicable, notify the IC or End User that temporary discontinuance of the use of a service may be required; however, where prior notice is not practicable, nothing contained herein shall be deemed to preclude the Telephone Company's right to temporarily discontinue forthwith the use of a service if such action is reasonable under the circumstances. In case of such temporary discontinuance, the IC or End User will be promptly notified and afforded the opportunity to correct the condition which gave rise to the temporary discontinuance. During such period of temporary discontinuance, credit allowance for service interruptions as set forth in 2.4.4 following is not applicable.

2.2.3 Unlawful Use

The service provided under this tariff shall not be used for an unlawful purpose.

2.3 Obligations of the IC

2.3.1 Damages

The IC shall reimburse the Telephone Company for damages to Telephone Company facilities utilized to provide services under this tariff caused by the negligence or willful act of the IC or an End User while using the services of the IC, or resulting from improper use of the Telephone Company facilities, or due to malfunction of any facilities or equipment provided by other than the Telephone Company. The Telephone Company will, upon reimbursement for damages, cooperate with the IC in prosecuting a claim against the person causing such damage and the IC shall be subrogated to the right of recovery by the Telephone Company for the damages to the extent of such payment.

2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.2 Ownership of Facilities and Theft

Facilities utilized by the Telephone Company to provide service under the provisions of this tariff shall remain the property of the Telephone Company. Such facilities shall be returned to the Telephone Company by the IC or End User, whenever requested, within a reasonable period following the request in as good condition as reasonable wear will permit.

The IC shall reimburse the Telephone Company for any loss through theft of facilities utilized to provide services under this tariff at the IC terminal location or End User premises.

2.3.3 Equipment Space and Power

The IC shall furnish or arrange to have furnished to the Telephone Company, at no charge, equipment space and electrical power required by the Telephone Company to provide services under this tariff at the points of termination of such services. The selection of ac or dc power shall be mutually agreed to by the IC and the Telephone Company. The IC shall also make necessary arrangements in order that the Telephone Company will have access to such spaces at reasonable times for installing, testing, inspecting, repairing or removing Telephone Company services. Equipment space and power furnished or arranged to be furnished by the IC shall not be used in the provision of service to any other IC or End User.

2.3.4 Additional Facilities and Protective Apparatus

The IC shall bear the cost, if any, of such additional facilities or protective apparatus which, according to accepted telecommunications industry standards, are required to be installed because of the particular use or hazardous location of the services provided under this tariff. Rates and/or charges, if applicable, will be developed on an individual case basis and filed in 12. Following.

2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.5 Inspection of Facilities and Protective Apparatus

The IC and End User shall allow the Telephone Company to inspect at reasonable times any facilities or equipment provided by other than the Telephone Company required in accordance with 2.3.4 preceding and 2.5 following which are associated with the services provided under this tariff to determine if such installation compliew with such Telephone Company requirements.

2.3.6 Availability for Testing

The services provided under this tariff shall be available to the Telephone Company at times mutually agreed upon in order to permit the Telephone Company to make tests and adjustments appropriate for maintaining the services in satisfactory operating condition. Such tests and adjustments shall be competed within a reasonable time. No credit will be allowed for any interruptions involved during such tests and adjustments.

2.3.7 Balance

All signals for transmission over the services provided under this tariff shall be delivered by the IC balanced to ground except for ground start, duplex (DX) and McCulloh-Loop (Alarm System) type signally and dc telegraph transmission at speeds of 75 baud or less.

2.3.8 Design of IC Services

Subject to the provisions of 2.1.7 preceding, the IC shall be solely responsible, at its own expense, for the overall design of its services and for any redesigning or rearrangement of its services which may be required because of changes in facilities, operations or procedures of the Telephone Company, minimum protection criteria or operating or maintenance characteristics of the facilities.

2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.9 <u>References to the Telephone Company</u>

The IC may advise End Users that certain services are provided by the Telephone Company in connection with the service the IC furnishes to End Users; however, the IC shall not represent that the Telephone Company jointly participates in the IC's services.

2.3.10 Contacts with IC Customers (End Users)

The IC shall be responsible for all contacts and arrangements with End Users concerning the provision and maintenance of, and the billing and collecting of charges for, the ICs services to End Users, except as set forth in 4, 8, 9 and 13 following, for End User Access Service, Billing Service, Directory Assistance Service and Presubscription, respectively.

2.3.11 Claims and Demands for Damages

- (A) With respect to claims of patent infringement made by third persons, the IC shall defend, indemnify, protect and save harmless the Telephone Company from and against all claims arising out of the combining with, or use in connection with, the services provided under this tariff, any circuit, apparatus, system or method provided by the IC or End User.
- (B) The IC shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by third persons arising out of the construction, installation, operation, maintenance, or removal of the IC's circuits, facilities, or equipment connected to the Telephone Company's services provided under this tariff, including, without limitation, Workmen's Compensation claims, actions for infringement of copyright and/or unauthorized use of program material, libel and slander actions based on the content of communications transmitted over the IC's circuits, facilities or equipment, and proceedings to recover taxes, fines, or penalties for failure of the IC to obtain or maintain in effect any necessary certificates, permits, licenses, or other authority to acquire or operate the

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2.

General Regulations (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.11 <u>Claims and Demands for Damages</u> (Cont'd)

(B) (Cont'd)

services provided under this tariff; provided, however, the foregoing indemnification shall not apply t suits, claims, and demands to recover damages for damage to property, death, or personal injury unless such suits, claims or demands are based on the tortuous conduct of the IC, its officers, agents or employees.

- (C) The IC shall defend, indemnify and save harmless the Telephone company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the IC or third persons rising out of the Telephone Company provision of Billing Analysis Service or any other service under this tariff at the request of the IC, including, but not limited to claims for libel, slander, invasion of privacy, conversion and trespass.
- (D) The IC shall defend, indemnify and save harmless the Telephone Company from and against any suits, claims, losses or damages, including punitive damages, attorney fees and court costs by the IC or third parties arising out of any act or omission of the IC in the course of using services provided under this tariff.

2.3.12 Notification of Service-Affecting Activities

The IC shall provide the Telephone Company timely notification of the following: planned or unplanned outages of IC facilities which will affect the Telephone Company's capability to provide adequate service for anticipated traffic volumes; facility failures within the IC network which will adversely impact upon the Telephone Company's capability to provide adequate service for anticipated traffic volumes; and, IC marketing activities designed to generate rapid or short-term increases in anticipated traffic volumes. This timely notification will enable the Telephone Company to administer its network as set forth in 6.5.1 following.

2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.13 <u>Coordination with Respect to Network Contingencies</u>

The IC shall, in cooperation with the Telephone Company, coordinate in planning the actions to be taken to maintain maximum network capability following natural or man-made disasters which affect telecommunications services.

2.3.14 Jurisdictional Report Requirements

(A) Jurisdictional Reports

- (1) When the IC orders service for both interstate and intrastate use, the projected interstate percentage of use and intrastate percentage of use must be provided in whole numbers to the Telephone Company. Those whole number percentages will be used by the Telephone Company to apportion the use and/or charges between interstate and intrastate until a revised report is received as set forth in (2) following.
- (2)Effective on the first of January, April, July and October of each year the IC shall update the interstate and intrastate jurisdictional report. The IC shall forward to the Telephone Company, to be received no later than 15 days after the first of each such month, a revised report showing the interstate and intrastate percentage of use for the past three months ending the last day of December, March, June and September, respectively, for each service arranged for interstate and intrastate use. The revised report will serve as the basis for the next three months billing and will be effective on the bill date for that service. No prorating or back billing will be done based on the report. If the IC does not supply the reports, the Telephone Company will assume the percentages to be the same as those provided in the last quarterly report. For those cases in which a quarterly report has never been received from the IC, the Telephone Company will assume the percentages to be the same as those provided in the order for service as set forth in (1) preceding.
- (3) Each interexchange carrier, as a condition of access, agrees to maintain its billing records in a conveniently auditable form and agrees to permit a timely and reasonable audit of such records for the purpose of determining appropriate access billing records. If an interexchange carrier shall fail to maintain adequate billing records to substantiate intrastate usage reports, all access services shall be billed as intrastate service and the interexchange carrier's points of presence shall be used as a surrogate for the originating and terminating points in identifying and classifying communications as intrastate or interstate in nature.

2.

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General Regulations (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.14 Jurisdictional Report Requirements (Cont'd)

(B) <u>Maintenance of IC Records</u>

The IC shall maintain and retain for a minimum for one year, complete, detailed and accurate records, workpapers and backup documentation in form and substance to evidence the percentage data provided to the Telephone Company a set forth in (A) (1) and (2) preceding. All of the records, workpapers and backup documentation shall be made available during normal business hours, at the location named in the report, upon reasonable request by the Telephone Company in order to permit review by the Telephone Company auditor or outside auditor under contract to the Telephone Company or an auditor of a federal or state regulatory commission. If the records, workpapers and backup documentation are not provided or are insufficient or not in accordance with the provisions of this paragraph, the percentages of intrastate service will be assumed by the Telephone Company to be the same as indicated in the last report received until the deficiencies are corrected and new reports, as required herein, are provided to the Telephone Company.

2.3.15 Determination of Intrastate Access Service

When mixed interstate and intrastate Access Service is provided, all charges (i.e., nonrecurring, monthly and/or usage) including optional features charges, will be prorated between interstate and intrastate. The percentage provided in the reports as set forth in 2.3.14 (A) preceding will serve as the basis for prorating the charges. The percentage of an Access Service to be charged as intrastate is applied in the following manner:

(A) For monthly and nonrecurring chargeable rate elements, multiply the percent intrastate use times the quantity of chargeable elements times the stated tariff rate per element.

Issued: March 22, 2000

2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.15 Determination of Intrastate Access Service (Cont'd)

(B) For usage sensitive (i.e., access minutes and calls) chargeable rate elements, multiply the percent intrastate use times actual use (i.e., measured or Telephone Company assumed average use) times the stated tariff rate.

The intrastate percentage will change as revised usage reports are submitted as set forth in 2.3.14 preceding.

- 2.3.16 <u>Trouble Determination</u>
 - (A) The IC shall be responsible for receiving trouble reports from its end users and determining, by testing or other means, if the source of trouble is caused by the equipment or facilities provided by the IC, its end user, or by the Telephone Company.
 - (B) When more than one Telephone Company service is used to provide service to an IC, the IC is responsible for determining which service provided by the Telephone Company is causing the reported trouble.
 - (C) The IC shall be responsible for payment of Maintenance of Service Charges as set forth in 13.3.1 following when reporting trouble to the Telephone Company and the obligations in (A) and (B) preceding are not met.

2.3.17 Identification and Rating of VoIP-PSTN Traffic

- (A) Scope
 - VoIP-PSTN Traffic is defined as traffic exchanged between the Telephone Company end user and the customer in time division multiplexing ("TDM") format that originates and/or terminates in Internet protocol ("IP") format. This section governs the identification of VoIP-PSTN Traffic that is required to be compensated at interstate access rates by the Federal Communications Commission in its Report and Order in WC Docket Nos. 10-90, etc., FCC Release No. 11-161 (Nov. 18, 2011) ("FCC Order"). Specifically, this section establishes the method of separating such traffic (referred to in this tariff as "Relevant VoIP-PSTN Traffic") from the customer's traditional intrastate access traffic, so that such Relevant VoIP-PSTN Traffic can be billed in accordance with the FCC Order.

(C)

(C)

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2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.17 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

- (A) Scope (Cont'd)
 - 2. This section will be applied to the billing of switched access charges to a customer that is a local exchange carrier only to the extent that the customer has also implemented billing of interstate access charges for Relevant VoIP-PSTN Traffic in accordance with the FCC Order.

(B) Rating of VoIP-PSTN Traffic

The Relevant VoIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Telephone Company's applicable tariffed interstate switched access rates as specified in this tariff

As of July 13,2012, any intrastate originating Toll VOIP-PSTN Traffic will be billed at rates equal to the Company's intrastate originating switched access rates as provided in this tariff. Beginning July 1,2014, any intrastate originating Toll VOIP-PSTN Traffic identified in accordance with this tariff section will be billed at rates equal to the Telephone Company's relevant interstate switched access rates as provided in the Telephone Company's applicable Federal Access Tariff.

(C) Calculation and Application of Percent-VoIP-Usage Factor

The Telephone Company will determine the number of Relevant VoIP-PSTN Traffic minutes of use ("MOU") to which interstate rates will be applied under subsection (B), above, by applying a Percent VoIP Usage ("PVU") factor to the total intrastate access MOU exchanges with The Telephone Company from the customer. The PVU will be derived and applied as follows:

1. The customer will calculate and furnish to the Telephone Company a factor (the "PVU") representing the percentage of the total intrastate and interstate access MOU that the customer exchanges with to the Telephone Company in the State, that is sent to the Telephone Company and that originated in IP format; or is received by the Telephone Company and terminated in IP format. This PVU shall be based on information such as traffic studies, actual call detail, or other relevant and verifiable information.

(C)

Supplement No. 20 to Tariff PA P.U.C. No. 15

FRONTIER COMMUNICATIONS OF PENNSYLVANIA, INC. Section 2 First Revised Sheet 17.2 Cancels Original Sheet 17.2

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2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.17 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

- (C) Calculation and Application of Percent-VoIP-Usage Factor
 - 2. The Telephone Company will, likewise, calculate a factor (the "PVU-T") representing the percentage of the Telephone Company's total intrastate access MOU in the State that the Telephone Company originates or terminates on its network in IP format. This PVU-T shall be based on information, such as the number of the Telephone Company's retail VoIP subscriptions in the state, traffic studies, actual call detail, or other relevant and verifiable information.
 - 3. The Telephone Company will use the PVU-C and PVU-T factors to calculate a PVU factor that represents the percentage of total intrastate MOU exchanged between a Telephone Company end user and the customer that is originated or terminated in IP format, whether at the Telephone Company's end, at the customer's end, or at both ends. The PVU factor will be calculated as the sum of: (A) the PVU-C factor and (B) the PVU-T factor times (1.0 minus the PVU-C factor).
 - 4. The Telephone Company will apply the PVU factor to the total terminating intrastate access MOU received from the customer to determine the number of Relevant VoIP-PSTN Traffic MOUs.
 - 5. If the customer does not furnish the Telephone Company with a PVU pursuant to the preceding paragraph 1,the Telephone Company will utilize a PVU equal to zero. (C)
- (D) Initial PVU Factor

If the PVU factor is not available and/or cannot be implemented in the Telephone Company's billing systems by January 1, 2012, once the factor is available and can be implemented the Telephone Company will adjust the customer's bills to reflect the PVU retroactively to January 1, 2012. This retroactive adjustment will be made to January 1, 2012, provided that the customer provides the factor to the Telephone Company no later than April 15, 2012; otherwise, it will set the initial PVU equal to zero, as specified in subsection (C)(1), above.

