Original Title Page

CONNECTION WITH TELEPHONE COMPANY FACILITIES TARIFF

Containing

Regulations and Rates applicable to interconnection of terminal equipment and communications systems with services and facilities provided within West Virginia by Frontier West Virginia Inc.

The names Verizon West Virginia Inc. and Bell Atlantic - West Virginia, Inc. have been changed to Frontier West Virginia Inc. All references throughout this Tariff to Verizon West Virginia Inc. and Bell Atlantic - West Virginia, Inc., "the Telephone Company" or "the company" shall be read as Frontier West Virginia Inc.

CONNECTION WITH TELEPHONE COMPANY FACILITIES TARIFF P.S.C.-W.Va.-No. 205

Frontier West Virginia Inc.

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APPLICATION OF TARIFF

A. GENERAL

Terminal equipment and communications systems may be connected at the customer's premises to telecommunications and channel services furnished by the Telephone Company where such connections are made in accordance with the provisions of this tariff. Telecommunications services as used herein includes Exchange Service, Long Distance Message Telecommunications Service (LDMTS) and Wide Area Telecommunications Service (WATS). The regulations and rates contained herein are in addition to the applicable regulations and rates specified in other tariffs of the Telephone Company.

B. REGULATIONS

1. Explanation of Terms

Accessories

Accessories are devices which are mechanically attached to, or used with, the facilities furnished by the Telephone Company and which are independent of, and not electrically, acoustically, or inductively connected to, the communications path of the Telephone Company facilities.

Authorized Protective Connecting Module

An Authorized Protective Connecting Module is a protective unit designed by Lucent Technologies and manufactured under the control of Lucent Technologies quality assurance procedures, which unit is to be incorporated in a conforming answering device.

Conforming Answering Device

A Conforming Answering Device is a customer-provided device which automatically answers incoming calls; transmits a prerecorded voice message or appropriate audible signal to the calling party; records a voice message from the calling party if so designed and arranged; and automatically disconnects from the line in a prearranged manner on completion of the last of the functions for which it was designed and arranged as described in this paragraph. The Conforming Answering Device may include remote interrogation and/or device function an Authorized control. A Conforming Answering Device must incorporate Protective Connecting Module and must bear a valid Conformance Number.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Conformance Number

A Conformance Number is an identifying number assigned by Lucent Technologies to a particular model of conforming answering device incorporating an Authorized Protective Connecting Module when that model of device is in conformance with the provisions set forth by Lucent Technologies in its Technical Reference for Conforming Answering Devices.

Connecting Arrangement

A Connecting Arrangement is the equipment provided by the Telephone Company to accomplish the direct electrical connection of customer-provided facilities with the facilities of the Telephone Company.

Customer-Provided Communications Systems

Customer-provided Communications Systems are channels and other facilities provided by a customer, which are capable, when not connected to Telephone Company channel service or the telecommunications network, of communications between customer-provided terminal equipment or Telephone Company stations.

Customer-Provided Terminal Equipment

Customer-provided Terminal Equipment are devices, apparatus and their associated wiring, provided by a customer, which do not constitute a communications system and which, when connected to the communications path of Telephone Company facilities, are so connected either electrically, acoustically or inductively.

Customer-Provided Test Equipment

Customer-provided Test Equipment as used in this tariff is test equipment located at the premises of the customer that is used by the customer for the detection and/or isolation of a communications service fault.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Data Access Arrangement

A data access arrangement is a protective connecting arrangement provided by the Telephone Company for use with the network control signaling unit, or in lieu of the connecting arrangement, an arrangement to identify a central office line and protective facilities and procedures to determine compliance with criteria as specified in Section 2 of this tariff.

Direct Electrical Connection

A direct electrical connection is a physical connection of the electrical conductors in the communications path.

Grandfathered Communications Systems

Grandfathered communications systems are communications systems, including their equipment, premises wiring and protective circuitry, if any, connected at the customer's premises, in accordance with any Telephone Company's tariffs, and that are considered to be grandfathered under Part 68 of the Federal Communications Commission's Rules and Regulations because such systems were connected to the telecommunications network or channel services specified in Section 2, B.2.a.(2) following prior to January 1, 1980 and were of a type of system which was directly connected, i.e., without Telephone Company-provided connecting arrangements, to the (T) telecommunications network or the channel services specified in Section 2, B.2.a.(2) following as of June 1, 1978, or such systems are connected to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following prior to May 1, 1983 and are of a type system which was directly connected, i.e., without Telephone Company-provided connecting arrangements, to the (T) channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following as of April 30, 1980.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Grandfathered Connections of Communications Systems

Grandfathered connections of communications systems are connections via Telephone Company provided connecting arrangements of customer-provided communications systems, including their equipment and premises wiring, at the customer's premises, in accordance with any Telephone Company's tariffs, and that are considered to be grandfathered under Part 68 of the Federal Communications Commission's Rules and Regulations because such connections to the telecommunications network or channel services specified in Section 2, B.2.a.(2) following were made via Telephone Company-provided connecting (T) arrangements prior to January 1, 1980 and such connecting arrangements are of a type of connecting arrangement connected to the telecommunications network or the channel services specified in Section 2, B.2.a.(2) following as of June 1, 1978 or such connections to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following are made via Telephone Company-(T) provided connecting arrangements prior to May 1, 1983 and such connecting arrangements are of a type of connecting arrangement connected to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following as of April 30, 1980.

Grandfathered Terminal Equipment

Grandfathered terminal equipment is terminal equipment, including protective circuitry, if any, connected at the customer's premises, in accordance with any Telephone Company's tariffs, and that is considered to be grandfathered under Part 68 of the Federal Communications Commission's Rules and Regulations because such terminal equipment was connected to the telecommunications network or the channel services specified in Section 2, B.2.a.(2) following prior to July 1, 1979 and was of a type of terminal equipment which was directly connected, i.e., without Telephone Company-(T) provided connecting arrangements, to the telecommunications network or the channel services specified in Section 2, B.2.a.(2) following as of October 17, 1977 or such terminal equipment is connected to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following prior to May 1, 1983 and is of a type of terminal equipment which was directly connected, i.e., without Telephone Company-provided connecting arrangements, to the (T) channel services specified Section 2, B.2.a.(3) or B.2.a.(4) following as of April 30, 1980.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Grandfathered Connections of Terminal Equipment

Grandfathered connections of terminal equipment are connections via Telephone Company-provided connecting arrangements of customer-provided (T)terminal equipment connected at the customer's premises, in accordance with any Telephone Company's tariffs, and that are considered to be grandfathered under Part 68 of the Federal Communications Commission's Rules and Regulations because such connections to the telecommunications network or the channel services specified in Section 2, B.2.a.(2) following were made via Telephone Company-provided connecting arrangements prior to (T) July 1, 1979 and such connecting arrangements are the same type of connecting arrangement connected to the telecommunications network or the channel services specified in Section 2, B.2.a.(2) following as of October 17, 1977 or such connections to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following are made via Telephone Company-provided (T) connecting arrangements prior to May 1, 1983 and such connecting arrangements are the same type of connecting arrangement connected to the channel services specified in Section 2, B.2.a.(3) or B.2.a.(4) following as of April 30, 1980.

Headset

A headset is a hands-free, multiwire device containing acoustic-to-electric (transmitter) and electric-to-acoustic (receiver) transducers, normally worn on the head of the user for close talking, which provides 2-way transmission of live human speech.

Network Control Signaling

Network control signaling is the transmission of signals used in the telecommunications system which perform functions such as supervision (control, status and charging signals), address signaling (dialing), calling and called number identification, 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 switching machines in the telecommunications systems.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Network Control Signaling (Cont'd)

Satisfactory performance of the telecommunications network requires continuing functional compatibility of the network control signals and the switching equipment involved. To assure such continuing compatibility, network control signaling (except the function of tone-type address signaling when performed by customer-provided equipment or signaling functions performed by conforming answering devices) shall be performed by a network control signaling unit.

Network Control Signaling Unit

A network control signaling unit is the terminal equipment for the provision of network control signaling.

Nonpowered Conferencing Equipment

Nonpowered conferencing equipment consists of a portable plug-ended device, without active elements, including a multi-winding transformer and manual line switches designed to bridge two or more, but not to exceed five, of the lines appearing on a six-button telephone equipped with both hold and illumination features.

Registered Equipment

Registered equipment is equipment which complies with and has been approved within the Registration provisions of Part 68 of the Federal Communications Commission's Rules and Regulations.

Ringing

Ringing is an alternating or pulsating current intended to produce an audible or visible alerting signal at a station or switchboard.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

1. Explanation of Terms (Cont'd)

Single-ended Terminal Device

A single-ended terminal device is terminal equipment which connects only one line at a given time (e.g., headset).

2. Responsibility of the Customer

The customer shall be responsible for the installation, operation and maintenance or testing and repair of any customer-provided terminal equipment or communications system. No combinations of customer-provided terminal equipment or communications systems shall require change in or alteration of the equipment or services of the Telephone Company, except as specifically permitted under the provisions of Section 2, B.1.m. of this tariff, cause electrical hazards to Telephone Company personnel, damage to Telephone Company equipment, malfunction of Telephone Company billing equipment, or degradation of service to persons other than the user of the subject terminal equipment or communications system, the user's calling or called party.

Upon notice from the Telephone Company that a customer-provided terminal equipment, communications system or Customer Premises Inside Wire provided or maintained by the customer is causing such hazard, damage, malfunction or degradation of service, the customer shall make such changes as shall be necessary to remove or prevent such hazard, damage, malfunction or degradation of service.

3. Responsibility of the Telephone Company

Except as otherwise specified, telecommunications and Channel Services are not represented as adapted to the use of customer-provided terminal equipment or communications systems. Where customer-provided terminal equipment or communications systems are used with telecommunications or Channel Services, the responsibility of the Telephone Company shall be limited to the furnishing of service components suitable for telecommunications or Channel Services and to the maintenance and operation of service components in a manner proper for such services. Subject to this responsibility, the Telephone Company shall not be responsible for the through transmission of signals generated by the customer-provided terminal equipment or communications systems or for the quality of, or defects in, such transmission, or the reception of signals by customer-provided terminal equipment or communications systems, or address signaling where such signaling is performed by customer-provided signaling equipment.