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Section 2 First Revised Sheet 17.3 Cancels Original Sheet 17.3

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2. <u>General Regulations</u> (Cont'd)

2.3 <u>Obligations of the IC</u> (Cont'd)

2.3.17 Identification and Rating of VoIP-PSTN Traffic (Cont'd)

(E) PVU Factor Updates

The customer may update the PVU factor quarterly using the method set forth in subsection (C)(1), above. If the customer chooses to submit such updates, it shall forward to the Telephone Company, no later than 15 days after the first day of January, April, July and/or October of each year, a revised PVU factor based on data for the prior three months, ending the last day of December, March, June and September, respectively. The revised PVU factor will apply prospectively and serve as the basis for billing until superseded by a new PVU.

(F) PVU Factor Verification

Not more than four times in any year, the Telephone Company may ask the customer to verify the PVU factor furnished to the Telephone Company. The party so requested shall comply, and shall reasonably provide the records and other information used to determine the PVU factors.

(G) Switched Access Rate Elements

Switched Access Rate Element	FCC 2
Local Switching	\$0.00265114
Shared Trunk Port/Common Trunk Port	\$0.00020000
Information Surcharge per MOU	\$0.0000000
Tandem Transport Facility per minute-mile	\$0.00001000
Tandem Transport Termination	\$0.00241772
Tandem Switching	\$0.00020000
Shared Multiplexing, per Tandem MOU	\$0.0000000

2.4 Payment Arrangements and Credit Allowances

2.4.1 Payment of Rates, Charges and Deposits

(A) PVU Factor Verification

The Telephone Company may, in order to safeguard its interests, require an IC which has a proven history of late payments to the Telephone Company or does not have established credit with the Telephone Company except for an IC which is a successor of a company which has established credit with the Telephone Company and has no history of late payments to the Telephone Company, to make a deposit prior to or at any time after the provision of a

(C)

(C)

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Section 2 Original Sheet 18

ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(A) (Cont'd)

service to the IC to be held by the Telephone Company as a guarantee of the payment of rates and charges. Such deposit may not exceed the actual or estimated rates and charges for the service for a two month period plus the amount of any termination charges attributable to the service. The fact that a deposit has been made in no way relieves the IC from complying with the Telephone Company's regulations as to advance payments as set forth in 5.4.3 following or the prompt payment of bills. At such time as the provision of the service to the IC is terminated, the amount of the deposit will be credited to the IC's account and any credit balance which may remain will be refunded. At the option of the Telephone Company, such a deposit my be refunded or credited to the IC's account when the IC has established credit or an acceptable record of payment at any time prior to the termination of the provision of the service to the IC. In case of a cash deposit, for the period the deposit is held by the Telephone Company, the IC will receive simple annual interest at the same percentage rate as that set forth for this purpose in the Telephone Company's Local on General Exchange Service tariff. Should a deposit be credited to the IC's account, as indicated above, no interest will accrue on the deposit from the date such deposit is credited to the IC's account.

(B) The Telephone Company shall bill on a current basis all charges incurred by and credits due to the IC under this tariff attributable to services established or discontinued during the preceding billing period. In addition, the Telephone Company shall bill in advance charges for all services to be provided during the enduing billing period except for charges associated with service usage and for the Federal Government which will be billed in arrears. The bill day (i.e., the billing date of a bill for an End User or IC for Access Service under this tariff), the period of service each bill covers and the payment date will be as follows:

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Section 2 Original Sheet 19

ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.1 <u>Payment of Rates, Charges and Deposits</u> (Cont'd)

- (B) (Cont'd)
 - (1) For End User Service and Presubscription Service, the Telephone Company will establish a bill day each month for each end user account. The bill will cover End User service and Presubscription Service charges for the ensuing billing period except for End User Service and Presubscription Service for the Federal Government which will be billed in arrears. Any known unbilled charges for prior periods and any known unbilled adjustments for prior periods for End User Service and Presubscription Service will be applied to this bill. Such bills are due when rendered.
 - (2) For Service other than End User Service and Presubscription Service, the Telephone Company will establish a bill day each month for each IC account. The bill will cover nonusage sensitive service charges for the ensuing billing period for which the bill is rendered, any known unbilled nonusage sensitive charges for the period after the last bill day thru the current bill day. Any known unbilled usage charges for prior periods and any known unbilled adjustments will be applied to this bill. Payment for such bills is due as set forth in (3) following. If payment is not received by the payment date, as set forth in (3) following in immediately available funds, a late payment penalty will apply as set forth in (3) following.

For bill days in January 1984, the bill will cover nonusage sensitive service charges for the ensuing billing period, the nonusage sensitive service charges for the period from March 1, 2000 thru the bill day, usage charges for the period from March 1, 2000 thru the bill day and any known adjustments for the calendar month of January 1984. Such bills are due as set forth in (3) following. If payment is

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Section 2 Original Sheet 20

ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)
 - 2.4.1 Payment of Rates, Charges and Deposits (Cont'd)
 - (B) (Cont'd)
 - (2) (Cont'd)

not received on the payment date as set forth in (3) following in immediately available funds, a late payment penalty will apply as set forth in (3) following.

(3) (a) All bills dated as set forth in (2) preceding for service, other than End User Service and Presubscription Service, provided to the IC by the Telephone Company are due 31 days (payment date) after the bill day or by the next bill date (ie., same date in the following month as the bill date), whichever is the shortest interval, except as provided herein, and are payable in immediately available funds. If such payment date would cause payment to be due on a Saturday, Sunday or Holiday (i.e., Year's Day, Independence Day, Labor Day, New Thanksgiving Day, Christmas Day, the second Tuesday in November and a day when Washington's Birthday, Memorial Day or Columbus Day is legally observed), payment for such bills will be due from the IC as follows:

> If such payment date falls on a Sunday or on a Holiday which is observed on a Monday, the payment date shall be the first non-Holiday day following such Sunday or Holiday. If such payment date falls on a Saturday or on a Holiday which is observed on Tuesday, Wednesday, Thursday or Friday, the payment date shall be the last non-Holiday day preceding such Saturday or Holiday.

(b) Further, if any portion of the payment is received by the Telephone Company after the payment date as set forth in (a) preceding, or if

TARIFF PA P.U.C. 15

Section 2 Original Sheet 21

ACCESS SERVICE

2. <u>General Regulations</u> (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)
 - 2.4.1 <u>Payment of Rates, Charges and Deposits</u> (Cont'd)
 - (B) (Cont'd)
 - (3) (Cont'd)
 - (b) (Cont'd)

any portion of the payment is received by the Telephone Company in funds which are not immediately available to the Telephone Company, then a late payment penalty shall be due to the Telephone Company. The late payment penalty shall be the portion of the payment not received by the payment date times a late factor. The late factor shall be the lessor of:

- (I) the highest interest rate (in decimal value) which may be levied by law for commercial transactions, compounded daily for the number of days from the payment date to and including the date that the IC actually makes the payment to the Telephone Company, or
- (II) 0.000657 per day, compounded daily for the number of days from the payment date to and including the date that the IC actually makes the payment to the Telephone Company.
- (c) In the event that a billing dispute concerning any charges billed to the IC by the Telephone Company is resolved in favor of the Telephone Company, any payments withheld pending settlement of the dispute shall be subject to the late payment penalty set forth in (b) preceding. If the billing dispute is resolved in favor of the IC, no late payment penalty will apply to the disputed amount.
- (C) When a payment for Access Service Charges billed under this Tariff is due to the Telephone Company from the IC as set forth in (B) (3) preceding on the same payment date

TARIFF PA P.U.C. 15

Section 2 Original Sheet 22

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.1 Payment of Rates, Charges and Deposits (Cont'd)

(C) (Cont'd)

that a Purchase of Accounts Receivable net purchase amount is due to the IC from the Telephone Company as set forth in 8.2.3 following, the Telephone Company may, with at least 31 days notice to the IC, net the payment for IC Access Service Charges with the net purchase amount. The Telephone Company will pay the net amount to the IC on the payment date when such net amount is due to the IC or require the IC to pay to the Telephone Company the net amount when such net amount is due to the Telephone Company. If either party does not make the payment on the payment date, a late payment penalty as set forth in 8.2.3(C) following or (B) (3) preceding, whichever is appropriate, applies.

- (D) Adjustments for the quantities of services established or discontinued in any billing period beyond the minimum period set forth for services in other sections of this tariff will be prorated to the number of days or major fraction of days based on a 30 day month. The Telephone Company will, upon request and if available, furnish such detailed information as may reasonably be required for verification of any bill.
- (E) When a rate as set forth in this tariff is shown to more than two decimal plces, the charges will be determined using the rate shown. The resulting amount will then be rounded to the nearest penny (i.e., rounded to two decimal places).
- (F) When more than one copy of an IC bill for services provided under the provisions of this tariff is furnished to the IC, an additional charge applies for each additional copy of the bill as set forth in 13.3.6 following.

2.4.2 <u>Minimum Periods</u>

The minimum periods for which services are provided and for which rates and charges are applicable are as set forth in 5., 8. and 9. following for the services involved.

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Section 2 Original Sheet 23

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.2 Minimum Periods (Cont'd)

The minimum period for which service is provided and for which rates and charges are applicable for a Specialized Service or Arrangement provided on an individual case basis as set forth in 12. following, is one month unless a different minimum period is established with the individual case filing.

When a service is discontinued prior to the expiration of the minimum period, charges are applicable for the remaining portion of the minimum period, whether the service is used or not, and will be based on the rates in effect for the service at the time of discontinuance.

2.4.3 <u>Cancellation of an Order for Service</u>

Provisions for the cancellation of an order for service are set forth in other applicable sections of this tariff.

2.4.4 Credit Allowance for Service Interruptions

(A) General

A service is interrupted when it becomes unusable to the IC or End User because of a failure or a facility component used to furnish service under this tariff. An interruption period starts when an inoperative service is reported to the Telephone Company by the IC or End User and ends when the service is operative.

(B) <u>When A Credit Allowance Applies</u>

In case of an interruption to any service, allowance for the period of interruption, if not due to the negligence of the IC or End User, shall be as follows:

(1) For services, other than those mentioned in (2) and (6) following, no credit shall be allowed for an interruption of less than 24 hours. The IC or End User shall be credited for an interruption of 24 hours or more at the rate of 1/30 of the monthly charge for the service for each period of 24 hours or major fraction thereof that the interruption continues from the time of notice to the Telephone Company that an interruption has occurred.

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Section 2 Original Sheet 24

ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)
 - 2.4.4 Credit Allowances for Service Interruptions (Cont'd)
 - (B) <u>When A Credit Allowance Applies</u> (Cont'd)
 - (2) For Program Audio Service and Video Service provided at daily rates, no credit shall be allowed for an interruption of less than 30 seconds. The IC or End User shall be credited for an interruption of 30 seconds or more at the rate of 1/288 of the daily charge for the service for each 5 minutes or fraction thereof that an interruption continues from the time of notice to the designated Telephone Company operating center that an interruption has occurred. Two or more such interruptions occurring during a period of 5 consecutive minutes shall be considered as one interruption.
 - (3) Credit allowances for interruptions to Switched Access Service and Directory Assistance Service apply only to the applicable monthly rates and minimum monthly usage charges.
 - (4) The credit allowance(s) for an interruption or for a series of interruptions shall not exceed the monthly rate and minimum monthly usage charge for the service interrupted in any one monthly billing period.
 - (5) For certain Special Access services (Wideband Digital, WD1-4; Digital Data Access, DA1-4; and High Capacity, HC1), any period during which the error performance is below that specified for the service will be considered as an interruption.
 - (6) Service interruptions for Specialized Service or Arrangements provided under the provisions of 12. Following shall be administered in the same manner as those set forth in this section (2.4.4) unless other regulations are specified with the individual case filing.

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Section 2 Original Sheet 25

ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)
 - 2.4.4 <u>Credit Allowance for Service Interruptions</u> (Cont'd)
 - (C) <u>When a Credit Allowance Does Not Apply</u>

No credit allowance will be made for:

- (1) Interruptions caused by the negligence of the IC or End User.
- (2) Interruptions of a service due to the failure of equipment or systems provided by the IC, End User or others.
- (3) Interruptions of a service during any period in which the Telephone Company is not afforded access to the premises where the service is terminated.
- (4) Interruptions of a service during any period when the IC or End User has released a service to the Telephone Company for maintenance purposes, to make rearrangements, or for the implementation of an order for a change in the service.
- (5) Interruptions of a service which continue because of the failure of the IC or End User to authorize replacement of any element of special construction, as set forth in THE INDIVIDUAL COMPANY'S LOCAL EXCHANGE TARIFF for SPECIAL CONSTRUCTION. The period for which no credit allowance is made begins on the seventh day after the IC or End User receives the Telephone Company's written notification of the need for such replacement and ends on the day after receipt by the Telephone Company of the IC's or End User's written authorization for such replacement.

TARIFF PA P.U.C. 15

Section 2 Original Sheet 26

ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)
 - 2.4.4 <u>Credit Allowance for Service Interruptions</u> (Cont'd)
 - (C) <u>When Credit Allowance Does Not Apply</u> (Cont'd)
 - (6) Periods when the IC or End User elects not to release the service for testing and/or repair and continues to use it on an impaired basis.
 - (7) Interruptions caused by the failure of other Telephone Company provided services which are connected by the IC at its terminal location or by the end user at its premises.
 - (8) An interruption or a group of interruptions, resulting from a common cause, for amounts less than one dollar.
 - (D) Use of an Alternative Service Provided by the Telephone Company

Should the IC elect to use an alternative service provided by the Telephone Company during the period that a service is interrupted, the IC must pay the tariffed rates and charges for the alternative service used.