APPLICATION OF TARIFF

- B. REGULATIONS (Cont'd)
 - 3. Responsibility of the Telephone Company (Cont'd)

The Telephone Company will, at the customer's request, provide information concerning interface parameters, including the number of ringers which may be connected to a particular telephone line, needed to permit customerprovided terminal equipment to operate in a manner compatible with telecommunications or Channel Services.

The Telephone Company may make changes in its telecommunications or Channel Services, equipment, operations or procedures, where such action is not inconsistent with Part 68 of the Federal Communications Commission's (F.C.C.) Rules and Regulations. If such changes can be reasonably expected to render any customer's terminal equipment or communications system incompatible with telecommunications or Channel Services, or require modification or alteration of such customer-provided terminal equipment or communications systems, or otherwise materially affect its use or performance, the customer will be given adequate notice, in writing, to allow the customer an opportunity to maintain uninterrupted service.

- 4. Recording of Two-way Telephone Conversations
 - a. Telecommunications and Channel Services are not represented as adapted to the recording of two-way telephone conversations. However, customer-provided voice recording equipment may be directly, acoustically or inductively connected with telecommunications and Channel Services. When such connections are made, the customer-provided voice recording equipment shall be so arranged that at the will of the user it can be activated and deactivated. In addition, one of the following conditions must apply:

All parties to the telephone conversation must give their prior consent to the recording of the conversation, and the prior consent must be obtained in writing or be part of, and obtained at the start of, the recording, or

All parties to the telephone conversation must be verbally notified at the beginning of the conversation that the recording party intends to record the conversation, and the notification must be recorded as part of the call by the recording party, or

A distinctive recorder tone, repeated at intervals of approximately fifteen seconds, is required to alert all parties when the recording equipment is in use. The distinctive recording tone can be provided as part of the recording equipment, customer-provided registered or grandfathered protective circuitry, or a grandfathered Telephone Company provided connecting arrangement.

APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

- 4. Recording of Two-way Conversations(Cont'd)
 - b. A broadcast licensee shall be exempt from the preceding recording requirements provided at least one of the following requirements is met:

The licensee informs each party to the call of its intent to broadcast the conversation.

Each party to the call is aware of the licensee's intent to broadcast the call.

Such awareness of the licensee's intent to broadcast the call may be reasonably imputed to the party.

- c. The F.C.C. has established the following exceptions to the preceding requirements.
 - (1) Recordings made of incoming calls to the telephone numbers publicized for emergencies involving health or safety of life and property, e.g., emergency situations involving fire, health care, police, public utilities and emergency road service, and outgoing calls made in immediate response to such calls. Included in this exception are the following:

Recordings made at the United States Department of Defense Command Centers of the emergency communications transmitted over the Department of Defense's private system when connected to the telecommunications network.

(2) Recordings of calls made for patently unlawful purposes, such as bomb threats, kidnap ransom requests and obscene telephone calls. Outgoing calls made in immediate response to such calls are also excepted. Included in this exception are the following.

> Recordings made by the United States Secret Service of the Department of the Treasury for recording of two-way telephone conversations which concern the safety and security of the person of the President of the United States, members of the President's immediate family, or the White House and its grounds.

(3) Recordings of calls made by Federal, State or local law enforcement authorities, or Federal intelligence authorities, acting under color of law.

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APPLICATION OF TARIFF

- B. REGULATIONS (Cont'd)
 - 4. Recording or Two-way Telephone Conversations (Cont'd)
 - d. When customer-provided voice recording equipment is used with a Channel Service which is connected to telecommunications services, the provisions in a. and b. preceding are applicable to such Channel Service.
 - 5. Recording, Reproducing, Automatic Answering and Recording Equipment and Conforming Answering Devices
 - a. Customer-provided recording, reproducing and automatic answering and recording equipment and conforming answering devices may be connected with facilities of the Telephone Company only when and for so long as the customer subscribes to a sufficient number of telephone lines to handle adequately the volume of telephone calls received without interfering with any of the services offered by the Telephone Company. In the event that the use of customer-provided equipment causes such interference, the Telephone Company shall have the right to discontinue service without prior notification to the customer.
 - b. Use of Telephone Company facilities for transmitting prerecorded messages to the general public is subject to the following conditions:
 - (1) For purposes of identification, customers to telephone service who transmit prerecorded messages to the general public over facilities provided by the Telephone Company must include in the recorded message the name of the customer or individual responsible for the service and the address at which the service is provided.
 - (2) Customers transmitting factual public announcements such as time, weather, stock market quotations, airline schedules and similar information are excluded from (1) preceding.
 - (3) The customer's name, or that of an agent in the case of business service, shall be made available to the public upon request.
 - 6. Hazardous or Inaccessible Locations
 - a. Except as otherwise provided in b. following, facilities furnished by the customer which involve hazardous or inaccessible locations, may be connected to the telecommunications network.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

- 6. Hazardous or Inaccessible Locations (Cont'd)
 - b. Customer-provided terminal equipment and communications systems connected to the telecommunications network in accordance with a. preceding prior to January 1, 1980, may remain connected and be moved and reconnected for the life of the equipment without registration unless subsequently modified. New installations of customer-provided terminal equipment and communications systems subject to Part 68 of the FCC's Rules and Regulations must be connected to the telecommunications network in accordance with Section 2, B.1.a. and b. and B.1.1. following.
- 7. Violation of Regulations

Where any customer-provided terminal equipment, communications system or Customer Premises Inside Wire provided or maintained by the customer is used with telecommunications or Channel Services in violation of any of the applicable regulations, the Telephone Company shall have the right to terminate the service until the customer has given confirmation in writing to the Telephone Company of compliance with applicable regulations. Except when it is determined by the Telephone Company that the violation must cease for the protection of the telecommunications system, the Telephone Company shall notify the customer in writing of the violation prior to termination of the service. The customer shall correct the violation and confirm in writing to the Telephone Company, within ten days following receipt of such notification, that the violation has been corrected. The customer-provided equipment or system may be removed by the customer to correct any violation in connection therewith, subject to the confirmation requirements of this provision. The right of the Telephone Company to terminate the service, as provided preceding, includes, but is not limited to, the right to suspend the service or to disconnect such customer-provided equipment or communications system.

8. Other Connections With Customer-Provided Facilities

In addition to the regulations and rates contained herein, certain other tariffs of the Telephone Company also contain services which include provisions for connection with customer-provided facilities. The following list includes some but not necessarily all such services.

Channel Services Direct Inward Dialing Service Mobile Telephone Service

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APPLICATION OF TARIFF

- B. REGULATIONS (Cont'd)
 - 9. Provisions of Channels and Equipment

When the customer elects to provide their own communications system, it is contemplated that the customer shall provide all station apparatus and associated channels which are part of the system and which are located on the same customer's premises as the system.

- 10. Customer Premises Inside Wire
 - a. General Provisions
 - Customer premises inside wire and standard jacks associated with Telephone Company provided services not connected in common equipment, may be provided by either the Telephone Company or the customer.
 - (2) Customer premises inside wire is all wire which is located on the customer's side of the network interface associated with WATS or Local Exchange Service and not connected in common equipment or associated with data equipment.
 - (3) Customer premises inside wire provided by the customer may be connected to residence and business individual Local Exchange Service and WATS, not connected in common equipment, furnished by the Telephone Company either at the network interface or at any Telephone Company provided miniature standard jack.
 - (4) Telephone company owned customer premises inside wire maintained by the customer remains the property of the Telephone Company.
 - b. Responsibility of the Customer
 - Where the customer elects to provide the customer premises inside wire and standard jacks, the installation must be in accordance with the technical standards as specified in Section 1A following.
 - (2) In the event that the customer maintains or attempts to maintain customer premises inside wire, the customer assumes the risk of loss of service, damage to property, or death to or injury of the customer or the customer's agent. The customer will save the Telephone Company harmless from any and all liability, claims, or damage suits arising out of the customer's wire maintenance activity.

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APPLICATION OF TARIFF

B. REGULATIONS (Cont'd)

- 10. Customer Premises Inside Wire (Cont'd)
 - c. Responsibility of the Telephone Company

The Telephone Company will make the technical standards and regulations for customer provision of customer premises inside wire available to customers at locations designated by the Telephone Company.

CONNECTION WITH TELEPHONE COMPANY FACILITIES TARIFF P.S.C.-W.Va.-No. 205

Frontier West Virginia Inc.

Section 1A 1st Revised Page 1 Cancels Original Page 1

TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

A. GENERAL

This document sets forth minimum technical, material, and workmanship standards applicable to the provision of customer premises inside wire for connection to Local Exchange and Wide Area Telephone Services. For individual line Local Exchange Service, such wiring must be used only with F.C.C. registered or grand-fathered nonbutton and/or single button telephones and associated ancillary devices.

All building and electrical codes applicable in the jurisdictions served by Frontier West Virginia Inc. shall be complied with. Article 800, entitled (C) Communication Circuits, of the National Electrical Code, and other relevant sections of that code are hereby incorporated by reference and must be complied with.

A Glossary of Terms used in this section is provided in B.6. following.

B. REGULATIONS

1. Means Of Connection To The Network

The physical and electrical demarcation between customer premises inside wire and the telecommunications network is a Telephone Company provided network interface or a Telephone Company provided registration program jack.

For those premises which only have nonmodular connecting blocks or nonmodular jacks, the customer must first obtain and install a modular converter which will serve as the network interface, and be used for the connection of the customer premises inside wire.

- 2. General Conditions
 - a. General Technical and Safety Considerations

Wiring may only be used to conduct the operating signals, voltage, and currents normally found on basic telephone Exchange Service lines. Customer premises inside wire must be capable of being exposed to, and conducting without damage, possible lightning surges and 60 Hz power line disturbances. This standard requires that such wire and its associated hardware be designed, installed, and maintained so as to operate safely when conducting these signals, surges, and disturbances.

Caution: Telephone connections may have varying amounts of electric current in the bare conductors and terminal screws. Therefore, customer premises inside wire must not be installed or maintained without first disconnecting such wire from the network interface, or the Telephone Company provided standard registration program jack, and also from any other power source.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

- B. REGULATIONS (Cont'd)
 - 2. General Conditions (Cont'd)
 - b. Limitations

In the event any customer premises inside wire fails to comply with the standards or conditions set forth herein, Frontier West Virginia Inc. (C) shall not be required to connect to such wire until the customer achieves compliance.

- 3. Material Standards
 - a. Wire
 - Two-pair wire shall be twisted in a four-conductor spiral or as two twisted pair to form the cable. Three-pair wire shall have the conductors twisted together to form pairs and then grouped together to form the cable.
 - (2) The cable shall be covered with a jacket of polyvinylchloride or a functionally equivalent compound which has a 1500V RMS minimum breakdown rating.
 - (3) Each conductor shall be solid annealed copper individually insulated with distinctly colored high density polyethylene or functionally equivalent compound.
 - (4) Length of wire from the first wire entrance to the farthest jack must be limited to 250 feet for 22 AWG gauge wire and 200 feet for 24 AWG gauge wire.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

- B. REGULATIONS (Cont'd)
 - 3. Material Standards (Cont'd)
 - a. Wire (Cont'd)
 - (5) Pairs within cables cannot be split. Table A sets forth typical wire types and appropriate pair color code matches which must not be separated.

Table A

Typical Wire Types

Type of Wire	Pair No.	Pair Color	Pair Color Matches	
2- pair wire	1	Green	Red	
	2	Black	Yellow	
3-pair wire	1	White/	Blue/	
		Blue	White	
	2	White/	Orange/	
		Orange	White	
	3	White/	Green/	
		Green	White	

b. Jacks

All jacks used in conjunction with customer premises inside wire must comply with Subpart F of Part 68 of the Federal Communication Commission's Rules (i.e., the Registration Program).

- 4. Wire Connections, Routing And Separations Standards
 - a. Wire Connections
 - (1) The continuity of the wire color code must be maintained through all connections (e.g., red wire connected to red). Typical connections and wire coding for one-line service are shown in Table B.

Issued by authority of an Order of the Public Service Commission of West Virginia in Case No. dated .

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

- 4. Wire Connections, Routing And Separations Standards (Cont'd)
 - a. Wire Connections (Cont'd)
 - (1) (Cont'd)

Table B

Conductor Function		Conductor Color	
No Dial Light	Dial Light	2-Pair Wire	3-Pair Wire
Tip	Tip	Green	White/Blue
Ring	Ring	Red	Blue/White
Not Used	Transformer	Black	White/Orange

(D)

(2) Customer premises inside wire must be securely fastened by the appropriate means, to any surface encountered, without damaging or puncturing the insulating jacket. Typical fasteners and spacing intervals are shown in Table C.

Table C

	Spacing				
Fasteners	Horizontal V		Vertical		From Corner
	Feet	Inches	Feet	Inches	Inches
Wire Clamp		16		16	2
Staples (Wire)		7 1/2		7 1/2	2
Bridle Rings†	4				2 through 8 1/2*
Drive Rings†	4		8		2 through 8 1/2*

- * When changing direction of wire runs the fasteners should be spaced to hold the wire at approximately a 45-degree angle.
- To avoid possible injury do not use drive rings below a 6-foot clearance level, use bridle rings.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

- B. REGULATIONS (Cont'd)
 - 4. Wire Connections, Routing And Separations Standards (Cont'd)
 - a. Wire Connections (Cont'd)
 - (3) Removal of wiring jacket or individual conductor insulation for connections or splices shall be accomplished by removing the minimum amount of jacket or insulation necessary to make the connection or splice. Insulation equivalent to that provided on the individual wire conductors and the jacket shall be suitably restored by placement of the splices in an appropriate enclosure or by using adequately insulated splicing means. If there is a point where the jacket or insulation has been removed and concealed, it must be accessible without disturbing permanent building finishes (e.g., by removing a cover).
 - b. Wire Routing
 - (1) Wire shall be installed so as to assure that there is adequate insulation of telephone wiring from commercial power wiring and grounded surfaces. Wiring is required to be sheathed in an insulating jacket in addition to the insulation enclosing individual conductors. It shall be assured that this physical and electrical protection afforded by the insulating jacket and insulation enclosing individual conductors shall not be damaged or punctured during installation.
 - (2) Telephone wire shall not be placed in the same conduit or raceways with wires that conduct electricity.
 - (3) Judgment should be used in selecting the locations of placement of inside wire. The following are examples of locations which should be avoided.
 - I. Damp locations
 - II. Wire runs which provide support for any objects.
 - III. Excessively hot locations, steam pipes, heating ducts, hot water pipes, etc.
 - IV. Locations where wires will be subjected to abrasion or corrosion.
 - V. Between two structural studdings when electrical wiring is present.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

- 4. Wire Connections, Routing And Separations Standards (Cont'd)
 - b. Wire Routing (Cont'd)
 - (3) (Cont'd)
 - VI. Areas above suspended ceilings used for returning air in heating/air conditioning systems.
 - (4) Place wiring where it will be least likely to be broken or detached. Provide protection if necessary. Wiring shall always be suitably supported by means which do not damage or puncture the wiring insulation.
 - (5) Wiring should follow joists; however, if it becomes necessary to span joists, run no more than three (3) inches from a wall to avoid possible damage to the wire.
 - (6) Whenever wire conduit is available or is required by applicable codes, it should be used. However, be sure conduit does not contain electrical wires that are not associated with telephone equipment. If it does, do not use the conduit.
 - c. Wire Separations
 - (1) Minimum separations are required in or on buildings, between telephone wiring and other conductors or metallic objects. The wiring separations specified in Table D are required for wires that cross or are parallel to other types of wires. The alternatives shown in Table D only apply to wire crossing.
 - (2) Separations of less than six (6) feet between inside wiring and lightning wire on rods are permissible under the following conditions:
 - Where telephone, power, and lightning rod ground connections are all made to a metallic cold water pipe that is properly grounded.
 - II. Where separately driven ground rods are used for telephone, power, and lightning rod installations, and the ground rods are bonded together.
 - In no case, shall the separation be less than four (4) inches.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

- 4. Wire Connections, Routing And Separations Standards (Cont'd)
 - c. Wire Separations (Cont'd)

Table D

Separation and Physical Protection for Premises Inside Wiring The table applies only to telephone wiring from network interface or other Telephone Company provided modular jack to telephone sets. Separations apply to crossing and to parallel runs (minimum separations). Minimum separations between telephone wiring, whether located inside or attached to the outside of buildings, and other types of wiring involved are as follows:

and concr cypeb	or writing involved are as forrows.	1	
	Type of Wire Involved	Minimum	Wire
		Separations	Crossing
			Alternatives
	Bare light or power wire of any	5 ft.	No
	voltage		alternative
Electric	Open wiring not over 300 volts	2 in.	See Note
Supply	Wires in conduit, or in armored		
	or non-metallic sheath cable, or	None	N/A
	power ground wires		
Radio &	Antenna lead-in and ground wires	4 in.	See Note
Television			
Signal or	Open wiring or wires in conduit	None	N/A
Control wires	or cable		
Communication	Community television systems		
wires	coaxial cables with ground	None	N/A
	shielding		
Telephone Drop	Using fused protectors	2 in.	See Note
Wire	Using fuseless protectors or		
	where no protector wiring from	None	N/A
	transformer		
Sign	Neon signs and associated wiring	6 in.	No
	from transformer		alternative
Lightning	Lightning rods and wires	6 ft.	See writing
system			Separations

Note: If minimum separations cannot be obtained, additional protection of a plastic tube, wire guard, or two layers of vinyl tape extending 2 inches beyond each side of object being crossed must be provided.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

- B. REGULATIONS (Cont'd)
 - 5. Wiring Operational Tests
 - a. Upon completion of an installation or change in the inside wiring, the customer should perform an operational test. This test should consist of lifting the handset of a functioning telephone which has been connected to the newly placed wire, listening for dial tone, dialing a digit to eliminate dial tone, and hanging up.
 - b. If excessive noise occurs during testing, or if dial tone cannot be heard or eliminated, or if trouble develops subsequent to installation of or changes in the wiring, disconnect the wiring from the Telephone Company provided network interface or modular jack and plug the functioning telephone directly into the jack. If the telephone works, the trouble condition is in the inside wire. If the telephone does not operate, contact the Telephone Company.
 - 6. Glossary Of Terms

Ancillary Equipment

Equipment which provides supplementary features, such as answering sets, speakerphones and dialers.

Armored or Nonmetallic Sheathed Cable

An assembly of two or more insulated conductors having an outer sheath of moisture resistant, flame retardant, nonmetallic material.

Bare Wire

An electrical conductor having no covering or insulation whatsoever.

Bridle Ring

A device used to loosely hold telephone wiring where appearance is not a factor. The bridle ring screws into the supporting surface. It is usually used where the wire is run below six feet and contains no sharp or hazardous edges. The telephone wire is inserted after the ring is in place.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

6. Glossary Of Terms (Cont'd)

Cleats

Porcelain fasteners which are used to fasten electric power wires that are insulated but do not have an outer protective jacket.

Coaxial Cable

A two-conductor cable for transmitting electrical signals that consist of a tube of conducting material surrounding a second centrally located conductor which is held in place by insulators.

Conduit

A plastic or metal pipe or tube used to carry telephone or electrical wiring.

Connecting Block

A device used for connecting premises telephone wiring and a means of connecting telephone sets to such wiring.

Dial Light

A small light bulb powered by low voltage and used to illuminate a telephone set dial in dark locations.

Drive Rings

A devise used to loosely hold telephone wiring in place where appearance is not a factor. The nail in a drive ring is driven into the supporting surface and the ring is open to permit placing of the wires. A drive ring must be used at least six feet from the floor so that its nail will not present a hazard.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

6. Glossary Of Terms (Cont'd)

Drop Wire

Wire used to transmit telephone service into a customer's premises. It may be aerial or buried.