(E) <u>Temporary Surrender of a Service</u>

In certain instances, the IC may be requested by the Telephone Company to surrender a service for purposes other than maintenance, testing or activity relating to a service order. If the IC consents, a credit allowance will be granted. The credit allowance will be 1/30 of the monthly rate for each period of 24 hours or fraction thereof that the service is surrendered. In no case will the credit allowance exceed the monthly rate for the service surrendered in any one monthly billing period.

TARIFF PA P.U.C. 15

Section 2 Original Sheet 27

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.5 Services Included in Netting

Payment for services obtained by an IC under the provisions of this tariff, except for services set forth in 3. following, and THE INDIVIDUAL COMPANY'S LOCAL EXCHANGE TARIFF for Special Construction, when Billing Processing Service and/or Private Line Billing Service is provided by the Telephone Company to the IC, will be included in the netting of accounts receivable as set forth in 8.2.3 following when the IC has been notified by the Telephone Company.

2.4.6 Re-establishment of Service Following Fire, Flood or Other Occurrence

(A) <u>Nonrecurring Charges Do Not Apply</u>

Charges do not apply for the re-establishment of service following a fire, flood or other occurrence attributed to an Act of God provided that:

- (1) The service is of the same type as was provided prior to the fire, flood or other occurrence.
- (2) The Service is for the same IC or End User.
- (3) The service is at the same location on the same premises.
- (4) The re-establishment of service begins within 60 days after Telephone Company service is available. (The 60 day period may be extended a reasonable period if the renovation of the original location on the premises affected is not practical within the allotted time period).

(B) <u>Nonrecurring Charges Apply</u>

Nonrecurring Charges apply for establishing service at a different location on the same premises or at a different premises pending re-establishment or service at the original location.

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Section 2 Original Sheet 28

ACCESS SERVICE

2. General Regulations (Cont'd)

2.4 <u>Payment Arrangements and Credit Allowances</u> (Cont'd)

2.4.7 <u>Title or Ownership Rights</u>

- (A) The payment of rates and charges by ICs or End Users for the services offered under the provisions of this tariff does not assign, confer or transfer title or ownership rights to proposals or facilities developed or utilized, respectively, by the Telephone Company in the provision of such services.
- (B) Title or ownership rights to Specialized Service or Arrangements designed by the Telephone Company to meet an IC's or End User's request remain with the Telephone Company except as specifically provided for by written agreement of all parties.

2.4.8 Ordering, Rating and Billing of Access Services Where More Than One Exchange Telephone Company is Involved

The Telephone Company will handle ordering, rating and billing of Access Services under this tariff where more than one Exchange Telephone Company is involved in the provision of Access Service as set forth in (A) or (B) following. The choice of either (A) or (B) shall be made by the Telephone Company and the Telephone Company will notify the IC which option will apply when the IC orders Access Service. The choice of (A) or (B) will be based on the interconnection arrangements between the two Exchange Telephone Companies involved.

(A) When an Access Service is ordered by an IC where one end of the Transport element (i.e., Special Transport, Local Transport or Directory Transport, as appropriate) is in one Exchange Telephone Company operating territory and the other end is in another Exchange Telephone Company operating territory, except for Access Services provided with the use of Hubs (multiplexing or bridging), the Exchange Telephone Company in whose territory the end user serving wire center is located will accept the order for the Access Service from the IC. That Exchange Telephone Company will then determine the charges involved, arrange to provide the Access Service ordered and bill the charges in accordance with its Access service tariff.

TARIFF PA P.U.C. 15

Section 2 Original Sheet 29

ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.4 Payment Arrangements and Credit Allowances (Cont'd)
 - 2.4.8 Ordering, rating and Billing of Access Services Where More Than One Exchange Telephone Company is Involved (Cont'd)
 - (A) (Cont'd)

When an Access Service provided with the use of a Hub (multiplexing or bridging) is ordered by an IC, the Exchange Telephone Company in whose territory the Hub is located will accept the order for the Access service from the IC. That Exchange Telephone Company will then determine the charges involved, arrange to provide the Access Service ordered and bill the charges in accordance with its Access Service tariff.

(B) When an Access Service is ordered by an IC where one end of the Transport element (i.e., Special Transport, Local Transport, or Directory Transport, as appropriate) is in one Exchange Telephone Company operating territory and the other end is in another exchange telephone Company operating territory, both exchange Telephone Companies will accept the order for the Access service from the IC. Each Exchange Telephone Company will provide its portion of the Transport element from the serving wire center in its operating territory to a border interconnection point with the other Exchange Telephone Company. Each Exchange Telephone Company will determine the charges involved for its portion of the Access Service ordered and will bell such charges in accordance with its Access Service tariff. Title page not withstanding, the mileage used to determine the Transport element will be the mileage measured from the serving wire center in the first Exchange Telephone Company operating territory to the serving wire center in the second exchange Telephone Company operating territory. The rate for the transport element will be the rate in each exchange Telephone company's tariff for the mile band for the mileage measured as set forth in the preceding sentence. Each Exchange

TARIFF PA P.U.C. 15

Section 2 First Revised Sheet 30

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ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.4 <u>Payment Arrangements and Credit Allowances (Cont'd)</u>
 - 2.4.8 <u>Ordering, Rating and Billing of Access Services Where More Than One Exchange</u> Telephone Company is Involved (Cont'd)
 - (B) (Cont'd)

Telephone Company's charge for the Transport element will be the product of the Exchange Telephone Company's mile band rate and the mileage measured for the two serving wire centers multiplied by the mileage from the Exchange Telephone Company's serving wire center to the border interconnection point and divided by the sum of the mileage from the first Telephone Company serving wire center to the border interconnection point and the mileage from the second Telephone Company serving wire center to the border interconnection point. All other appropriate charges in each Exchange Telephone Company's tariff are applicable.

(C) When Tandem Switched Transport is provided to a terminating carrier different from a Frontier Telephone ILEC Company, Terminating – Tandem 3rd party rates are applicable otherwise Terminating –Tandem Affiliate rates are applicable. When originating Tandem Switched Transport is provided, Originating rates are applicable.

(D) Switched Access Examples Example 1 – Originating Switched Access

- Feature Group D Switched access is ordered to End Office.
- Originating End Office and Access Tandem are in the operating territory of a Telephone Company (TC-A).
- Customer Designated Premises is in the operating territory of a Telephone Company (TC-B)
- Assumptions:
- TC-A Direct Trunk Transport BP = 40%
- TC-B Direct Trunk Transport BP = 60%
- Direct Trunked Transport mileage = 26 mi.
- Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
- End Office charges = 9,000 min. x EO rate
- Tandem Switched Transport Facility charge = 9,000 min. x 23 mi. x TSF rate

Section 2 Original Sheet 30.1

ACCESS SERVICE

2. <u>General Regulations (Cont'd)</u>

- 2.4 <u>Payment Arrangements and Credit Allowances (Cont'd)</u>
 - 2.4.8 <u>Ordering, Rating and Billing of Access Services Where More Than One Exchange</u> <u>Telephone Company is Involved (Cont'd)</u>
 - (D) Switched Access Examples

Example 1 – Originating Switched Access (continued)

- Tandem Switched Transport Termination charge = 2 terminations x 9,000 min. x. x TST rate
- Tandem Switching Rate = 9,000 min. x TS rate
- Direct Trunked Facility charge = 26 mi. x DTF rate x 40%
- Direct Trunked Termination charge = 1 termination x DTT rate
- Shared Multiplexing charge = 9,000 min. x 23 mi. x SM rate

Example 2 – Terminating Switched Access – Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- Terminating Access Tandem is owned by Frontier Telephone ILEC Companies (TC-A) and end office is owned by a non-Frontier Telephone ILEC Company.
- Assumptions:
- TC-A Direct Trunk Transport BP = 40%
- TC-B Direct Trunk Transport BP = 60%
- Direct Trunk Transport mileage = 26 mi.
- TC-A Tandem Switched Transport BP = 20%
- TC-B Tandem Switched Transport BP = 80%
- Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
- Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 20%
- Tandem Switched Transport Termination-3rd Party charge = 1 termination x 9,000 min. x TST – 3rd Party rate
- Tandem Switching–3rd Party Rate = 9,000 min. x TS-3rd Party rate
- Direct Trunked Facility charge = 26 mi. x DTF rate x 40%
- Direct Trunked Termination charge = 1 termination x DTT rate
- Shared Multiplexing 3rd Party Charge = 9,000 min. x 23 mi. x SM-3rd Party rate

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Section 2 Original Sheet 30.2

ACCESS SERVICE

2. <u>General Regulations (Cont'd)</u>

2.4 <u>Payment Arrangements and Credit Allowances (Cont'd)</u>

(C)

- 2.4.8 <u>Ordering, Rating and Billing of Access Services Where More Than One Exchange</u> <u>Telephone Company is Involved (Cont'd)</u>
 - (D) Switched Access Examples

Example 3 – Terminating Switched Access Tandem End Office

- Feature Group D Switched Access is ordered to End Office.
- Terminating End Office and Access Tandem are both owned by Frontier Telephone ILEC Companies (TC-A).
- Assumptions:
- TC-A Direct Trunk Transport BP = 40%
- TC-B Direct Trunk Transport BP = 60%
- Direct Trunk Transport mileage = 26 mi.
- Tandem Switched Transport mileage = 23 mi.
- Telephone Company A charges are:
- End office Charges = 9,000 min. x EO rate
- Tandem Switched Facility End Office charge = 9,000 min. x 23 mi. x TSF-End Office rate.
- Tandem Switched Transport Termination –End Office charge = 2 terminations x 9.000 min. x TST-End Office rate.
- Tandem Switching End Office charge = 9,000 min. x TS-End Office rate
- Direct Trunked Facility Charge = 26 mi x DTF rate x 40%
- Direct Trunked Termination charge 1 termination x DTT rate
- Shared Multiplexing charge = 9,000 min. x 23 mi. x SM rate

Example 4 – Terminating Switched Access-Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- Terminating Access Tandem is owned by Frontier Telephone ILEC Companies (TC-A). Terminating End Office is owned by a non-Frontier Telephone ILEC Company.
- Assumptions:
- Direct Trunk Transport mileage = 26 mi.
- TC-A Tandem Switched Transport BP = 20%
- TC-B Tandem Switched Transport BP = 80%
- Tandem Switched Transport mileage = 23 mi.

- Telephone Company A charges are:

- Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 20%

Section 2 Original Sheet 30.3

ACCESS SERVICE

2. <u>General Regulations (Cont'd)</u>

2.4 <u>Payment Arrangements and Credit Allowances (Cont'd)</u>

- 2.4.8 <u>Ordering, Rating and Billing of Access Services Where More Than One Exchange</u> <u>Telephone Company is Involved (Cont'd)</u>
 - (D) Switched Access Examples

Example 4 – Terminating Switched Access-Tandem 3rd Party

- Tandem Switched Transport Termination- 3^{rd} Party charge = 1 termination x 9,000 min. x TST 3^{rd} Party rate
- Tandem Switching–3rd Party Rate = 9,000 min. x TS-3rd Party rate
- Direct Trunked Facility charge = 26 mi. x DTF rate
- Direct Trunked Termination charge = 2 terminations x DTT rate
- Shared Multiplexing-3rd Party Charge = 9,000 min. x 23 mi. x SM-3rd Party rate

<u>Example 5 – Originating Switched Access Frontier Telephone ILEC Company owns only the End Office.</u>

- Feature Group D Switched Access is ordered to End Office.
- End Office is owned by Frontier Telephone ILEC Companies (TC-A).
- Access Tandem is owned by a non-Frontier Telephone ILEC Company (TC-B)
- Assumptions:
- Direct Trunk Transport mileage = 26 mi.
- TC-A Tandem Switched Transport BP = 80%
- TC-B Tandem Switched Transport BP = 20%
- Tandem Switched Transport mileage = 23 mi.

- Telephone Company A charges are:

- End Office Charges = 9,000 min. x EO rate
- Tandem Switched Transport Facility charge = 9,000 min. x 23 mi. x TSF rate x 80%.
- Tandem Switched Transport Termination charge = 1 termination x 9.000 min. x TST rate.

Example 6 – Terminating Switched Access – Tandem 3rd Party

- Feature Group D Switched Access is ordered to End Office.
- End Office is owned by Frontier Telephone ILEC Companies (TC-A).
- Access Tandem is owned by a non-Frontier Telephone ILEC Company (TC-B)
- Telephone Company A charges are:

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Section 2 Original Sheet 30.4

ACCESS SERVICE

2. <u>General Regulations (Cont'd)</u>

2.4 <u>Payment Arrangements and Credit Allowances (Cont'd)</u>

(C)

(C)

- 2.4.8 <u>Ordering, Rating and Billing of Access Services Where More Than One Exchange</u> <u>Telephone Company is Involved (Cont'd)</u>
 - (D) Switched Access Examples

Example 6 – Terminating Switched Access – Tandem 3rd Party

- End Office Charges = 9,000 min. x EO rate
- Tandem Switched Transport Facility-3rd Party charge = 9,000 min. x 23 mi. x TSF-3rd Party rate x 80%.
- Tandem Switched Transport Termination- 3^{rd} Party charge = 1 termination x 9.000 min. x TST- 3^{rd} Party rate.

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FRONTIER COMMUNICATIONS OF PENNSYLVANIA, INC.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 Connections
 - 2.5.1 General

Equipment and Systems (i.e., terminal equipment, multiline terminating systems and communications systems) may be connected with access service (Switched and Special) furnished by the Telephone Company where such connection is made in accordance with the provisions specified in this section and in 2.1 preceding.

Equipment and systems subject to Part 68 of the F.C.C. Rules and Regulations (Registration Program) will be connected in accordance with 2.5.4 and 2.5.5 following. Equipment and systems not subject to the Registration Program will be connected in accordance with 2.5.7 and 2.5.8 following.

Connection may be made at the point of interface at the IC terminal location or the network interface at the End User location. The Telephone Company will furnish and maintain its service components in a manner suitable for the service being furnished. The Telephone Company is not responsible for:

- The through transmission of signals generated by IC or End User provided equipment and systems or for the quality of, or defects in, such transmission.
- The reception of signals by IC or End User provided equipment and systems.
- Address signaling performed by IC or End User provided equipment and systems.

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Section 2 Original Sheet 32

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.2 <u>Responsibilities of the IC or End User</u>

When and IC or End User connects equipment or systems to a service, it is responsible for the proper installation, operation and maintenance of the connected equipment or systems, and is also responsible for compliance with Part 68 or the F.C.C Rules and Regulations and/or minimum protection criteria as set forth in 2.5.10 following.

ICs or End Users are also responsible for complying with the regulations set forth in (A) and (B) following.

(A) <u>Compatibility with the Service</u>

The IC or End User is responsible for the compatibility of the equipment or system with the service to which it is connected, as set forth in (1) and (2) following. This responsibility applies at the initial installation and on a continuing basis for the duration of the connection.

(1) <u>Interface Information</u>

The IC or End User must specify the type of facility interface (including signaling) which is required. If data transmission is involved, the IC must also specify the type of data conditioning required.

The Telephone Company publishes Technical References which the IC or End User can obtain as an aid in selecting the appropriate service and feature arrangements.

(2) <u>Interference and Hazard</u>

The operating characteristics of the equipment or system connected to a service must not interfere with, or impair, any of the services offered by the Telephone company. In addition, they must not endanger the safety of Telephone Company employees or the public; damage or interfere with the functioning of Telephone Company equipment, or services; or otherwise injure the public in its use of these services.

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FRONTIER COMMUNICATIONS OF PENNSYLVANIA, INC.

Section 2 Original Sheet 33

ACCESS SERVICE

2. General Regulations (Cont'd)

- 2.5 <u>Connections</u> (Cont'd)
 - 2.5.2 <u>Responsibilities of the IC or End User</u> (Cont'd)
 - (B) <u>Maintenance of Service</u>

The IC is responsible for payment of Maintenance of Service Charges, as set forth in 13.3.1 following, when the conditions enumerated in that section are present.

(C) <u>Violation of Regulations</u>

If any of these connection regulations are violated, the Telephone Company will take action to protect its services and will promptly notify the IC or End User of the violation. After receiving such notice, the IC or End User must discontinue such use of the equipment and/or system, or correct the violation and confirm in writing by an authorized representative that the correction has been made. This confirmation must be received by the Telephone Company at the address shown at the bottom of Page 1 preceding within ten days after the IC or End User has received notification of the violation. If the IC or End User does not correct the violation, or does not provide the required written confirmation to the Telephone Company within ten days, service will be suspended until such time as the IC r End User does comply. Extraordinary procedures as set forth in 2.5.9 (B) following may be invoked, if warranted.

2.5.3 <u>Responsibilities of the Telephone Company</u>

In addition to furnishing and maintaining its service components to the specifications of the service ordered, the Telephone Company will:

- (A) Make technical information pertaining to service interfaces available (i.e., Technical Advisories, Technical Publications, etc.) As an aid to the IC or End User in selecting the appropriate interface.
- (B) Furnish any service interface information required by Part 68 of the FCC's Rules and Regulations (e.g., the number of ringers that may be supported by a particular service).
- (C) Test and maintain only that service or equipment which it provides if an interruption or impairment occurs on a service.

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Section 2 Original Sheet 34

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.3 <u>Responsibilities of the Telephone Company</u> (Cont'd)

- (D) Not be responsible to any party if a change in its Minimum Protection Criteria, service components or procedures affects any facilities, equipment or systems provided by others in any way, or requires their modification in order to be used. However, if such changes can be reasonably expected to materially affect the operating or transmission characteristics of the service or render any IC or End User provided equipment or system incompatible with the service, the Telephone Company will make a reasonable effort to notify the IC or End User in writing of the proposed change. A reasonable interval will be allowed before the change is implemented to enable the IC or End User to maintain compatibility of its equipment or system with the service.
- 2.5.4 Connections of Equipment and Systems Subject to the Registration Program

All terminal equipment, protective circuitry and multiline terminating systems that are registered may be connected at the IC or End Users premises to Category I or III access services as specified in B and C following.

(A) <u>Registration Program</u>

The Registration Program was established by the F.C.C. so that terminal equipment, protective circuitry and multiline terminating systems could be registered in accordance with prescribed rules to demonstrate they will not cause harm to Telephone Company services.

(For simplicity, such equipment, protective circuitry or system will be referred to as "registered equipment" in this section). The FCC's regulations regarding the Registration Program are contained in Part 68 of the FCC's Rules and Regulations (hereafter referred to as the Registration Program). If equipment is registered in accordance with the registration Program, then it may be connected to those access services within the scope of the Registration Program without the requirement for protective circuitry.

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Section 2 Original Sheet 35

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (A) <u>Registration Program</u> (Cont'd)

The Registration Program also includes a "grandfathered" provision for terminal equipment, protective circuitry and multiline terminating systems that are directly connected to those access services within the scope of the registration Program. (For simplicity, such equipment, protective circuitry or system will be referred to as "grandfathered equipment". This provision means that equipment, protective circuitry or system which was lawfully connected to a service without a Telephone Company provided connecting arrangement as of certain dates is considered grandfathered. (See 2.5.5 following.)

(B) <u>Connections To Access Service</u>

Registered equipment may be directly connected using Telephone company provided standard jacks, at eh IC terminal location or End User premises. Special Access Services have been classified as Category I, II or III. The category is determined by the type of service and the type of equipment connected to it. There are specific regulations for each service category which must be complied with when connecting equipment to those services. Regulations governing Category I and III special access services are set forth in (C) following. Regulations governing Category II access services are set forth in 2.5.7 following.

(C) <u>Conditions Governing the Connection of Registered Equipment</u>

Registered equipment may be directly connected at the IC terminal location or the End User's premises, subject to the Registration Program, provided that:

(1) All combinations of registered equipment and associated nonregistered terminal equipment (including but not limited to wiring) are installed, operated and maintained so that the rules of the Registration Program are continually satisfied.

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Section 2 Original Sheet 36

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (C) <u>Conditions Governing the Connection of Registered Equipment</u> (Cont'd)
 - (2) The following notification requirements are met:
 - (a) Before connecting the registered equipment to a service, the IC or End User must verify the following information and furnish it to the Telephone company upon request or as required:
 - Registration Number.
 - Ringer Equivalence and the type of ringer.
 - Type of Telephone Company provided standard jack required for the connection.
 - Access services to which the registered equipment will be connected.
 - Information concerning the premises wiring associated with multiline terminating systems (when required).
 - OPS class (i.e., Type A, B or C port) for which the equipment is registered (when an off-premises station service is involved).
 - Appropriate facility interface information for a Category III access service.
 - (b) The IC or End User must also notify the Telephone company when the registered equipment is permanently disconnected.
 - (3) The Ringer Equivalence of the equipment or system in combination with the total Ringer Equivalence of other equipment connected to the same access service does not exceed the allowable maximum of five or as otherwise determined by the Telephone Company.
 - (4) The ringer type is designated by the Telephone Company as suitable for that particular access service.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)

(C) <u>Conditions Governing the Connection of Registered Equipment</u> (Cont'd)

(5) All connections of registered equipment or systems to access services furnished by the Telephone Company are made through Telephone Company provided standard registration program jacks, as provided for in 13.3.4 following except that (a) registered multiline terminating systems may be connected through jacks wired in other than a standard manner when agreed to by the Telephone Company, or (b) IC or End User provided equipment and systems which involve hazardous or inaccessible locations may be directly connected to access service furnished by the Telephone Company when those locations are authorized to be connected to local exchange service under tariffs filed with appropriate regulatory agencies.

(D) <u>Premises Wiring</u>

Premises wiring is used to connect separately housed equipment entities or system components to one another. Premises wiring can be used in an equipment room; to connect stations together; or to connect the stations to common equipment. Premises wiring in the nature of an equipment cord is also used to connect equipment entities or system components to the point of interface at the IC terminal location or the network interface at the End User location.

Premises wiring rules are specified in Part 68 of the F.C.C.'s Rules and Regulations. A registered multiline terminating system may be directly connected to access service provided its premises wiring conforms to one of the following classifications and to Part 68 of the F.C.C.'s Rules and Regulations.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)

(D) <u>Premises Wiring</u> (Cont'd)

(1) <u>Fully-Protected Premises Wiring</u>

Fully-Protected Premises Wiring is premises wiring which is:

- (a) No greater than 25 feet in length (measured linearly between the points where it leaves equipment or connector housings) and registered as a component of and supplied to the user with the registered equipment or protective circuitry with which it is to be used.
- (b) A cord which complies with (a) preceding and which is extended once by a registered connectorized extension cord. Extension cords may not be used as a substitute for wiring which for safety reasons should be affixed to or embedded in a building's structure.
- (c) Wiring located in an equipment room with restricted access, provided that this wiring remains exposed for inspection and is not concealed or embedded in the building's structure, and that it conforms to Part 68 of the F.C.C.'s Rules and Regulations.
- (d) Electrically behind registered equipment, system components or protective circuitry which assure that electrical contact between the wiring and commercial power wiring or earth ground will not result in hazardous voltages or excessive longitudinal imbalance at the access service interface.
- (2) <u>Partially-Protected Premises Wiring Requiring Acceptance Testing for Imbalance</u>

Premises wiring which is electrically behind registered equipment, system components or circuitry which assure

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)

(D) <u>Premises Wiring</u> (Cont'd)

(2) <u>Partially-Protected Premises Wiring Requiring Acceptance Testing for Imbalance</u> (Cont'd)

That electrical contact between the wiring and commercial power wiring will not result in hazardous voltages at the Special Access Service interface.

(3) <u>Unprotected Premises Wiring</u>

Unprotected Premises Wiring is all other premises wiring.

(4) <u>Premises Wiring Used with Telephone Company Provided Multiline Terminating</u> <u>Systems</u>

When the Telephone Company installs and maintains all premises wiring used with its multiline terminating systems, it will assume the responsibility to assure that the regulations pertaining to premises wiring under the Registration Program are continually met.

(5) <u>Premises Wiring Used with IC or End User Provided Multiline Terminating</u> <u>Systems</u>

When an IC or End User provided multiline terminating system uses Fully Protected Premises Wiring (as defined in the Registration Program) no further action regarding wiring is required. However, when an IC or End User elects to install, connect, reconfigure or remove other than Fully Protected Premises Wiring, the appropriate institutional controls specified in the Registration Program must be followed. These controls are not applicable when the preceding activities are accomplished functionally using a fully protected cross-connect panel or when the entire multiline terminating system is removed.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (D) <u>Premises Wiring</u> (Cont'd)
 - (5) <u>Premises Wiring Used with IC or End User Provided Multiline Terminating</u> <u>Systems</u> (Cont'd)

(a) Institutional Controls

Institutional controls require that:

- I At least ten days advance notice must be given to the Telephone Company in the form of a notarized affidavit before placement and connection of the premises wiring. (This time period may be changed by agreement of the Telephone Company and the installation supervisor.) A copy of the affidavit must also be maintained at the IC's or End User's premises.
- II If the premises wiring being installed is classified as unprotected, the work must be supervised by an installation supervisor who has been trained by the equipment manufacturer, received written authority to install their equipment and has at least six months experience in this type of work. A licensed professional engineer (as specified in Part 68 of the F.C.C.'s Rules and Regulations) may also supervise the work but does not have to meet these requirements. In either of the above cases the Telephone Company must be provided with a notarized affidavit.
- III If the premises wiring being installed is classified as partially protected, the work must be supervised by an installation supervisor who has at least six months experience in this type of work. However, the

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (D) <u>Premises Wiring</u> (Cont'd)
 - (5) <u>Premises Wiring Used with IC or End User Provided Multiline Terminating</u> <u>Systems</u> (Cont'd)
 - (a) <u>Institutional Controls</u> (Cont'd)
 - III (Cont'd)

Supervisor is not required to be trained by or have written authority from the equipment manufacturer. A licensed professional engineer may also supervise the work but does not have to meet these requirements. In either of the above cases the Telephone Company must be provided with a notarized affidavit.

- IV For other than fully protected multiline terminating systems, an installation supervisor or licensed professional engineer may submit an application for a blanket affidavit number to the Telephone Company(s) within each state in lieu of individual affidavits. This blanket affidavit number will be assigned on a yearly basis by each Telephone Company. Prior to each installation thereafter, this blanket affidavit number must be submitted to the Telephone Company. The blanket affidavit number only covers that equipment which has been supported by documentation to the Telephone Company.
- (b) <u>Extraordinary Procedures</u>

The Telephone Company may invoke the extraordinary procedures as set forth in Part 68 of the F.C.C. Rules and Regulations for Premises Wiring when one or more of the following conditions are present:

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)

(D) <u>Premises Wiring</u> (Cont'd)

- (5) <u>Premises Wiring Used with IC or End User Provided Multiline Terminating</u> <u>Systems</u> (Cont'd)
 - (b) <u>Extraordinary Procedures</u> (Cont'd)
 - Information provided in the aforementioned affidavit gives reason to believe that a violation of the registration Program is likely.
 - A failure has occurred during acceptance testing for longitudinal imbalance.
 - Harm has occurred, and there is reason to believe that this harm was a result of wiring operations performed under the Registration Program.

(E) <u>Connection of IC or End User Provided Test Equipment</u>

- (1) <u>Direct Electrical Connection</u>
 - (a) IC or End User provided test equipment may be connected to an Access Service (Category I or III) at the IC's or End User's premises through registered or gandfathered terminal equipment, multiline terminating system or protective circuitry which either singularly or in combination assures that all of the requirements of the Registration Program (total protection) are met at the Access Service interface.