Ground

Earth ground. Part of an electrical path or connection.

Ground Connections

Metal paths (wires, metal water pipes, rods and clamps) which connect electric circuits to earth ground, usually for protective reasons.

Ground Rods

A solid metal rod or pipe which is driven into the earth in order to provide an earth ground for electrical circuits.

Hardwired

The term "hardwired" as applied to a telephone set means the connection of the telephone set line (mounting) cord to a connecting block with screw connections. Under the FCC's Registration Program for terminal equipment, only those telephone sets which were connected to the telecommunications network in a "hardwired" manner prior to July 1, 1979, may remain connected or be reconnected in such a fashion.

Inside Wire

Wire designed to carry a telephone circuit(s) around a customer's premises. Typically, it consists of four insulated conductors encased in an insulated jacket.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

6. Glossary Of Terms (Cont'd)

Interface

The point of interconnection between terminal equipment or premises inside wire and the telecommunications network. The network interface or other modular jack which serves as the interface must be provided by the Telephone Company.

Knobs

Porcelain fasteners used to affix electric power wires which are insulated but do not have an outer protective jacket to a surface.

Modular

The term "modular" as used herein applies to the connection of a telephone set mounting cord to the telecommunications network via plugs located on the end of such cords and jacks used to connect premises inside wire.

Network Interface

The network interface will be located at a minimum point of penetration to the building or property in which a customer is located, as determined by the Telephone Company and accessible to the customer. Where the customer's equipment or type of service requires the extension of the network interface to a point other than the minimum point of penetration, the customer will be responsible for the facilities beyond the minimum point of penetration.

Nonmodular

The term "nonmodular" as used herein applies to the connection of a telephone set mounting cord to the telecommunications network via a four-pin plug and matching jack, or via hardwiring.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

6. Glossary Of Terms (Cont'd)

Open Wiring

A wiring method using cleats, knobs, tubes or flexible tubing for the protection and support of insulated conductors run in or on buildings and not concealed by the building structure.

Premises

A premises is the continuous property except railroad right-of-way, etc., occupied by a customer either under lease or ownership. In the same building occupied by others in addition to the customer, the premises is all space occupied by the customer regardless of whether such space is continuous or separated by intervening floors or rooms. All space must be accessible from within the building by halls, stairs or elevators.

Protector

A device used as protection from hazardous voltages. It may be mounted either inside or outside the premises. If mounted outside it will be covered with a plastic or metal housing.

Raceways

A metal or plastic channel used for loosely holding electrical and telephone wires in buildings. A raceway is usually located in the floor and is usually encased on three or four sides by concrete.

Registered Terminal Equipment

Terminal equipment which is registered for connection to the telecommunications network in accordance with Subpart C of Part 68 of the FCC's Rules. If a terminal device has been properly registered it will have an identification number permanently affixed to it.

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TELEPHONE WIRING STANDARDS FOR USE WITH NONBUTTON AND SINGLE BUTTON SETS ON THE SAME PREMISES

B. REGULATIONS (Cont'd)

6. Glossary Of Terms (Cont'd)

Ring

As used herein, "ring" refers to that side of a two-wire telephone circuit which is connected to the negative side of a battery located at the Telephone Company central office. It is like the "hot" side of a residential lightning circuit.

Telecommunications Network

The public switched telephone network.

Tip

As used herein, "tip" refers to that side of a two-wire telephone circuit which is connected to the positive side of a battery at the Telephone Company central office. It is like the "ground connection" side of a residential lightning circuit.

Transformer

As used herein, a transformer is an electrical device which reduces the voltage in electrical house wiring to a low voltage in order to operate a dial light. It plugs into an electrical outlet and has externally located low voltage connections which are extended by inside wiring to the telephone set dial light.

Wire Clamp

A device used to secure telephone wires to a surface. One end is U shaped for placement over the wire. The other end contains a tab which is affixed to the mounting surface with a nail or screw.

Wire Guard

A length of plastic, round or U shaped, used to protect telephone wiring from abrasion or foreign voltages.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

A. GENERAL

Terminal equipment, protective circuitry and communications systems may be connected to facilities of the Telephone Company.

B. REGULATIONS

- 1. Basis of Connection to the Telecommunications Network
 - a. Registered Terminal Equipment, Registered Protective Circuitry and Registered Communications Systems

Registered terminal equipment, registered protective circuitry and registered communications systems may be directly connected at the customer's premises to the telecommunications network, subject to Section 1 preceding, Part 68 of the Federal Communications Commission's Rules and Regulations, the order of the Federal Communications Commission in Docket 20828 (Computer Inquiry II) and the following.

(1) All combinations of registered equipment and associated nonregistered terminal equipment, including but not limited to wiring, shall be installed, operated and maintained so that the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are continually satisfied.

The Telephone Company may discontinue service or impose other remedies as provided for in Part 68 of the Federal Communications Commission's Rules and Regulations for failure to comply with these provisions.

- (2) The customer shall not connect registered equipment to a Telephone Company line if:
 - (a) the ringer equivalence of such equipment in combination with the total ringer equivalence or other equipment connected to the same line exceeds the allowable maximum of five or as otherwise determined by the Telephone Company, or
 - (b) the ringer type is not a ringer type designated by the Telephone Company as suitable for that particular line.
- (3) Unless a specific waiver has been granted by the Federal Communications Commission or except as otherwise provided in (4) following, all connections of registered equipment to services furnished by the Telephone Company shall be made through Telephone Company provided standard jacks; or, in the case of registered communications systems, through standard jacks wired in other than a standard manner, when such nonstandard wiring of the jack is agreed to by the Telephone Company.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - a. (Cont'd)
 - (4) The requirement for the use of standard jacks as described in (3) preceding is waived for registered equipment which is located in hazardous or inaccessible locations.
 - b. Premises Wiring Associated with Registered Communications Systems
 - (1) Premises wiring is wiring which connects separately housed equipment entities or system components to one another, or wiring which connects an equipment entity or system component with the network interface, located at the customer's premises and not with an equipment housing.
 - (2) 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 terminal 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 extension cord. Extension cords may 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 Federal Communications Commission'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 network interface.
 - (3) Protected premises wiring requiring acceptance testing for imbalance is premises wiring which is electrically behind registered equipment, system components or circuitry which assure

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - b. (Cont'd)
 - (3) (Cont'd)

that electrical contact between the wiring and commercial power wiring will not result in hazardous voltages at the telephone network interface.

- (4) Unprotected premises wiring is all other premises wiring.
- (5) Customers who intend to connect premises wiring other than fully-protected premises wiring to the telephone network shall give advance notice to the Telephone Company, in accordance with the procedures specified in Part 68 of the Federal Communications Commission's Rules and Regulations or as otherwise authorized by the Federal Communications Commission.
- (6) The Telephone Company may invoke extraordinary procedures specified in Part 68 of the Federal Communications Commission's Rules and Regulations where one or more of the following conditions are present:
 - (a) Information provided in the supervisor's affidavit gives reason to believe that a violation of Part 68 of the Federal Communications Commission's Rules and Regulations is likely.
 - (b) A failure has occurred during acceptance testing for imbalance.
 - (c) Harm has occurred, and there is reason to believe that this harm was a result of wiring operations performed under Part 68 of the Federal Communications Commission's Rules and Regulations.

In addition, the Telephone Company may monitor or participate in acceptance testing for imbalance, or may inspect other than fullyprotected premises wiring installations as set forth in Part 68 of the Federal Communications Commission's Rules and Regulations.

c. Connections of Grandfathered Terminal Equipment and Grandfathered Communications Systems

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - c. (Cont'd)
 - (1) Direct Connections (Cont'd)
 - (a) Grandfathered Terminal Equipment

Grandfathered terminal equipment may remain directly connected and be moved and reconnected to the telecommunications network for the life of the equipment without registration and may be modified only in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations, subject to the following:

- I. the customer shall notify the Telephone Company when such grandfathered terminal equipment is to be connected and shall notify the Telephone Company when such grandfathered terminal equipment is to be permanently disconnected; such notification shall include a description of the equipment including the manufacturer's name, model number, and type of equipment;
- II. all such connections are made through Telephone Company provided standard jacks or are otherwise connected by the Telephone Company; and
- III. all such connections shall comply with the minimum protection criteria set forth in B.1.e. following.
- (b) Grandfathered Communications Systems
 - I. Grandfathered communications systems may remain directly connected and be moved and reconnected to the telecommunications network for the life of the equipment without registration, and may be modified only in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations, subject to the following:

the customer shall notify the Telephone Company when such communications systems are to be connected and shall notify the Telephone Company when such communications systems are to be permanently disconnected; such notification shall include a description of the equipment including the manufacturer's name, model number, and type of equipment;

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - c. (Cont'd)
 - (1) Direct Connections (Cont'd)
 - (b) Grandfathered Communications Equipment (Cont'd)
 - I. (Cont'd)

all such connections are made through Telephone Company provided standard jacks or are otherwise connected by the Telephone Company;

all such connections shall comply with the minimum protection criteria set forth in B.1.e. following;

premises wiring shall conform to Part 68 of the Federal Communications Commission's Rules and Regulations;

no changes may be made to equipment so connected except by the manufacturer thereof, or a duly authorized agent of the manufacturer.

II. Additions to grandfathered communications systems may be made without registration of any additional equipment involved if:

> equipment so added is being reconnected, i.e., was previously directly connected prior to January 1, 1980, in accordance with Telephone Company tariffs; and

such additions comply with the provisions of (b) I. preceding.