Connection of IC or End User provided test equipment that does not provide protection against excessive signal power must be made in accordance with the Interim Program for the connection of IC or End User Provided Test Equipment.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)

(E) <u>Connection of IC or End User Provided Test Equipment</u> (Cont'd)

- (1) <u>Direct Electrical Connection</u> (Cont'd)
 - (b) IC or End User provided test equipment may be connected to a Category II Access Service at the IC's or End User's premises on a direct electrical basis, or through terminal equipment or multiline terminating system, provided the test equipment meets the specified Minimum Protection Criteria at the point of interface or network interface.
- (2) Interim Program* for the Connection of IC or End User Provided Test Equipment

IC or End User provided test equipment may also be connected to Access Service (Category I or III) at the IC's or End User's premises either directly at the point of interface or network interface, or through a multiline terminating system, terminal equipment or protective circuitry which does not provide protection for signal power control, if the connection is made in accordance with the following Interim Program:

- (a) The test equipment is limited to transmission signal power generating and/or detection devices, or similar devices, utilized by the IC or End User for the detection and/or isolation of a communications service fault.
- * The Interim Program for the Connection of IC or End User Provided Test Equipment, unless sooner canceled or changed, will remain in effect until a permanent program is adopted by the F.C.C. a result of Part 68 Rulemaking in CC Docket No. 81-216, 85 F.C.C.2d 868 (1981).

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ACCESS SERVICE

- 2. General Regulations
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (E) <u>Connection of IC or End User Provided Test Equipment</u> (Cont'd)
 - (2) <u>Interim Program* for the Connection of IC or End User Provided Test Equipment</u> (Cont'd)
 - (b) The test equipment is of a type that was lawfully directly connected to a service as of March 6, 1981. Such test equipment may remain connected, be moved or reconnected during the life of the test equipment unless it is subsequently modified.
 - (c) Direct connections of IC or End User provided test equipment or connections through Telephone Company provided terminal equipment or a multiline terminating system must be made through Telephone company provided jacks or as otherwise authorized by the Telephone Company.
 - (d) The test equipment must be operated in accordance with the Institutional Procedures for Control of Signal Power set forth in 2.5.9 following. Automatic test equipment utilizing responders (or their functional equivalent) must be installed, operated and maintained so as to comply with the signal power specifications in Compatibility Bulletin 106, Issue 2, and Technical reference PUB 60101.
 - (e) The IC or End User must notify the Telephone Company of each service at each premises to which the IC or End User provided test equipment will be connected in

* The Interim Program for the Connection of IC or End User Provided Test Equipment, unless sooner canceled or changed, will remain in effect until a permanent program is adopted by the F.C.C. as a result of Part 68 Rulemaking in CC Docket No. 81-216, 85 F.C.C.2d 868 (1981).

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Section 2 Original Sheet 45

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.4 Connections of Equipment and Systems Subject to the Registration Program (Cont'd)
 - (E) <u>Connection of IC or End User Provided Test Equipment</u> (Cont'd)
 - (2) <u>Interim Program* for the Connection of IC or End User Provided Test Equipment</u> (Cont'd)
 - (e) (Cont'd)

advance of the initial connection. The IC or End User must also notify the Telephone Company when such test equipment is permanently disconnected at each premises.

(f) The IC or End User provided test equipment, either singularly or in combination with terminal equipment, multiline terminating system or protective circuitry(including but not limited to wiring, (may not cause electrical hazards to Telephone Company equipment, malfunction of Telephone Company billing equipment, or degradation of service to persons other than the user of the test equipment or the user's calling or called party.

* The Interim Program for the Connection of IC or End User Provided Test Equipment, unless sooner canceled or changed, will remain in effect until a permanent program is adopted by the F.C.C. as a result of Part 68 Rulemaking in CC Docket No. 81-216, 85 F.C.C.2d 868 (1981).

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u>

- (A) <u>Direct Connections</u>
 - (1) <u>Grandfathered Terminal Equipment, Multiline Terminating Systems and</u> Protective Circuitry Connected to Category I Access Service

Grandfathered equipment may remain connected or be moved and reconnected to Category I access services for the life of the equipment without registration and may be modified only in accordance with Part 68 of the F.C.C.'s Rules and Regulations, if:

- (a) the IC or End User provides the following information to the Telephone Company prior to reconnecting the grandfathered IC or End User provided equipment or system:
 - Manufacturer's Name
 - Model No.
 - Type Equipment or System
 - Description of the Interface
 - Access service(s) to which the equipment or system will be connected
 - Information concerning the premises wiring associated with a multiline terminating system (when required)
- (b) all connections are made through Telephone Company provided standard registration program jacks unless the Telephone Company agrees to an alternate type of connection;

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> Services (Cont'd)
 - (A) <u>Direct Connections</u> (Cont'd)
 - (1) <u>Grandfathered Terminal Equipment, Multiline Terminating Systems and</u> Protective Circuitry Connected to Category I Access Service (Cont'd)
 - (c) all such connections comply with the minimum protection criteria set forth in 2.5.10 following.
 - (d) no changes are made to equipment or systems so connected except by the manufacturer thereof, or a duly authorized agent of the manufacturer.
 - (e) the IC or End User must notify the Telephone Company when the grandfathered equipment or system is permanently disconnected.
 - (f) the premises wiring, associated with grandfathered multiline terminating system which was installed after June 1, 1978 and connected to Category I access services is moved and reconnected, conforms to Part 68 of the F.C.C.'s Rules and Regulations.

At the IC's or End User's option grandfathered equipment or systems may be connected to Category II access services.

(2) <u>Grandfathered Terminal Equipment, Multiline Terminating Systems and</u> Protective Circuitry Connected to Category III Access Services

Grandfathered equipment may be connected to Category III access services in accordance with (1) (a) through (e) preceding and the following:

(a) Equipment directly connected to Category III access services on or before April 30, 1980 is grandfathered and may remain connected and be moved and reconnected for the life of the equipment without registration and may be modified only in accordance with Part 68 of the F.C.C.'s Rules and Regulations.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u> (Cont'd)
 - (A) <u>Direct Connections</u> (Cont'd)
 - (2) <u>Grandfathered Terminal Equipment, Multiline Terminating Systems and</u> <u>Protective Circuitry Connected to Category III Access Services</u> (Cont'd)
 - (a) (Cont'd)

Premises wiring associated with grandfathered multiline terminating systems that are moved and reconnected must comply with Part 68 of the F.C.C.'s Rules and Regulations.

- (b) When an IC or End User provided multiline terminating systems are connected to Category III access services the IC or End User must specify the appropriate access service interface information. In addition, when the access service is arranged for off-premises station operation, the IC or End User must specify the OPS class of the equipment as specified in Part 68 of the F.C.C.'s Rules and Regulations (i.e., Type A, B. or C port) or the range of the station port in ohms.
- (3) Additions to Grandfathered Multiline Terminating Systems

Additions to grandfathered multiline terminating systems, may be made without registration of any additional equipment involved, if:

(a) equipment so added to Category I access service is being reconnected, i.e., was previously directly connected to the telecommunications network or Category I access services prior to January 1, 1980, or

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u> (Cont'd)
 - (A) <u>Direct Connections</u> (Cont'd)
 - (3) Additions to Grandfathered Multiline Terminating Systems (Cont'd)
 - (b) equipment so added to Category III access service was (1) connected prior to May 1, 1983, and is of a type directly connected to Category III access services as of April 30, 1980, or (2) being reconnected, i.e., was previously connected to Category III access services prior to May 1, 1983.
 - (c) any premises wiring added conforms to Part 68 of the F.C.C.'s Rules and Regulations.
 - (B) <u>Connections through Grandfathered Protective Connecting Arrangements Provided by the</u> <u>Telephone Company</u>

Provided by the Telephone Company

(1) <u>General</u>

When IC or End User provided terminal equipment or multiline terminating systems that are not registered or grandfathered are connected to Category I or Category III access services, protection is required. The protection can be provided through registered or grandfathered protective circuitry or through Telephone Company provided Protective Connecting Arrangements as set forth in 13.3.7 following.

Grandfathered connecting arrangements will be provided by the Telephone Company to connect IC or End User provided terminal equipment or multiline terminating systems to Category I and Category III access services under the following conditions:

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u> (Cont'd)
 - (B) <u>Connections Through Grandfathered Connecting Arrangements Provided by the</u> <u>Telephone Company</u> (Cont'd)
 - (1) <u>General</u> (Cont'd)
 - (a) Grandfathered connecting arrangements used to move and reconnect IC or End User provided terminal equipment or multiline terminating systems will continue to be provided by the Telephone Company, subject to their availability.
 - (b) Network control signaling is performed by equipment furnished, installed and maintained by the Telephone company, except that IC or End User provided tone-type address signaling is permissible through a Telephone Company-provided connecting arrangement and signaling functions may be performed by IC or End User provided Conforming Answering Devices.
 - (c) The IC or End User provided equipment or system must comply with the minimum protection criteria as set forth in 2.5.10 following.
 - (d) When used for data transmission, the IC or End User furnishes the equipment which performs the function of data signaling conditioning.

When the IC or End User provided terminal equipment is used for both voice and data communications, the same connecting arrangement may be used.

(2) <u>Category I</u>

Telephone Company-provided grandfathered connecting arrangements will continue to be provided to reconnect IC or End User provided terminal equipment or multiline terminating systems which were previously connected to Category I access services through such connecting

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u> (Cont'd)
 - (B) <u>Connections through Grandfathered Connecting Arrangements Provided by the Telephone</u> <u>Company</u> (Cont'd)
 - (2) <u>Category I</u> (Cont'd)

Arrangements prior to the respective register only dates. (The register only dates are July 1, 1979, for terminal equipment, and January 1, 1980, for multiline terminating systems.) In addition, connecting arrangements which were installed prior to the respective register only dates, may remain connected for the life of the equipment and may be moved and reconnected.

(3) <u>Category III</u>

Connecting arrangements will be provided by the Telephone Company to connect IC or End User provided terminal equipment or multiline terminating systems to Category III access services under the following conditions:

- (a) After May 1, 1983, Telephone Company-provided connecting arrangements will only be provided to reconnect IC or End User provided terminal equipment or multiline terminating systems which were previously connected, in accordance with Telephone Company tariffs, to Category III access services through connecting arrangements prior to May 1, 1983.
- (b) Connections of IC or End User provided terminal equipment or multiline terminating systems made through Telephone Company-provided connecting arrangements in accordance with (a) preceding may remain connected and may be moved and reconnected for the life of the equipment and may be modified only in accordance with Part 68 of the F.C.C.'s Rules and

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- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.5 <u>Connections of Grandfathered Equipment and Systems to Category I or Category III Access</u> <u>Services</u> (Cont'd)
 - (B) <u>Connections through Grandfathered Connecting Arrangements Provided by the Telephone</u> <u>Company</u> (Cont'd)
 - (3) <u>Category III</u> (Cont'd)
 - (b) (Cont'd)

Regulations. Grandfathered connecting arrangements used for such moves and reconnections will continue to be provided by the Telephone Company subject to their availability.

In addition, prior to April 30, 1980, when terminal equipment or multiline terminating systems were connected to Category III access service which was not arranged for connection to the telecommunications network, the Telephone Company provided arrangements to protect against hazardous voltages, longitudinal imbalance and signal power overload as set forth in 2.5.7 (B) following.

The Telephone Company provided that protection on Category III voice grade access services until May 1, 1983, provided that:

- The terminal equipment or multiline terminating system is of a type which was so connected prior to April 30, 1980.
- The terminal equipment or multiline terminating system is not on the F.C.C.'s grandfather eligibility list.
 - The Category III access service is not arranged for connection to the telecommunications network.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.6 <u>Connections Involving National Defense and Security</u>

In certain cases involving national defense and security the Registration Program permits the connection of nonregistered terminal equipment or multiline terminating systems to an Access Service, if the Secretary of Defense or the head of any other Federal Government Department involved in national defense or security, the head of any other governmental department (having requisite F.C.C. approval), or their authorized representative certifies in writing to the Telephone Company that:

- (A) the connection is required in the interest of national defense and security;
- (B) the equipment to be connected either complies with the technical requirements of the Registration Program or will not cause harm to the telecommunications network or Telephone Company employees; and
- (C) the installation work is supervised by a person who meets the qualifications stated in the Registration Program.
- 2.5.7 <u>Connections of Terminal Equipment or Multiline Terminating Systems to Category II Access</u> <u>Services</u>
 - (A) <u>General</u>

Category II access services are those services which are not covered by Part 68 of the F.C.C.'s Rules and Regulations and are therefore not classified as Category I or III. Connections to Category II access services are set forth in (B) and (C) following.

(B) <u>Connections to Category II Access Services</u>

IC or End User provided terminal equipment or IC or End User provided multiline terminating systems may be directly connected without Telephone Company provided connecting arrangements to a Category II access service which is not

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.7 <u>Connections of Terminal Equipment or Multiline Terminating Systems to Category II Access</u> <u>Services</u> (Cont'd)
 - (B) <u>Connections to Category II Access Services</u> (Cont'd)

arranged for connection to the telecommunications network. The connection in such cases shall be to the Service Terminating Arrangement.

The Telephone Company will equip those voice grade Category II access services with the necessary arrangements on the IC or End User premises to protect the telecommunications network from hazardous voltages and the harmful effects of longitudinal imbalance. In addition, the Telephone Company will make the necessary arrangements in its central office to protect against signal power overload resulting from violations of the minimum protection criteria specified in paragraph 2.5.10 following. Where there is evidence that IC or End User provided terminal equipment or IC or End User provided systems violate the specified minimum protection criteria, signal level protection may be provided by the Telephone Company on the IC's or End User's premises. This regulation applies to all such voice grade access service except those placed in service on or after February 15, 1973 where the IC or End User provided terminal equipment or system applies ringing below 300 Hertz and to the voice grade services listed in (C) following.

(C) <u>Minimum Protection Criteria</u>

The minimum protection criteria as set forth in 2.5.10 following applies to the connection of terminal equipment, multiline terminating systems and communications systems connected to Category II access service.