- III. Additions of registered equipment to grandfathered communications systems are subject to B.1.a. preceding.
- (c) Customer-provided terminal equipment and customer-provided communications systems connected to the telecommunications network via customer-provided grandfathered protective circuitry are subject to the provisions of (a) and (b) preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - d. Connections Through Connecting Arrangements Provided by the Telephone Company
 - (1) General Conditions
 - (a) Grandfathered connections of terminal equipment and grandfathered connections of communications systems made in accordance with B.1.d.(2) and (3) respectively following may remain connected and be moved and reconnected for the life of the equipment and may be modified only in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations. Connecting arrangements used for such moves and reconnections will continue to be provided by the Telephone Company subject to their availability, at the rates and charges specified in Section 3.
 - (b) Subject to availability, the Telephone Company will provide grandfathered connecting arrangements in accordance with the provisions of Section 3 of this tariff to accommodate the connection of devices or system components, i.e., equipmentto-equipment connections, connected at the customer's premises to Telephone Company provided host terminal equipment or communications systems provided the host terminal equipment or communications system is grandfathered and is not a model or specific system type which has been registered. A grandfathered connecting arrangement provided under the provisions of Section 3 may remain connected for the life of the arrangement's connection to its associated Telephone Company provided host terminal equipment or communications system. All reconnections of such connecting arrangements will be subject to the requirements specified above. Grandfathered connecting arrangements are provided at the rates and charges specified in Section 3.
 - (c) Customer-provided communications systems which are not subject to Part 68 of the Federal Communications Commission's Rules and Regulations may be connected in accordance with B.1.j. following. Telephone Company provided connecting arrangements are furnished for the connection of such systems at the rates and charges specified in Section 3 of this tariff.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - d. (Cont'd)
 - (1) General Conditions (Cont'd)
 - (d) Customer-provided terminal equipment may be connected in accordance with B.1.k. following, to services of the Telephone Company specifically exempted from the Federal Communications Commission's Registration Program. Telephone Company provided connecting arrangements are furnished for the connection of such equipment at the rates and charges specified in Section 3 of this tariff.
 - (e) Separate, identifiable and discrete protective circuitry, i.e., connecting arrangements, used for grandfathered connections of communications systems to the telecommunications network, may be removed or replaced with apparatus of lesser protective function, provided that any equipment, and any premises wiring whose classification is changed thereby, conforms to Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (f) Network control signaling shall be performed by equipment furnished, installed and maintained by the Telephone Company, except that:
 - customer-provided tone-type address signaling is permissible through a Telephone Company provided connecting arrangement.
 - II. signaling functions may be performed by customer-provided Conforming Answering Devices specified in g. following.
 - (2) Grandfathered Connections of Terminal Equipment
 - (a) Data Terminal Equipment

Subject to the provisions of (1)(a) and (d) preceding, customer-provided data terminal equipment, including telephotograph equipment, may be connected at the customer's premises to the telecommunications network through a network control

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - d. (Cont'd)
 - (2) Grandfathered Connections of Terminal Equipment (Cont'd)
 - (a) Data Terminal Equipment (Cont'd)

signaling unit and a data access arrangement provided by the Telephone Company in accordance with the following:

I. The customer shall furnish the equipment which performs the functions of:

Conditioning the data signals generated by the customer-provided terminal equipment to signals suitable for transmission by means of Telephone Company services, and

Conditioning signals transmitted by means of Telephone Company services to data signals suitable for reception by customer-provided equipment.

- II. The customer-provided data terminal equipment must comply with the minimum protection criteria specified in B.1.e. following:
- III. Where a data access arrangement is furnished in connection with customer-provided terminal equipment and such terminal equipment is used for both voice and data communication, the data access arrangement may be used to connect the customer-provided terminal equipment for voice communication.
- (b) Voice Terminal Equipment

Subject to the provisions of (1)(a) and (d) preceding, customer-provided voice terminal equipment may be connected at the customer's premises to the telecommunications network in accordance with the following:

I. The connection shall be made through a network control signaling unit and a connecting arrangement furnished by the Telephone Company. In accordance with B.1.f. and g. following, a connecting arrangement is not required for the connection of attested equipment or conforming answering devices.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - d. (Cont'd)
 - (2) Grandfathered Connections of Terminal Equipment (Cont'd)
 - (b) Voice Terminal Equipment (Cont'd)
 - II. Where a data access arrangement is furnished in connection with customer-provided terminal equipment and such terminal equipment is used for both voice and data communication, the data access arrangement may be used to connect the customer-provided terminal equipment for voice communications.
 - III. The customer-provided voice terminal equipment must comply with the minimum protection criteria specified in B.1.e. following.
 - (3) Grandfathered Connections of Communications Systems

Subject to the provisions of (1)(a) preceding, customer-provided communications systems may be connected at the customer's premises to telecommunications services in accordance with the following:

- (a) The connection shall be through a network control signaling unit and connecting arrangement furnished by the Telephone Company.
- (b) The provisions relating to minimum protection criteria set forth in B.1.e. following shall apply to the connection of customer-provided communications systems.
- e. Minimum Protection Criteria for Electrical Connections
 - (1) To prevent excessive noise and crosstalk in the 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 customer-provided equipment to the Network interface located on the customer's premises will be specified for each customer location but in no case shall it exceed one milliwatt.
 - (2) To protect other services, it is necessary that the signal which is applied by the customer-provided equipment to the Network interface located on the customer's premises meet the following limits.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - e. Minimum Protection Criteria for Electrical Connections (Cont'd)
 - (2) (Cont'd)
 - (a) The power in the band from 3,995 Hertz to 4,005 Hertz shall be at least 18dB below the power of the signal as specified in (1) preceding.
 - (b) The power in the band from 4,005 Hertz to 10,000 Hertz shall not exceed 16dB below one milliwatt.
 - (c) The power in the band from 10,000 Hertz to 25,000 Hertz shall not exceed 24dB below one milliwatt.
 - (d) The power in the band from 25,000 Hertz to 40,000 Hertz shall not exceed 36dB below one milliwatt.
 - (e) The power in the band above 40,000 Hertz shall not exceed 50dB below one milliwatt.
 - (3) To prevent the interruption or disconnection of a call, or interference with network control signaling, it is necessary that the signal applied by the customer-provided equipment to the Telephone Company interface located on the customer's premises at no time have energy solely in the 2450 to 2750 Hertz band. If signal power is in the 2450 to 2750 Hertz band, it must not exceed the power present at the same time in the 800 to 2450 Hertz band.
 - f. Attested Equipment Connected Prior to July 1, 1980
 - (1) Until July 1, 1980, customer-provided headsets and nonpowered conferencing equipment which meet the standards and procedures set forth by the Telephone Company in technical references for attested equipment may be connected at the customer's premises to the telecommunications network in accordance with (a) through (e) following. Such equipment may remain connected and be moved and reconnected in accordance therewith for the life of the equipment unless subsequently modified.
 - (a) The connection shall be made through an interface connection, e.g., headset jack, provided by the Telephone Company.
 - (b) The identification number issued by the Telephone Company to the manufacturer or supplier must appear on each unit of attested equipment utilized.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - f. Attested Equipment Connected Prior to July 1, 1980 (Cont'd)
 - (1) (Cont'd)
 - (c) Customers must notify the Telephone Company of their intention to connect attested equipment. Such notification must include the identification number of the equipment and the location at which that equipment is to be used.
 - (d) Attested equipment may not:
 - I. Be connected to a source of electrical power which is external to the telecommunications network.
 - II. Be grounded.
 - III. Perform any network control signaling functions prior to and including the establishment of the intended transmission path.
 - IV. Have amplification in the transmission path, other than single-ended terminal devices with the maximum gain limited so that the output power meets the minimum protection criteria set forth in B.1.e. preceding.
 - V. Use wiring external to such equipment that is permanently affixed at the site of the installation other than portable connections compatible with the interface connection provided by the Telephone Company.
 - (e) Attested equipment must comply with the minimum protection criteria set forth in B.1.e. preceding.
 - (2) In the event attested equipment bearing an identification number does not meet the requirements set forth by the Telephone Company in its technical references, the customer using such attested equipment shall either disconnect the equipment from the Telephone Company service or arrange for connection of the equipment in accordance with B.1.a. preceding.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - g. Conforming Answering Devices Connected Prior to July 1, 1979
 - (1) Customer-provided conforming answering devices which meet the standards and procedures set forth by the Telephone Company in technical references for conforming answering devices and which were connected at the customer's premises to the telecommunications network prior to July 1, 1979 in accordance with (a) through (e) following, may remain connected and be moved and reconnected in accordance therewith for the life of the equipment, unless subsequently modified.
 - (a) Customers shall notify the Telephone Company of their intention to connect conforming answering devices. Such notification shall include the location at which the conforming answering device is to be used as well as its conformance number.
 - (b) The conforming answering device shall only be connected by means of a jack or jack arrangement provided by the Telephone Company.
 - (c) The conforming answering device shall be operated and maintained in accordance with those instructions furnished with such conforming answering device as required by the Telephone Company's technical reference for conforming answering devices.
 - (d) Conforming Answering Devices may not:
 - I. Be used to transmit or receive data signals;
 - II. Be used with public coin telephone service; and
 - III. Be used to originate calls.
 - (e) The conforming answering device shall comply with the minimum protection criteria set forth B.1.e. preceding.
 - (2) In the event that an answering device bearing a conformance number does not meet the requirements of the Telephone Company's technical reference for conforming answering devices, the customer using such answering device shall either disconnect the device from the Telephone Company service or arrange for connection of the device in accordance with B.1.a. preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - h. Accessories

Customer-provided accessories may be used with telecommunications services provided that such accessories comply with the provisions of Section 1, B.2. and B.1.d(1)(f) of this section.

- Connections of Customer-provided Communications Systems Not Subject to Part 68 of the Federal Communications Commission's Rules and Regulations
 - (1) Direct Electrical Connection

Customer-provided communications systems not subject to Part 68 of the Federal Communications Commission's Rules and Regulations may be connected with telecommunications services on a direct electrical basis at the customer's premises provided that:

- (a) The connection is made through:
 - I. a connecting arrangement furnished by the Telephone Company, or
 - II. registered or grandfathered terminal equipment, protective circuitry, or communications system subject to Part 68 of the Federal Communications Commission's Rules and Regulations which, either singularly or in combination, assures that the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are met at the network interface.

In lieu of these requirements for total hardware protection, an optional, alternative method is available, as described in (2) following, for the control of signal power only.

- (b) The connection is:
 - I. through switching equipment, or
 - II. to a customer-provided communications system not subject to Part 68 of the Federal Communications Commission's Rules and Regulations that is arranged to promptly return the network service to an idle, on-hook, state should the communications system fail. In addition, the customer must notify the Telephone Company when the communications system fails.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - i. (Cont'd)
 - (1) Direct Electrical Connection (Cont'd)
 - (c) Minimum protection criteria set forth in B.1.e. preceding are complied with when the connection is made through equipment or systems that are not registered.
 - (d) When the connection is to WATS service, the customer has a requirement to communicate over a WATS line to or from premises of that customer located in the same rate state as that for which the WATS initial period rate applies. Customer-provided communications systems not subject to Part 68 of the Federal Communications Commission's Rules and Regulations which are not connected through switching equipment must connect only in that WATS rate state in terminal equipment or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (2) Institutional Procedures for Signal Power Control
 - (a) When customer-provided communications systems not subject to Part 68 of the Federal Communications Commission's Rules and Regulations are connected through a Telephone Company provided connecting arrangement - or registered or grandfathered system or protective circuitry which assures that all of the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are met at the network interface, no further action is required. However, when a customer elects to connect such a communications system to the telecommunications network and the registered or grandfathered equipment, system or protective circuitry through which the connection is made does not provide protection for signal power control, the customer must comply with the following institutional procedures:
 - I. The customer-provided communications system must be installed, operated and maintained so that the signal power, within the frequency range of 200-4000 Hertz, at the telecommunications network interface continuously complies with Part 68 of the Federal Communications Commission's Rules and Regulations.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - i. (Cont'd)
 - (2) Institutional Procedures for Signal Power Control (Cont'd)
 - (a) (Cont'd)
 - II. The operator(s)/maintainer(s) responsible for the establishment, maintenance and adjustment of the voice frequency signal power present at the telecommunications network interface must be trained to perform these functions by successfully completing one of the following:
 - (i) a training course provided by the manufacturer of the equipment used to control voice frequency signal power; or
 - (ii) a training course provided by the customer or authorized representative, who has responsibility for the entire communications system, using training materials and instructions provided by the manufacturer of the equipment used to control the voice frequency signal power; or
 - (iii) 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
 - (iv) in lieu of the preceding training requirements, the operator(s)/maintainer(s) is under the control of a supervisor trained in accordance with (i) through (iii) preceding.

Upon request the customer is required to provide the proper documentation to demonstrate compliance with the requirements in this II.

III. 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 customer-provided communications system. A copy of the affidavit must also be maintained at the customer's premises. The affidavit must contain the following information.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - i. (Cont'd)
 - (2) Institutional Procedures for Signal Power Control (Cont'd)
 - (a) (Cont'd)

III. (Cont'd)

- (i) The full name, business address, business telephone number and signature of the customer or authorized representative who has responsibility for the operation and maintenance of the communications system.
- (ii) The line(s) which the communications system will be either connected to or arranged for connection to.
- (iii) A statement that all operations associated with establishment, maintenance and adjustment of the signal power present at the network interface will comply with Part 68 of the FCC's Rules and Regulations.
- (iv) A statement describing how each operator/maintainer of the communications system will meet and continue to meet the training requirements for persons installing, adjusting or maintaining the communications system.
- (b) Extraordinary Procedures
 - The Telephone Company may invoke extraordinary procedures to protect the telecommunications network where one or more of the following conditions are present.
 - (i) Information provided in the affidavit gives reason to believe that a violation of Part 68 of the FCC's Rules and Regulations or the Institutional Procedures specified in (2)(a) preceding is likely.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - i. (Cont'd)
 - (2) Institutional Procedures for Signal Power Control (Cont'd)
 - (b) Extraordinary Procedures (Cont'd)
 - I. (Cont'd)
 - (ii) Harm has occurred and there is reason to believe this harm was a result of operations performed under the Institutional Procedures specified in (2)(a) preceding.
 - II. 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 Part 68 are met at the network interface. This protective apparatus may be provided by either the Telephone Company or the customer.
 - (ii) Disconnecting service.
 - III. A charge specified by the Telephone Company will apply
 when:
 - (i) It is necessary to send a Telephone Company employee to the premises where the connection is made because a condition specified in I. preceding exists, and
 - (ii) A failure to comply with Part 68 of the FCC's Rules and Regulations or the Institutional Procedures for signal power control in (2)(a) preceding is disclosed.
 - j. Connections of Customer-provided Terminal Equipment to Services Specifically Exempted from the FCC's Registration Program.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - j. Connections of Customer-provided Terminal Equipment to Services (Cont'd)
 - (1) The connection shall be through a network control signaling unit and connecting arrangement furnished by the Telephone Company.
 - (2) The customer-provided terminal equipment must comply with the minimum protection criteria specified in B.1.e. preceding.
 - k. Connections Involving National Defense and Security
 - (1) In certain cases Part 68 of the FCC's Rules and Regulations permit the connection of nonregistered terminal equipment or communications systems to the telecommunications network, provided that:
 - (a) The Secretary of Defense; the head of any other governmental department, having requisite Federal Communications Commission approval; or their authorized representative certifies in writing to the Telephone Company that:
 - The connection is required in the interest of national defense and security;
 - II. The equipment to be connected either complies with the technical requirements of Part 68 or will not cause harms to the telecommunications network or Telephone Company employees; and
 - III. The work is supervised by an installation supervisor who meets the qualifications stated in Part 68.
 - 1. Connections of Customer-provided Test Equipment
 - (1) Totally Protective Connections

Customer-provided test equipment may be connected to the telecommunications network at the premises of the customer through registered or grandfathered terminal equipment, protective circuitry, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations which, either singularly or in combination, assures that all of the requirements of Part 68 of the Federal Communications Rules and Regulations, total protection are met at the network interface.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - 1. Connections of Customer-provided Test Equipment (Cont'd)
 - (2) Interim Program for Connections of Customer-Provided Test Equipment

Customer-provided test equipment may also be connected at the premises of the customer either directly at the network interface, or through terminal equipment, protective circuitry, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations which does not provide protection for signal power control under the following Interim Program provided that:

- (a) The customer-provided test equipment is limited to transmission signal power generating and/or detection devices, or similar devices, utilized by the customer for the detection and/or isolation of a communications service fault.
- (b) The customer-provided test equipment is of a type that was lawfully directly connected to the telecommunications network as of March 6, 1981. Such test equipment may remain connected, be moved or reconnected during the life of the test equipment unless it has been subsequently modified.
- (c) Direct connections of customer-provided test equipment or connections through Telephone Company provided terminal equipment, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations are made through Telephone Company provided jacks or as otherwise authorized by the Telephone Company.
- (d) Customer-provided test equipment must be operated in accordance with the Institutional Procedures for Signal Power Control as specified in (3) following.
- (e) The customer notifies the Telephone Company of each telecommunications network service at each premises to which the customer-provided test equipment will be connected in advance of the initial connection. The customer must also notify the Telephone Company when such test equipment is permanently disconnected at each premises.
- (f) No customer-provided test equipment or combination of test equipment with terminal equipment, protective circuitry or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations, including Issued by authority of an Order of the Public Service Commission of West Virginia

_____ dated

in Case No.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - 1. Connections of Customer-provided Test Equipment (Cont'd)
 - (2) (Cont'd)
 - (f) (Cont'd)

but not limited to wiring, may cause electrical hazards to Telephone Company personnel, damage to Telephone Company equipment, malfunction of Telephone Company billing equipment, or degradation of service to persons other than the user of the subject test equipment or the user's calling or called party.

- (3) Institutional Procedures for Signal Power Control
 - (a) In accordance with (2)(d) preceding, the customer must comply with the following Institutional Procedures:
 - I. The customer must install, operate and maintain the test equipment so that its signal power at the network interface complies with Subpart D of Part 68 of the Federal Communications Commission's Rules and Regulations.
 - II. The operator(s)/maintainer(s) responsible for the test equipment signal power present at the network interface must be trained to perform these functions by successfully completing one of the following:
 - (i) a training course provided by the manufacturer of the test equipment, or
 - (ii) a training course provided by the customer, or authorized representative of the customer, using training materials and instructions provided by the manufacturer of the test equipment, or
 - (iii) an independent training course, e.g., trade school or technical institution, recognized by the manufacturer of the test equipment, or
 - (iv) in lieu of the preceding training requirements, the operator(s)/maintainer(s) is under the control of a supervisor trained in accordance with (i) through (iii) preceding.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - 1. Connections of Customer-provided Test Equipment (Cont'd)
 - (3) Institutional Procedures for Signal Power Control (Cont'd)
 - (a) (Cont'd)
 - II. (Cont'd)

Upon request, the customer is required to provide proper documentation to demonstrate compliance with the requirements in this II.

- III. Advance notice must be given to the Telephone Company in the form of a notarized affidavit before the initial connection of the customer-provided test equipment at each premises after April 9, 1981. A copy of the affidavit must also be maintained at the customer's premises. The affidavit must contain the following information:
 - (i) The full name, business address, business telephone number and signature of the customer or authorized representative who has responsibility for the operation of the test equipment.
 - (ii) The line(s) to which the test equipment will be either connected to or arranged for connection to.
 - (iii) A statement that all operations associated with the establishment, maintenance and adjustment of the test equipment signal power present at the network interface will comply with Subpart D of Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (iv) A statement describing how each operator of the test equipment will meet and continue to meet the training requirements for persons installing, connecting, adjusting or maintaining the test equipment.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - 1. Connections of Customer-provided Test Equipment (Cont'd)
 - (3) Institutional Procedures for Signal Power Control (Cont'd)
 - (b) Extraordinary Procedures
 - The Telephone Company may invoke extraordinary procedures to protect the telecommunications network where one or more of the following conditions are present.
 - (i) Information provided in the affidavit gives reason to believe that a violation of Part 68 of the FCC's Rules and Regulations or the Institutional Procedures specified in (a) preceding is likely.
 - (ii) Harm has occurred and there is reason to believe this harm was a result of operations performed under the Institutional Procedures specified in (a) preceding.
 - II. The extraordinary procedures, which can be invoked by the Telephone Company, include:
 - Requiring the use of protective apparatus which either protects solely against excessive signal power or which assures that all of the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are met at the network interface.
 - (ii) Disconnecting service.
 - III. A charge specified by the Telephone Company will apply
 when:
 - (i) It is necessary to send a repair person to the premises where the test equipment is connected because a condition as specified in I. preceding exists, and
 - (ii) A failure to comply with the Institutional Procedures for signal power control is disclosed.