At this time, minimum protection criteria have not been specified for the following services due to the nature of the service and/or the type of channels and equipment used. However, the Telephone Company reserves the right to specify such criteria if required.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.7 <u>Connections of Terminal Equipment or Multiline Terminating Systems to Category II Access</u> <u>Services</u> (Cont'd)
 - (C) <u>Minimum Protection Criteria</u> (Cont'd)
 - Narrowband Access Service
 - Voice Grade Secure Communications (Type I, II, III, IV)
 - Voice Grade 2
 - Program Audio
 - Telephoto
 - Remote operation of Mobile Radiotelephone and Radiotelegraph
 - Wideband Digital
 - Wideband Secure Communications (Type I, II, III)
 - 2.5.8 <u>Connections of Access Service to Communications Systems Not Subject to Part 68 or the F.C.C.'s</u> <u>Rules and Regulations</u>
 - (A) When an IC or End User provided communications system is connected to Access Service that is arranged for connection to the telecommunications network, the connection may be made through:
 - (1) an arrangement provided by the Telephone Company, or
 - (2) registered or grandfathered terminal equipment, multiline terminating system, or protective circuitry which, either singularly or in combination, assures that all the requirements of the registration Program (including signal power) are met at the access interface.

In lieu of these requirements for total hardware protection, an optional, alternative method, as set forth in 2.5.9 following, is available for the control of signal power only.

- (B) Where the Access Service is arranged for connection to the common user switching equipment located in a Telephone Company central office, the connection must be:
 - (1) through switching equipment, or

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.8 <u>Connections of Access Service to Communications Systems Not Subject to Part 68 of the F.C.C.'s</u> <u>Rules and Regulations</u> (Cont'd)
 - (B) (Cont'd)
 - (2) to an IC or End User provided communications system that is arranged to promptly return the access service to an idle (on-hook) state should the communications system fail. In addition, the IC or End User must notify the Telephone Company when the communications system fails.
 - (C) Minimum Protection Criteria as set forth in 2.5.10 following must be complied with when the connection is made through equipment or systems that are not registered.

2.5.9 Institutional Procedures for Control of Signal Power

(A) <u>Conditions</u>

When IC or End User provided communications systems or test equipment are connected to Access Services (including 1.544 Mbps) that are arranged for telecommunications network access and the connection is through (1) a Telephone company provided connecting arrangement, or (2) registered or grandfathered terminal equipment, multiline terminating system or protective circuitry which assures that all of the requirements of the Registration Program are met at the access service interface, no further action is required. However, when an IC or End User elects to connect a communications system or test equipment to access service and the registered or grandfathered equipment, system or protective circuitry through which the connection is made does not provide protection for control of signal power, the IC or End User must comply with the following institutional procedures:

(1) The operator/maintainer responsible for the establishment, maintenance and adjustment of the voice frequency signal power present at the Access Service interface must be trained to perform these functions by successfully completing one of the following:

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ACCESS SERVICE

- 2. <u>General Regulations</u> (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.9 Institutional Procedures for Control of Signal Power (Cont'd)
 - (A) <u>Conditions</u> (Cont'd)
 - (1) (Cont'd)
 - (a) a training course provided by the manufacturer of the equipment to control voice frequency signal power; or
 - (b) a training course provided by the IC or End User authorized representative, who has responsibility for the entire communications system, multiplexor, or test equipment, using training materials and instructions provided by the manufacturer of the equipment used to control the voice frequency signal power; or
 - (c) an independent training course (e.g., trade school or technical institution) recognized by the manufacturer of the equipment used to control the voice frequency signal power; or
 - (d) in lieu of the preceding training requirements, the operator/maintainer is under the control of a supervisor trained in accordance with (a) through (c) preceding.

Upon request, the IC or End User is required to provide the proper documentation to demonstrate compliance with the requirements set forth in (1) preceding.

- (2) At least ten days advance notice must be given to the Telephone Company in the form of a notarized affidavit before the initial connection of the IC or End User provided communications system or test equipment. A copy of the affidavit must also be maintained at the IC's End User's premises. The affidavit must also be maintained at the IC's End User's premises. The affidavit must contain the following information:
 - (a) The full name, business address, business telephone number and signature of the IC or End User or authorized representative who has responsibility for the operation and maintenance of the communications system or test equipment.

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ACCESS SERVICE

- 2. <u>General Regulations</u> (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.9 Institutional Procedures for Control of Signal Power (Cont'd)
 - (A) <u>Conditions</u> (Cont'd)
 - (2) (Cont'd)
 - (b) The line(s) to which the communications system or test equipment will be connected or arranged to be connected.
 - (c) A statement that all operations associated with the establishment, maintenance and adjustment of the signal power present at the interface will comply with the Registration Program.
 - (d) A statement describing how each operator and/or maintainer of the communications system or test equipment will meet and continue to meet the training requirements for persons installing, adjusting or maintaining such equipment or systems.
 - (3) The IC or End User provided communications systems connected to 1.544 Mbps facilities must be installed, operated and maintained so that the 3-second average, rms (root mean square) equivalent analog signal power (within the frequency range of 200-4000 Hz) for each subrate channel at the circuit interface does not exceed -12dBm.

(B) <u>Extraordinary Procedures</u>

- (1) The Telephone Company may invoke extraordinary procedures to protect the service if one or more of the following conditions are present:
 - Information provided in the affidavit gives reason to believe that a violation of the registration Program or the Institutional Procedures for Control of Signal Power is likely.
 - Harm has occurred and there is reason to believe this harm was a result of operations performed under the Institutional Procedures for Control of Signal Power.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.9 Institutional Procedures for Control of Signal Power (Cont'd)
 - (B) <u>Extraordinary Procedures</u> (Cont'd)
 - (2) The extraordinary procedures, which can be invoked by the Telephone Company, include:
 - Requiring the use of protective apparatus which either protects solely against signal power or which assures that all of the requirements of the Registration Program are met at the point of interface or the network interface. This protective apparatus may be provided by the Telephone Company, the IC or End User.
 - Disconnecting Service.
 - (3) A charge equal to the Maintenance of Service charge as set forth in Section 13.3.1 following will apply when:
 - It is necessary to send a repairperson to the premises where the connection is made because a condition set forth in (1) preceding exists, and
 - A failure to comply with the Registration Program or the Institutional Procedures for Control of Signal Power is disclosed.

2.5.10 Minimum Protection Criteria for Direct Electrical Connections

- (A) To prevent excessive noise and crosstalk in the telecommunications network, it is necessary that the power of the signal at the central office not exceed 12dB below one milliwatt when averaged over any three-second interval. To insure that this limit is not exceeded, the power of the signal which may be applied by the IC's or End User's facilities to the Telephone Company interface located at the IC or End User premises will be specified for each IC or End User premises, but in no case shall it exceed one milliwatt.
- (B) To protect other services from interference at frequencies which are above the band of service provided and to insure that the input to the service does not exceed the limits indicated, the Telephone Company will specify the acceptable signal power in the following bands to be applied by the equipment at the point of interface or network interface:

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- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.10 Minimum Protection Criteria for Direct Electrical Connections (Cont'd)
 - (B) (Cont'd)
 - (1) <u>Metallic voltage</u>
 - (a) 4 kHz to 270 kHz

Center Frequency (f) of 8 kHz Band	Maximum Voltage in <u>All 8 kHz Bands</u>	Metallic Terminating Impedance
8 kHz to 12 kHz	-(6.4+12.6 log f) dBV	300 ohms
12 kHz to 90 kHz	(23 - 40 log f) dBV	135 ohms
90 kHz to 266 kHz	- 55 dBV	135 ohms

(b) The root-mean-square (rms) value of the metallic voltage components in the frequency range of 270 kHz to 6 MHz shall, averaged over 2 microseconds, not exceed -15 dBV. This limitation applies with a metallic termination having an impedance of 135 ohms.

(2) <u>Longitudinal Voltage</u>

(a) 4 kHz to 270 kHz

Center Frequency (f)	Maximum Voltage	Terminating
of 8 kHz Band	in All 8 kHz bands	Impedance
8 kHz to 12 kHz	-(18.4+20 log f) dBV	500 ohms
12 kHz to 42 kHz	(3 - 40 log f) dBV	90 ohms
42 kHz to 266 kHz	- 62 dB	90 ohms

(b) The root-mean-square (rms) value of the longitudinal voltage components in the frequency range of 270 kHz to 6 MHz shall, averaged over 2 microseconds, not exceed -30 dBV. This limitation applies with a longitudinal termination having an impedance of 90 ohms.

 $dBV = 20 \log_{10}$ voltage in volts

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.10 Minimum Protection Criteria for Direct Electrical Connections (Cont'd)

- (C) To prevent the interruption of disconnection of a call, or interference with network control signaling, it is necessary that the signal applied by the IC's or End User's facilities to the Telephone Company interface located at the IC or End User premises at no time have energy solely in the 2450 to 2750 Hz band. If signal power is in the 2450 to 2750 Hz band, it must not exceed the power present at the same time in the 800 to 2450 Hz band.
- (D) Where there is no connection to the telecommunications network, and the signal applied by the IC's or End User's facilities has energy solely in the 2675 to 2750 Hz band, the IC or End User shall coordinate the application of that signal with the Telephone Company.
- (E) Where IC's or End User's facilities apply signals that have components in the frequency spectrum below 300 Hz, excluding ringing signals, the currents and voltages (including all harmonics and spurious signals) at the interface shall not exceed the following limits:
 - (1) The maximum root-mean-square (rms) value, including dc and ac components, of the current per conductor will be specified by the Telephone Company, but in no case will the specified value exceed 0.35 ampere.
 - (2) The magnitude of the peak of the conductor to ground voltage shall not exceed 70 volts.
 - (3) The conductor to conductor voltage shall be such that the conductor to ground voltage limit set forth in (2) preceding is not exceeded. If the signal source is not grounded, the voltage limit in (2) above applies to the conductor to conductor voltage.
 - (4) The total weighted rms voltage within the band from 50 Hz to 300 Hz shall not exceed 100 volts. The total weighted rms voltage is the square root of the sum of the products of the weighting factors for the individual frequency components times the square of the

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.10 Minimum Protection Criteria for Direct Electrical Connections (Cont'd)
 - (E) (Cont'd)
 - (4) (Cont'd)

rms voltage of the individual frequency components. The weighting factors are as follows:

for frequencies between	weighting factor
50 Hz and 100 Hz	$f^{2}/10^{4}$
100 Hz and 300 Hz	$f^{3.3}/10^{6.6}$

where f is the numerical value of the frequency, in Hz, of the frequency component being weighted.

- (F) Where IC or End User provided data terminal equipment is connected to special access services with data capability and used for baseband data transmission the following limits shall not be exceeded. However, at specific bit rates of 2.4, 4.8 or 9.6 kbps, higher levels of transmission are permissible if a bipolar signal format specified by the Telephone Company is met. The bipolar signal format is necessary to limit intractable interference. The telephone Company will provide the bipolar specifications upon request.
 - (1) The maximum root-mean-square (rms) value, including dc and ac components, of the current per conductor will not exceed 0.15 ampere.
 - (2) The magnitude of the peak of the conductor to ground voltage shall not exceed 70 volts.
 - (3) The conductor to conductor voltage shall be such that the conductor to ground voltage limit in (b) preceding is not exceeded. If the signal source is not grounded, the voltage limit in (b) preceding applies to the conductor to conductor voltage.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)

2.5.10 Minimum Protection Criteria for Direct Electrical Connections (Cont'd)

- (F) (Cont'd)
 - (4) The total weighted rms voltage within the band from 10 Hz to 10,000 Hz shall not exceed 100 volts. The total weighted rms voltage is the square root of the sum of the products of the weighting factors for the individual frequency components times the square of the rms voltage of the individual frequency components. The weighting factors are as indicated:

for frequencies between	weighting factor
10 Hz and 100 Hz	$f^2/10^4$
1000 Hz and 10,000 Hz	$f^{3.3}/10^{6/6}$

where f is the numerical value of the frequency, in Hertz, of the frequency component being weighted.

- (5) The total voltage within the frequency band from 10,000 Hz to 25,000 Hz shall not exceed 0.05 volts rms.
- (6) The total voltage within the frequency band from 25,000 Hz to 40,000 Hz shall not exceed 0.012 volts rms.
- (7) The total voltage within the frequency band above 40,000 Hertz shall not exceed 0.0025 volts rms.
- (8) The foregoing signal level restrictions are based upon multiple disturbers being present in a given cable. When several services employing baseband data transmission are keyed simultaneously, the signal limits stipulated in (4) through (7) preceding must be reduced by multiplying the voltage signal limits by a factor of 1/N, where N is the expected number of transitions occurring simultaneously.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.11 <u>Recording of Two-way Telephone Conversations</u>

The F.C.C. has adopted regulations which apply to the recording of two-way telephone conversations on the telecommunications network. These regulations also apply to Switched Access Service.

(A) Direct Electrical Connection

IC or End User provided voice recording equipment may be used to record two-way telephone conversations if a distinctive recorder tone is repeated at intervals of approximately fifteen seconds. This distinctive recorder tone is required when the recording equipment is in use and is electrically connected with services of the Telephone Company. The distinctive recorder tone can be provided as part of (1) the recording equipment, (2) the IC or End User provided registered or grandfathered protective circuitry, or (3) a grandfathered connecting arrangement provided by the Telephone Company.

The IC or End User provided voice recording equipment must be arranged so that it can be connected or disconnected (or switched on or off) at will.

(Filed in compliance with an Order of the F.C.C. adopted May 20, 1948, in Docket No. 6787).

(B) Exceptions to the Requirement for the Recorder Tone

The distinctive recorder tone is not required:

- (1) When used by an F.C.C. licensed broadcast station customer for recording of two-way conversation solely for broadcast over the air. (Filed in compliance with an Order of the F.C.C. adopted December 13, 1972.)
- (2) When used by the United States Secret Service of the Department of the Treasury for recording two-way telephone conversations which concern the safety and security of the President of the United States, members of the President's immediate family, or the White House and its grounds. (Filed in compliance with an Order of the F.C.C. adopted January 22, 1975.)