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CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 1. Basis of Connection to the Telecommunications Network (Cont'd)
 - m. Connections of Customer-provided Customer Premises Equipment to Individual Line Service

Customer-provided customer premises equipment may be connected to individual line service provided that it is registered or grandfathered under part 68 of the Federal Communications Commission's Rules and Regulations for individual line service and is modifiable, by either the Telephone Company or the customer, to be compatible with the service to which it is to be connected. Such modification, in accordance with Telephone Company requirements for compatibility, must be completed prior to any connection to the service. This requirement is in addition to any other regulations applicable to the connection of customer-provided customer premises equipment to individual line service which are specified in the Telephone Company's applicable tariffs.

- (1) Modification, when performed by the Telephone Company, will be by a Telephone Company representative who, without special training or special tools from the equipment's manufacturer, is able to rearrange or modify the equipment in order to achieve compatibility of the equipment with the particular configuration of service involved. The Telephone Company is not responsible for parts for use with the equipment to be used on the service.
- (2) A request by the customer to modify customer-provided customer premises equipment also grants permission to the Telephone Company to modify the equipment to make it compatible. Such permission does not necessitate disclosure by the Telephone Company of information which may be of a proprietary nature to the equipment's manufacturer.
- (3) The Telephone Company may make changes to their facilities without first obtaining customer approval so long as the Telephone Company is willing to modify the equipment as set forth preceding when necessary and without charge to the customer.
- 2. Basis of Connection to Channel Services

Terminal equipment and communications systems may be connected at the customer's premises to channel services furnished by the Telephone Company where such connections are made in accordance with Section 1 preceding and the following provisions.

Terminal equipment and communications systems may be connected in an interpositioned configuration to those channel services specified in a.(2), (3), or (4) following subject to Section 1, B.10., Interpositioning of Terminal Equipment and Communications Systems, preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - a. Connections of Registered Equipment
 - Registered terminal equipment, registered protective circuitry and registered communications systems may be connected to those channel services specified in (2), (3) and (4) following, subject to Section 1 preceding and this 2.a., and further subject to B.1.a., B.1.b., and B.1.1. preceding.
 - (2) The connection may be made only at the customer's premises to channel services that present a two-wire or four-wire loop signaling interface for such connection under the following conditions:
 - (a) Registered terminal equipment, registered protective circuitry, and registered button telephone systems may be connected to the station end of channel services furnished in connection with off-premises stations.
 - (b) Registered PBX systems may be connected, as a trunk connection, to the station end of channel services furnished in connection with off-premises stations.
 - (3) The connection of registered terminal equipment and registered PBX systems may be made only at the customer's premises to a channel service that presents an interface for either two-wire or fourwire transmission, with separate E and M signaling leads conventionally known as Type I, battery/ground, or Type II, contact closure type. Such E and M signaling leads are those terminal equipment or PBX leads, other than voice or data communications leads, used for the purpose of transferring supervisory or address signals across the interface.
 - (4) The connection of customer-provided registered terminal equipment and registered PBX systems may be made only at the customer's premises to a Series 1000 channel services furnished to provide indications of message registration of outgoing calls to such customer-provided equipment or systems.
 - (5) Customers who intend to install, perform additions to, or make arrangements of automatic identification of outward dialing functions shall give advance notice to the Telephone Company in accordance with the procedures specified in Part 68 of the Federal Communications Commission's Rules and Regulations or as otherwise authorized by the Federal Communications Commission.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - b. Connections of Grandfathered Terminal Equipment and Grandfathered Communications Systems
 - (1) Direct Connections
 - (a) Grandfathered terminal equipment and grandfathered communications systems, directly connected to the channel services specified in B.2.a.(2) preceding are subject to B.1.c.(1), B.1.f. and B.1.g. preceding. Such connections are subject to the minimum protection criteria set forth in B.2.c.(7) following.
 - (b) Grandfathered terminal equipment and grandfathered communications systems, directly connected to the channel services specified in B.2.a.(3) and (4) preceding on April 30, 1980, may remain connected for the life of the equipment without registration, and may be modified only in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations, subject to the following:
 - (I) All such connections shall comply with the minimum protection criteria set forth in B.2.c.(7) following.
 - (II) No changes may be made to equipment so connected except by the manufacturer thereof, or a duly authorized agent of the manufacturer.
 - (c) Until May 1, 1983, new installations of terminal equipment or communications systems which have been grandfathered may be connected for use with the channel services specified in B.2.a.(3) or (4) preceding, subject to the following:
 - (I) The customer shall notify the Telephone Company when such equipment or systems are to be connected and shall notify the Telephone Company when such equipment or systems are to be permanently disconnected; such notification shall include a description of the equipment including the manufacturer's name, model number, and type of equipment.
 - (II) All such connections are made through Telephone Company provided standard jacks or otherwise connected by the Telephone Company.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - b. (Cont'd)
 - (1) Direct Connections (Cont'd)
 - (c) (Cont'd)
 - (III) All such connections shall comply with the minimum protection criteria set forth in B.2.c.(7) following.
 - (IV) Premises wiring associated with communications systems shall conform to Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (V) No changes may be made to equipment so connected except by the manufacturer thereof, or a duly authorized agent of the manufacturer.
 - (d) Additions to grandfathered terminal equipment or grandfathered communications systems specified in (b) and (c) preceding may be made, subject to (c) (I) through (V) preceding and to the following:
 - (I) Until May 1, 1983, where the equipment being added is of a type which has been grandfathered, and
 - (II) After May 1, 1983, where the equipment being added is grandfathered.
 - (III) Additions of registered equipment are subject to B.2.a. preceding.
 - (e) Systems connected pursuant to (b) through (d) preceding may remain connected and be moved and reconnected, in accordance with (c) (I) through (V) preceding, for the life of the equipment and may be modified only in accordance with Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (f) Customer-provided terminal equipment and customer-provided communications systems connected via customer-provided grandfathered protective circuitry are subject to the provisions of (a) thru (e) preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - b. (Cont'd)
 - (2) Connections Through Connecting Arrangements Provided by the Telephone Company
 - (a) Grandfathered connections of terminal equipment and grandfathered connections of communications systems to the channel services specified in B.2.a.(2) preceding are subject to B.1.d. preceding. Such connections are subject to the minimum protection criteria set forth in B.2.c.(7) following.
 - (b) Grandfathered connections of terminal equipment and grandfathered connections of communications systems to the channel services specified in B.2.a.(3) and (4) preceding are subject to the following.:
 - (I) Until May 1, 1983, the Telephone Company will provide connecting arrangements for installations of new customerprovided terminal equipment or communications systems that are subject to Part 68 of the Federal Communications Commission's Rules and Regulations. However, after May 1, 1983, Telephone Company provided connecting arrangements will only be provided, to the extent that such connecting arrangements are available, to reconnect terminal equipment or communications systems which were previously connected to the channel services specified in B.2.a.(3) or (4) preceding through connecting arrangements prior to May 1, 1983.
 - (II) Grandfathered connections of terminal equipment and grandfathered connections of communications systems made in accordance with (I) preceding may remain connected and be moved and reconnected for the life of the equipment and may be modified only in accordance with Part 68 of the Federal Communications Commission's (FCC) Rules and Regulations. Connecting arrangements used for such moves and reconnections will continue to be provided by the Telephone Company subject to their availability, at the rates and charges specified in Section 3 following.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - b. (Cont'd)
 - (2) (Cont'd)
 - (b) (Cont'd)
 - (III) Network control signaling shall be performed by the connecting equipment furnished, installed and maintained by the Telephone Company, except that customer-provided tone-type address signaling is permissible through the Telephone Company provided connecting arrangement.
 - (IV) The connections specified in (I) through (III) preceding must comply with the minimum protection criteria specified in B.2.c.(7) following.
 - c. Connections of Customer-provided Terminal Equipment and Communications Systems not subject to the FCC's Registration Program
 - (1) Connecting arrangements are not required and minimum protection criteria are not applicable where customer-provided terminal equipment or communications systems are connected with the following channels when such channels are used for the types of transmission specified herein due to the nature of the service provided and/or the type of channels and equipment used.

Series 1000 Channels Series 2000 Channels (When used for the remote operation and control of mobile radio-telephone systems) Series 6000 Channels

- (2) Except as otherwise provided in B.1. preceding, customer-provided terminal equipment and communications systems may be electrically connected to Channel Services in accordance with the following provisions.
 - (a) When the customer-provided terminal equipment or communications system is connected with Channel Service furnished by the Telephone Company and such Channel Service is not arranged for connection to telecommunications services, such connections shall be made to an interface provided by the Telephone Company.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (2) (Cont'd)
 - (b) When the customer-provided terminal equipment or communications system is connected with Channel Service furnished by the Telephone Company and such Channel Service is arranged for connection to telecommunications services.
 - (I) Except as otherwise specified in c.(5)(a)IV. following, such connections shall be made through a connecting arrangement as provided herein, and
 - (II) The connection shall be such that the functions of network control signaling, except customer-provided tone-type address signaling through a Telephone Company provided connecting arrangement, are performed by equipment furnished by the Telephone Company.
 - (c) Customer-provided terminal equipment or communications systems connected pursuant to (a) or (b) must comply with the minimum protection criteria in (7) following.
 - (3) Date Terminal Equipment

Customer-provided data terminal equipment, including telephotograph equipment, may be connected at the customer's premises to channel services through a network control signaling unit and a data access arrangement provided by the Telephone Company in accordance with the following when such channel service is arranged as provided in (2)(b) preceding.