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.11 <u>Recording of Two-way Telephone Conversations</u> (Cont'd)
 - (B) <u>Exceptions to the Requirement for the Recorder Tone</u> (Cont'd)
 - (3) When used by a broadcast network or by a cooperative programming effort composed exclusively of F.C.C. licensees to record two-way telephone conversations solely for broadcast over the air by a licensed broadcast station. (Filed in compliance with an Order of the F.C.C. adopted December 18, 1975.)
 - (4) When used for recording at United States Department of Defense Command Centers of emergency communications transmitted over the Department of Defense's private line network when connected to Long distance Message Telecommunications Service, WATS or local Telephone Exchange Service. (Filed in compliance with an Order of the F.C.C. adopted May 19, 1976.)
 - (5) When used by the United States Nuclear Regulatory Commission of the Department of Energy for recording of two-way telephone conversations at its Operations Centers. (Filed in compliance with an Order of the F.C.C. adopted January 29, 1981.)
 - (C) <u>Acoustic or Inductive Connections</u>

IC or End User provided voice recording equipment may not be connected to a service for the recording of two-way telephone conversations by means of an acoustic or inductive connection unless its use qualifies under the regulations "Exceptions to the Requirement for the Recorder Tone" as set forth in (B) preceding.

2.5.12 Connection to a High Capacity (HC1) Facility

Terminal equipment, a multiline terminating system or a communications system which does not have the capability to transmit signals with encoded analog content via an HC1 facility to the telecommunications network or to a Category I or III access service may be directly connected to the point of interface or the network interface of the circuit. All other

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- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.12 Connection to a High Capacity (HC1) Facility (Cont'd)

connections to a HC1 facility are also made at the point of network interface and must be made in accordance with the following regulations.

(A) Connection of Terminal Equipment - Terminal equipment may be connected to a HC1 facility through, or in combination with, channel derivation equipment. If the connection provides the capability to transmit signals with encoded analog content via the HC1 facility to the telecommunications network or to a Category I or III access service, it must be connected in accordance with the Registration Program, or Interim Program as set forth in (C) and (D) following.

In addition, when voice-band data terminal equipment is used with the channel derivation equipment, the voice-band data terminal equipment must comply with Part 68 of the F.C.C.'s Rules and Regulations to insure continued billing integrity.

- (B) Connection of a Multiline Terminating System and Channel Derivation Equipment A multiline terminating system and/or channel derivation equipment may be connected to a HC1 facility. If the connection provides the capability to transmit signals with encoded analog content via the HC1 facility to the telecommunications network or to Category I or a Category III access service, it must be connected in accordance with the registration Program, or Interim Program as set forth in (C) and (D) following.
- (C) Registration Program A Petition for Rulemaking to modify Part 68 of the F.C.C.'s Rules and Regulations (registration Program) to include certain connections to HC1 facilities has been filed with the F.C.C. To accommodate connections during the pending of that rulemaking, the Telephone Company has established the following Interim Program.
- (D) Interim Program Terminal equipment and multiline terminating systems of a type listed on the Interim Program Summary may be connected at the IC's or End User's premises

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.12 Connection to a High Capacity (HC1) Facility (Cont'd)
 - (D) (Cont'd)

to a HC1 facility. (A copy of the Interim Program Summary is available from the F.C.C., Room BB300, Washington, D.C. 20554)

- (1) Equipment and systems may be added to the Interim Program Summary in one of the following ways:
 - (a) By being directly connected to any Telephone Company provided HC1 service, facility or circuit as of March 17, 1983.
 - (b) When the manufacturer of the terminal equipment or multiline terminating system submits a notarized affidavit to the F.C.C., Chief, Domestic Services Branch, Room BB300, Washington, D.C. 20554, attesting to the following:
 - The equipment or system meets the proposed technical requirements for connections to an HC1 service, facility or circuit. The technical requirements are those that have been proposed to the F.C.C. for inclusion in Part 68 of the Rules by the F.C.C./Industry Ad Hoc Task Group in Digital Interfaces. (Copy available from the Federal Communications Commission, Room BB300, Washington, D.C. 20554.)
 - The equipment or system complies with the requirements of the Bell System Technical Reference Publication 41451.
- (2) Until expiration of the Interim Program, terminal equipment and multiline terminating systems that are listed on the Interim Program Summary may be connected to an HC1 facility.

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ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.5 <u>Connections</u> (Cont'd)
 - 2.5.12 Connection to a High Capacity (HC1) Facility (Cont'd)
 - (D) (Cont'd)
 - (3) Any terminal equipment or multiline terminating system connected pursuant to this Interim Program may require modification in response to Part 68 of the Rules adopted in CC Docket No. 81-216 or RM 4087.
 - (4) Terminal equipment and multiline terminating systems that are connected under the Interim Program may remain connected and be moved and reconnected for the life of the equipment or system, except as may be required in response to Part 68 of the Rules adopted in CC Docket No. 81-216 or RM 4087.
 - (5) The Telephone Company may invoke extraordinary procedures to protect an HC1 facility. The extraordinary procedures applied will be the same as those for connection of a communications system to an access service as set forth in 2.5.9 (B) preceding.
 - (6) The Interim Program will expire on adoption of final F.C.C. Rules in RM 4087, unless sooner canceled, changed or extended.
 - (E) Connection of a Communications System an IC or End User provided communications system and associated channel derivation equipment, if any, may be connected to an HC1 facility. If the connection provides the capability to transmit signals with encoded analog content via the HC1 facility to the telecommunications network or to a Category I or Category III access service, it must be connected in accordance with the Institutional Procedure for Control of Communications System Signal Power.

In addition, when voice-band data terminal equipment is used with the IC or End User provided communications system, the voice-band data terminal equipment must comply with Part 68 of the F.C.C.'s Rules and Regulations to insure continued billing integrity.

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- 2. General Regulations (Cont'd)
 - 2.5 Connections (Cont'd)

2.5.13 Connection to Wideband Analog Access Service

(A) <u>Connections</u>

Terminal equipment, a multiline terminating system or a communications system may be directly connected to the Service Terminating Arrangement of a Wideband Analog Access Service if the signals transmitted by such equipment and presented at the interface do not exceed the signal levels specified under the Minimum Protection Criteria section following. If the signals transmitted exceed these signal levels, the Telephone Company will take action to protect its services.

(B) <u>Minimum Protection Criteria</u>

The Minimum Protection Criteria for Wideband Analog access Service are as follows. Signals presented at the point of interface or the network interface of these channels must not exceed the following transmitting power levels:

		WA1	WA2
(1)	Average Long-Term Power, simultaneously with (3) below, measured over a 30-second interval	-5 dBm0	+2 dBm0
(2)	Instantaneous Peak Power (.01% of the time)	+17 dBm0	+19 dBm0
(3)	Power in any 4 kHz segment over a three second interval	-13 dBm0	-13 dBm0
(4)	Out-of-band power	No greater than inband power density	
(5)	Single frequency tones	-13 dBm0	-13 dBm0

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ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u>

Certain terms used herein are defined as follows:

Access Code

The term "Access Code" denotes a uniform four or seven digit code assigned by the Telephone Company to an individual IC. The four digit code has the form 10XX, and the seven digit code has the form 950-10XX.

Access Minutes

The term "Access Minutes" denotes that usage of exchange facilities in interstate or foreign service for the purpose of calculating chargeable usage. On the originating end of an interstate or foreign call, usage is measured from the time the originating End User's call is delivered by the Telephone Company to and acknowledged as received by the IC's facilities connected with the originating exchange. On the terminating end of an interstate or foreign call, usage is measured from the time the call is received by the End User in the terminating exchange. Timing of usage at both originating and terminating end of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating and terminating end exchanges, as applicable. Those two times are measured by the receipt of a signal known as answer/disconnect supervision.

Access Tandem

The term "Access Tandem" denotes a Telephone Company switching system that provides a concentration and distribution function for originating or terminating traffic between end offices and IC terminal location.

Acceptance (Cooperative) Tests

The term "Acceptance (Cooperative) Tests" denotes those non chargeable tests which are performed by the Telephone Company in cooperation with the IC at the IC's request at the time service is installed.

Answer/Disconnect Supervision

The term "Answer/Disconnect Supervision" denotes the transmission of the switch trunk equipment supervisory signal (off-hook or on-hook) to the IC point of interface as an indication that the called party has answered or disconnected.

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Section 2 Original Sheet 71

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Assumed Average Access Minutes

The term "Assumed Average Access Minutes" denotes the usage that will be billed each month to ICs for Feature Group A, B or E access arrangements served from Telephone Company serving end offices where actual recorded minutes of use are not available.

Attenuation Distortion

The term "Attenuation Distortion" denotes the difference in loss at specified frequencies relative to the loss at 1004 Hz, unless otherwise specified.

Average Business Day

The term "Average Business Day" denotes 8:00AM to 11:00PM, Monday through Friday, excluding national holidays.

Balance (100 Type) Test Line

The term "Balance (100 Type) Test Line" denotes an arrangement in an end office which provides for balance and noise testing.

Bit

The term "Bit" denotes the smallest unit of information in the binary system of notation.

Busy Hour Minutes of Capacity

The term "Busy Hour Minutes of Capacity" denotes the average of the highest time consistent hour of usage during the highest twenty consecutive business day period during a calendar year.

Call

The term "Call" denotes an IC or End User attempt for which the complete address code (e.g., 0, 911, or 10 digits) is provided to the serving dial tone office.

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Section 2 Original Sheet 72

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Carrier or Common Carrier

The term "Carrier or Common Carrier" denotes any individual, partnership, associations, joint-stock company, trust or corporation engaged for hire in interstate or foreign communication by wire or radio.

Category I

The term "Category I" denotes the Special Access Services that are equivalent to the services that are defined in Part 68.2 (a) (2) of the F.C.C.'s Rules and Regulations.

Category II

The term "Category II" denotes Access Services not covered by Part 68 of the F.C.C.'s Rules and Regulations. These services include those access services where protection is incidentally supplied in the normal provision of the service.

Category III

The term "Category III" denotes the Special Access Services that are equivalent to the services that are defined in Part 68.2 (a) (3) of the F.C.C.'s Rules and Regulations.

<u>CCS</u>

The term "CCS" denotes a hundred call seconds, which is a standard unit of traffic load that is equal to 100 seconds of usage or capacity of a group of servers (e.g., trunks).

Central Office

The term "Central Office" denotes a local Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to each other and to trunks.

Central Office Prefix

The term "Central Office Prefix" denotes the first three digits (NXX) of the seven digit telephone number assigned to an End User's Telephone Exchange Service when dialed on a local basis.

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Section 2 Original Sheet 73

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Centralized Automatic Reporting on Trunks Testing

The term "Centralized Automatic Reporting on Trunks Testing" denotes a type of testing which includes the capacity for measuring operational and transmission parameters.

Channel (s)

The term "Channel (s)" denotes an electrical or photonic, in the case of fiber optic-based transmission systems, communications path between two or more points of termination.

Channelize

The term "Channelize" denotes the process of multiplexing-demultiplexing voice channels using analog or digital techniques.

C-Message Noise

The term "C-Message Noise" denotes the frequency weighted average noise within an idle voice channel. The frequency weighting, called C-message, is used to simulate the frequency characteristic of the 500-type telephone set and the hearing of the average subscriber.

C-Notched Noise

The term "C-Notched Noise" denotes the C-message frequency weighted noise on a voice channel with holding tone, which is removed at the measuring end through a notch (very narrow band) filter.

Coin Station

The term "Coin Station" denotes a location where Telephone Company equipment is provided in a public or semipublic place where Telephone Company customers can originate telephonic communications and pay the applicable charges by inserting coins into the equipment.

Common Carrier

See Carrier

FRONTIER COMMUNICATIONS OF PENNSYLVANIA, INC.

Section 2 Original Sheet 74

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Carrier Charge

The term "Carrier Charge" denotes a line, trunk, pay telephone line or other facility provided under the general and/or local exchange service tariffs of the Telephone Company, terminated on a central office switch and which may be used to make and receive exchange service calls, intrastate message service calls or interstate message service calls no matter if the Customer causes the line, trunk or facility to be arranged to prohibit any type of calls to be made or received. A carrier charge-residence is a line or trunk provided under the residence regulations of the general and/or local exchange service tariffs. A carrier charge-business is a line provided under the business regulations of the general and/or local exchange service tariffs.

Communications System

The term "Communications System" denotes channels and other facilities which are capable of communications between terminal equipment provided by other than the Telephone Company.

Data Transmission (107 Type) Test Line

The term "Data Transmission (107 Type) test Line" denotes an arrangement which provides for a connection to a signal source which provides test signals for one-way testing of data and voice transmission parameters.

Decibel

The term "Decibel" denotes a unit used to express relative difference in power, usually between acoustic or electric signals, equal to ten (10) times the common logarithm of the ratio of two signal powers.

Decibel Reference Noise C-Message Weighting

The term "Decibel Reference Noise C-Message Weighting" denotes noise power measurements with C-Message Weighting in decibels relative to a reference 1000 Hz tone of 90 dB below 1 milliwatt.

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Section 2 Original Sheet 75

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Decibel Reference Noise C-Message Referenced to 0

The term "Decibel Reference Noise C-Message Referenced to 0" denotes noise power in "Decibel Reference Noise C-Message Weighting" referred to or measured at a zero transmission level point.

Detail Billing

The term "Detail Billing" denotes the listing of each message and/or rate element for which charges to an IC or End User are due on a bill prepared by the Telephone Company.

Directory Assistance (Interstate)

The term "Directory Assistance" denotes the provision of telephone numbers by a Telephone Company operator when the operator location is accessed by an End User by dialing (NPA) 555-1212.

Dual Tone Multifrequency Address Signaling

The term "Dual Tone Multifrequency Address Signaling" denotes a type of signaling that is an optional feature of Switched Access Feature group A. It may be utilized when Feature Group A is being used in the terminating direction (from the point of interface with the IC to the local exchange end office). An office arranged for Dual tone Multifrequency Signaling would expect to receive address signals from the IC in the form of dual Tone Multifrequency signals.

Echo Control

The term "echo Control" denotes the control of reflected signals in telephone transmission path.

Echo Path Loss

The term "Echo Path Loss" denotes the measure of reflected signal at a 4-wire point of interface without regard to the send and receive Transmission Level Point.

Echo Return Loss

The term "Echo Return Loss" denotes a frequency weighted measure of return loss over the middle of the voiceband (approximately 500 to 2500 Hz), where talker echo is most annoying.

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Section 2 Original Sheet 76

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Effective 2-Wire

The term "Effective 2-Wire" denotes a condition which permits the simultaneous transmission in both directions over a channel, but it is not possible to insure independent information transmission in both directions. Effective 2-wire channels may be terminated with 2-wire or 4-wire interfaces.

Effective 4-Wire

The term "Effective 4-Wire" denotes a condition which permits the simultaneous independent transmission of information in both directions over a channel. The method of implementing effective 4-wire transmission is at the discretion of the Telephone Company (physical, time domain, frequency-domain separation or echo cancellation techniques). Effective 4-wire channels may be terminated with a 2-wire interface at the End User premises or central office, but not at the IC point of interface. However, when terminated 2-wire, simultaneous independent transmission cannot be supported.

End Office Switch

The term "End Office Switch" denotes a local Telephone Company switching system where Telephone Exchange Service customer station loops are terminated for purposes of interconnection to trunks. Included are Remote Switching Modules and Remote Switching Systems served by a host office in a different wire center.

End User

The term "End User" denotes any individual, partnership, association, corporation, governmental agency or any other entity which (A) obtains a common line or uses a pay telephone in the operating territory of the Telephone Company, or (B) subscribes to interstate service(s) provided by an IC or uses the services of the IC when the IC provides interstate service(s) for its own use.

Entry Switch

See First Point of Switching

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Section 2 Original Sheet 77

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Envelope Delay Distortion

The term "Envelope Delay Distortion" denotes a measure of the linearity of the phase versus frequency of a channel.

Equal Level Echo Path Loss

The term "Equal Level Echo Path Loss" (ELEPL) denotes the measure of Echo Path Loss (EPL) at a 4-wire interface which is corrected by the difference between the send and receive Transmission Level Point (TLP).

Equipment Available Basis

Services requested by an IC will be provided on an "equipment available basis". Such equipment will already be in-place within the serving switching office or planned for installation prior to the facility in-service date requested by the IC, for the Telephone Company to provide the service.

Expected Measured Loss

The term "Expected Measured Loss" denotes a calculated loss which specifies the end-to-end 1004-Hz loss on a terminated test connection between two readily accessible manual or remote test points. It is the sum of the inserted connection loss and test access loss including any test pads.

Exchange

The term "Exchange" denotes a unit established by the Telephone Company for the administration of communications service in a specified area which usually embraces a city, town or village and its environs. It consists of one or more central offices together with the associated facilities used in furnishing communications service within that area.

Facilities

The term "Facilities" denotes any cable, fiber optics, poles, conduit, microwave or carrier equipment, wire center distribution frames, central office switching equipment, computers (both hardware and software), business machines, etc., utilized to provide (1) the services offered under this tariff, or (2) the services provided by an IC for its own use or for an IC End User's use.

Field Identifier

The term "Field Identifier" denotes two to four characters that are used on service orders to convey specific instructions. Field Identifiers may or may not have associated data. Selected Field Identifiers are used in Telephone Company billing systems to generate nonrecurring charges.

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Section 2 Original Sheet 78

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

First Point of Switching

The term "First Point of Switching" denotes the first Telephone Company location at which switching occurs on the terminating path of a call proceeding from the IC terminal location to the terminating end office and, at the same time, the last Telephone Company location at which switching occurs on the originating path of call proceeding from the originating end office to the IC terminal location.

Frequency Shift

The term "Frequency Shift" denotes the change in the frequency of a tone as it is transmitted over a channel.

Grandfathered

The term "Grandfathered" denotes Terminal Equipment, Multiline Terminating systems and Protective Circuitry directly connected to the facilities utilized to provide services under the provisions of this tariff, and which are considered grandfathered under Part 68 of the F.C.C.'s Rules and Regulations.

Host Office

The term "Host Office" denotes an electronic switching system which provides call processing capabilities for one or more Remote Switching Modules or Remote Switching Systems.

IC Terminal Location

The term "IC Terminal Location" denotes the point at which Access Service connects to the IC's interstate telecommunications service.

Impedance Balance

The term "Impedance Balance" denotes the method of expressing Echo Return Loss and Singing Return Loss at a 4-wire interface whereby the gains and/or loss of the 4-wire portion of the transmission path, including the hybrid, are not included in the specification.

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Section 2 Original Sheet 79

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Impulse Noise

The term "Impulse Noise" denotes any momentary occurrence of the noise on a channel over a specified level threshold. It is evaluated by counting the number of occurrences which exceed the threshold.

Individual Case Basis

The term "Individual Case Basis" denotes a condition in which the regulations, if applicable, rates and charges for an offering under the provisions of this tariff are developed based on the circumstances in each case.

Inserted Connection Loss

The term "Inserted Connection Loss" denotes the 1004 Hz power difference (in dB) between the maximum power available at the originating end and the actual power reaching the terminating and through the inserted connection.

Intermodulation Distortion

The term "Intermodulation Distortion" denotes a measure of the non linearity of a channel. It is measured using four tones, and evaluating the ratios (in dB) of the transmitted composite four-tone signal power to the second-order products of the tones (R2), and the third-order products of the tones (R3).

Intrastate Customer(s)

The term "Intrastate Customer(s)" denotes any individual, partnership, association, corporation, or governmental agency or any other entity which subscribes to the services offered under this tariff to provide intrastate telecommunications services for its own use or for the use of its customers (End Users).

Interstate and Foreign Communications

The term "Interstate and Foreign Communications" denotes any communications subject to FCC oversight as provided under the Communications Act of 1934, as amended, and the F.C.C.'s Rules and Regulations.

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Section 2 Original Sheet 80

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Intrastate Communications

The term "Intrastate Communications" denotes any communications within the state subject to oversight by THE PENNSYLVANIA PUBLIC UTILITY COMMISSION as provided by the laws of the State.

Jointly Used Subscriber Plant

The term "Jointly Used Subscriber Plant" denotes the local non-traffic sensitive Telephone Exchange Service facilities furnished in connection with Switched Exchange Access provided to an IC to complete an interstate call vi an IC's intercity network to or from Telephone Exchange Service locations.

Line Side Connection

The term "Line Side Connection" denotes a connection of transmission path to the line side of local exchange switching system.

Local Access and Transport Area

The term "Local Access and Transport Area" denotes a geographic area established by the Telephone Company for the provision and administration of communications service. It encompasses designated exchanges, which are grouped to serve common social, economic and other purposes.

Local Tandem Switch

The term "Local Tandem Switch" denotes a local Telephone Company switching unit by which local or access telephonic communications are switched to and from an End Office Switch.

Loop Around Test Line

The term "Loop Around Test Line" denotes an arrangement in an end office which provides a means for making two-way transmission tests on a manual basis. This arrangement has two terminations, each reached by means of a separate seven-digit number.

Loss Deviation

The term "Loss Deviation" denotes the variation of the actual loss from the designed value.

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Section 2 Original Sheet 81

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

<u>Message</u>

The term "Message" denotes a "call" as defined preceding.

Milliwatt (102 Type) Test Line

The term "Milliwatt (102 Type) Test Line" denotes an arrangement in an end office which provides 1004 Hz tone at 0 dBm0 for one-way transmission measurements towards the IC terminal location from the Telephone Company end office.

Network Control Signaling

The term "Network Control Signaling" denotes the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status, and charge signals), address signaling (e.g., dialing), calling and called number identifications, rate of flow, service selection error control and audible tone signals (call progress signals indicating re-order or busy conditions, alerting, coin denominations, coin collect and coin return tones) to control the operation of the telecommunications system.

Network Interface

The term "Network Interface" denotes the point of demarcation on the End User's premises at which the Telephone Company's responsibility for the provision of Access Services end.

Nonsynchronous Test Line

The term "Nonsynchronous Test Line" denotes an arrangement in step-by-step end offices which provides operational tests which are not as complete as those provided by the synchronous test lines, but can be made more rapidly.

North American Numbering Plan

The term "North American Numbering Plan" denotes a three-digit area (Numbering Plan Area) code and a seven-digit telephone number made up of a three-digit Central Office code plus a four-digit station number.

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Section 2 Original Sheet 82

ACCESS SERVICE

- 2. General Regulations (Cont'd)
 - 2.6 Definitions (Cont'd)

Off-hook

The term "off-hook" denotes the active condition of Switched Access or a Telephone Exchange Service line.

On-hook

The term "on-hook" denotes the idle condition of Switched Access or a Telephone Exchange service line.

Open Circuit Test Line

The term "Open circuit test Line" denotes an arrangement in an end office which provides an ac open circuit termination of a trunk or line by means of an inductor of several Henries.

Originating Direction

The term "Originating Direction" denotes the use of access service for the origination of calls from an End User to an IC terminal location.

Pay Telephone

The term Pay Telephone indicates a Pay Telephone Line where the Telephone Company provides Coin Supervision and/or Call Screening.

Phase Jitter

The term "Phase Jitter" denotes the unwanted phase variations of a signal.

Point of Interface

The term "Point of Interface" denotes a point of demarcation, at the IC terminal location, between Telephone Company provided and IC provided services.

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Section 2 Original Sheet 83

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Premises

The term "Premises" denotes a building or portion(s) of a building occupied by a single IC or End User either as a place of business or residence. Adjacent buildings and the buildings on the same continuous property occupied by the IC or End User, not separated by a public thoroughfare, are also considered the IC or End User's premises.

Remote Switching Modules and/or Remote Switching Systems

The term "Remote Switching Modules and/or Remote Switching Systems" denotes small, remotely controlled electronic end office switches which obtain their call processing capability from an ESS-type Host Office. The Remote Switching Modules and/or Remote Switching Systems cannot accommodate direct trunks to an IC.

Return Loss

The term "Return Loss" denotes a measure of the similarity between the two impedances at the junction of two transmission paths. The higher the return loss, the higher the similarity.

Registered Equipment

The term "Registered Equipment" denotes the IC's or the IC's customer's premises equipment which complies with and has been approved within the Registration Provisions of Part 68 of the F.C.C.'s Rules and Regulations.

Service Terminating Arrangement

The term "Service Terminating Arrangement" denotes equipment furnished by the Telephone Company which is utilized for the termination of Telephone Company provided Access Service. Such "Service Terminating Arrangement" provides a clearly delineated interface which facilitates the design, isolation, and testing of the Access Service where the service is connected with IC or End User provided communications systems.

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Section 2 Original Sheet 84

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Seven Digit Manual Test Line

The term "Seven Digit Manual Test Line" denotes an arrangement which allows the IC to select balance, milliwatt and synchronous test lines by manually dialing a seven digit number over the associated access connection.

Short Circuit Test Line

The term "Short Circuit Test Line" denotes an arrangement in an end office which provides for an ac short circuit termination of a trunk or line by means of a capacitor of at least four microfarads.

Signal-to-C-Notched Noise Ratio

The term "Signal-to-C-Notched Noise Ratio" denotes the ratio in dB of a test signal to the corresponding C-Notched Noise.

Singing Return Loss

The term "Singing Return Loss" denotes the frequency weighted measure of return loss at the edges of the voiceband (200 to 500 Hz and 2500 to 3200 Hz), where singing (instability) problems are most likely to occur.

Special Order

The term "Special Order" denotes an order for a Billing and Collection Service or an order for a Directory Assistance Service.

Synchronous Test Line

The term "Synchronous Test Line" denotes an arrangement in an end office which performs marginal operational tests of supervisory and ring-tripping functions.

Terminating Direction

The term "Terminating Direction" denotes the use of Access Service for the completion of calls from an IC terminal location to an End User.

FRONTIER COMMUNICATIONS OF PENNSYLVANIA, INC.

Section 2 Original Sheet 85

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Transmission Measuring (105 Type) Test Line/Responder

The term "Transmission Measuring (105 Type) Test Line/Responder" denotes an arrangement in an end office which provides far-end access to a responder and permits two-way loss and noise measurements to be made on trunks from a near end office.

Transmission Path

The term "Transmission Path" denotes an electrical path capable of transmitting signals within the range of the service offering, e.g., a voice grade transmission path is capable of transmitting voice frequencies within the approximate range of 300 to 3000 Hz. A transmission path is comprised of physical or derived facilities consisting of any form or configuration of plant typically used in the telecommunications industry.

Transmission Performance

The term "Transmission Performance" denotes the immediate action limits beyond which the Telephone Company will accept an IC's trouble report and take corrective action.

<u>Trunk</u>

The term "Trunk" denotes a communications path connecting two switching systems in a network, used in the establishment of an end-to-end connection.

Trunk Group

The term "Trunk Group" denotes a set of trunks which are traffic engineered as a unit for the establishment of connections between switching systems in which all of the communications paths are interchangeable.

Trunk Side Connection

The term "Trunk Side Connection" denotes the connection of a transmission path to the trunk side of a local exchange switching system.

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Section 2 Original Sheet 86

ACCESS SERVICE

2. General Regulations (Cont'd)

2.6 <u>Definitions</u> (Cont'd)

Two-Wire to Four-Wire Conversion

The term "Two-Wire to Four-Wire Conversion" denotes an arrangement which converts a four-wire transmission path to a two-wire transmission path to allow a four-wire facility to terminate in a two-wire entity (e.g., a central office switch).

Uniform Service Order Code

The term "Uniform Service Order Code" denotes a three or five character alphabetic, numeric, or an alphanumeric code that identifies a specific item of service or equipment. Uniform Service Order Codes are used in the Telephone Company billing system to generate recurring rates and nonrecurring charges.

V and H Coordinates Method

The term "V and H Coordinates Method" denotes a method of computing airline miles between two points by utilizing an established formula which is based on the vertical and horizontal coordinates of the two points.

Wire Center

The term "Wire Center" denotes a building in which one or more central offices, used for the provision of Telephone Exchange Services, are located.