- (a) The customer shall furnish the equipment which performs the functions of:
 - Conditioning the data signals generated by the customerprovided terminal equipment to signals suitable for transmission by means of Telephone Company services, and
 - II. Conditioning signals transmitted by means of Telephone Company services to data signals suitable for reception by customer-provided equipment.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (3) Date Terminal Equipment (Cont'd)
 - (b) Where a data access arrangement is furnished in connection with customer-provided terminal equipment and such terminal equipment is used for both voice and data communication, the data access arrangement may be used to connect the customerprovided terminal equipment for voice communication.
 - (4) Voice Terminal Equipment
 - (a) Customer-provided voice terminal equipment may be connected at the customer's premises to channel service in accordance with the following when such channel service is arranged as provided in (2)(b) preceding.
 - The connection shall be made through a network control signaling unit and a connecting arrangement furnished by the Telephone Company.
 - II. Where a data access arrangement is furnished in connection with customer-provided terminal equipment and such terminal equipment is used for both voice and data communication, the data access arrangement may be used to connect the customer-provided terminal equipment for voice communication.
 - (b) Attested Equipment and Conforming Answering Devices may be used with channel service subject to the provisions of B.1.f. and B.1.g. preceding.
 - (5) Communications Systems
 - (a) Customer-provided communications systems, other than communications systems connected pursuant to B.2.a. and B.2.b. preceding, may be connected to channel service as specified following:

These communication systems, including channels derived from such systems, not exceeding voice grade, may be connected at the customer's premises where the customer has a regular and continuing requirement for the origination or reception of communications over the customer-provided communications system provided that:

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (a) (Cont'd)
 - The normal mode of operation of the customer-provided communications systems shall be to provide communications originating or receiving at the premises on which the connection is made.
 - II. The connection shall be made through switching equipment provided either by the customer or by the Telephone Company.
 - III. The connection shall be to channels of a type number lower than 5500 furnished by the Telephone Company or to channels created therefrom in accordance with the provisions of Section 1 of this Company's General Regulations Tariff.
 - IV. When the channel service is arranged as provided in c.(2)(b) preceding, the connection is made through:
 - (i) a connecting arrangement provided by the Telephone Company, or
 - (ii) registered or grandfathered terminal equipment, communications system, or protective circuitry, which, either singularly or in combination assures that the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are met at the network interface.

Minimum protection criteria as set forth in (7) following must be complied with when the connection is made through equipment or systems that are not registered.

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

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (a) (Cont'd)
 - When customer-provided communications systems not subject v. to Part 68 of the Federal Communications Commission's Rules and Regulations are connected to channel services that are arranged as provided in c.(2)(b) preceding and the connection is through, (a) a Telephone Company provided connecting arrangement or, (b) registered or grandfathered terminal equipment, communications system or protective circuitry which assures that all of the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations are met at the network interface, no further action is required. However, when a customer elects to connect a communications system to private line service and the registered or grandfathered equipment, system or protective circuitry through which the connection is made does not provide protection for signal power control, the customer must comply with the following institutional procedures:
 - (i) The customer-provided communications system must be installed, operated and maintained so that the signal power, within the frequency range of 200-4000 Hertz, at the network interface continuously complies with Part 68 of the Federal Communications Commission's Rules and Regulations.
 - (ii) The operator(s)/maintainer(s) responsible for the establishment, maintenance and adjustment of the voice frequency signal power present at the channel service must be trained to perform these functions by successfully completing one of the following:
 - a training course provided by the manufacturer of the equipment used to control voice frequency signal power; or

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (a) (Cont'd)
 - V. (Cont'd)
 - (ii) (Cont'd)
 - a training course provided by the customer or authorized representative, who has responsibility for the entire communications system, using training materials and instructions provided by the manufacturer of the equipment used to control the voice frequency signal power; or
 - 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
 - in lieu of the preceding training requirements, the operator(s)/maintainer(s) is under the control of a supervisor trained in accordance with the requirements of this(ii).

Upon request, the customer is required to provide proper documentation to demonstrate compliance with the requirements of this (ii).

- (iii) 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 customer-provided communications system. A copy of the affidavit must also be maintained at the customer's premises. The affidavit must contain the following information:
 - The full name, business address, business telephone number and signature of the customer or authorized representative who has responsibility for the operation and maintenance of the communications system.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (a) (Cont'd)
 - V. (Cont'd)
 - (iii) (Cont'd)
 - The line(s) which the communications system will be either connected to or arranged for connection to.
 - A statement that all operations associated with the establishment, maintenance and adjustment of the signal power present at the network interface will comply with Part 68 of the Federal Communications Commission's Rules and Regulations.
 - A statement describing how each operator/maintainer of the communications system will meet and continue to meet the training requirements for persons installing, adjusting or maintaining the communications system.
 - VI. Extraordinary Procedures
 - (i) The Telephone Company may invoke extraordinary procedures to protect the Channel Service where one or more of the following conditions are present.

Information provided in the affidavit gives reason to believe that a violation of Part 68 of the FCC's Rules and Regulations or the Institutional Procedures specified in V. preceding is likely.

Harm has occurred and there is reason to believe this harm was a result of operations performed under the Institutional Procedures specified in V. preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (a) (Cont'd)
 - VI. (Cont'd)
 - (ii) 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 Part 68 are met at the network interface. This protective apparatus may be provided by either the Telephone Company or the customer.

Disconnecting service.

(iii) A charge specified by the Telephone Company will apply when:

It is necessary to send a Telephone Company employee to the premises where the connection is made because a condition specified in (i) preceding exists, and

A failure to comply with Part 68 of the Federal Communications Commission's Rules and Regulations or the Institutional Procedures for signal power control in V. preceding is disclosed.

- (b) Where Channel Service is used in the provision of a composite data service for others and connection of such service is made to a communications system provided by a customer and the connection is made through customer-provided data switching equipment, the provisions of I. and II. preceding do not apply.
- (c) Customer-provided communications systems may be connected with Series 5000 wide-band data channels furnished to the same customer at the premises of the customer where the customer has a regular and continuing requirement for the origination or reception of communications over the customer-provided communications system provided that:

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (5) Communications Systems (Cont'd)
 - (c) (Cont'd)
 - The normal mode of operation of the customer-provided communications system shall be to provide communications originating or receiving at the premises on which the connection is made.
 - II. The connection shall be made through switching equipment provided by the customer.
 - III. The connection shall be made to Type 5502 service terminals provided by the Telephone Company.
 - (6) Accessories

Accessories provided by a customer may be used with channel services provided that such accessories comply with the provisions of Section 1, B.2. and (2)(b)II. of this section.

- (7) Minimum Protection Criteria for Electrical Connections
 - (a) Since channel services utilize Telephone Company channels and equipment in common with other services it is necessary in order to prevent excessive noise and cross talk that the power of the signal applied to the Telephone Company channel service is individually engineered, a single valued limit for all applications cannot be specified. Therefore, the power of the signal in the band above 300 Hertz which may be applied by the customer-provided equipment to the network interface will be specified by the Telephone Company for each application to be consistent with the signal power allowed on the telecommunications network.
 - (b) To protect other services, it is necessary that the signal which is applied by the customer-provided equipment to the network interface located on the customer's premises meet the following limits:
 - The power in the band from 3,995 Hertz to 4,005 Hertz shall be at least 18dB below the power of the signal as specified in (a) preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (7) Minimum Protection Criteria for Electrical Connections (Cont'd)
 - (b) (Cont'd)
 - II. The power in the band from 4,005 Hertz to 10,000 Hertz shall not exceed 16dB below one milliwatt.
 - III. The power in the band from 10,000 Hertz to 25,000 Hertz shall not exceed 24dB below one milliwatt.
 - IV. The power in the band from 25,000 Hertz to 40,000 Hertz shall not exceed 36dB below one milliwatt.
 - V. The power in the band above 40,000 Hertz shall not exceed 50dB below one milliwatt.
 - (c) Where there is connection to telecommunications services, to prevent the interruption or disconnection of a call, or interference with network control signaling, it is necessary that the signal applied by the customer-provided equipment to the network interface located on the customer's premises at no time have energy solely in the 2450 to 2750 Hertz band. If signal power is in the 2450 to 2750 Hertz band, it must not exceed the power present at the same time in the 800 to 2450 Hertz band.
 - (d) Where customer-provided equipment applies signals having components in the frequency spectrum below 300 Hertz, excluding ringing signals, the currents and voltages, including all harmonics and spurious signals, at the network interface shall not exceed the limits indicated in I. through IV. following:
 - I. The maximum rms (root-mean-square) 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.
 - II. The magnitude of the peak of the conductor to ground voltage shall not exceed 70 volts.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - c. (Cont'd)
 - (7) Minimum Protection Criteria for Electrical Connections (Cont'd)
 - (d) (Cont'd)
 - III. The conductor to conductor voltage shall be such that the conductor to ground voltage limit in II. preceding is not exceeded. If the signal source is not grounded, the voltage limit in II. preceding applies to the conductor to conductor voltage.
 - IV. The total weighted rms voltage within the band from 50 Hertz to 300 Hertz shall not exceed 100 volts. The total weighted rms voltage is the square root of the sum of the products of the weighing factors for the individual frequency components times the square of the rms voltage of the individual frequency components. The weighing factors are as indicated:

for	frequencies between				weighing factor
50	Hertz	and	100	Hertz	f ² /10 ⁴
100	Hertz	and	300	Hertz	f ^{3.3} /10 ^{6.6}

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

d. Channel Derivation Services

Customer-provided channel derivation devices which are used to create additional channels or bit streams in accordance with this Company's General Regulations Tariff, Section 1 and Channel Services Tariff, Section 11, may be connected to channel service subject to B.2.a., B.2.b. and Section 1 preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - e. Connections of Customer-provided Test Equipment
 - (1) Totally Protective Connections
 - (a) Customer-provided test equipment may be connected to those channel services specified in B.2.a. preceding at the premises of the customer through registered or grandfathered terminal equipment, protective circuitry, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations which, either singularly or in combination, assures that all of the requirements of Part 68 of the Federal Communications Commission's Rules and Regulations, total protection, are met at the network interface.
 - (b) Customer-provided test equipment may be connected to those channel services specified in B.2.c.(2) preceding at the premises of the customer either directly at the network interface, or through other equipment, provided that the minimum protection criteria specified in B.2.c.(7) preceding is continually met at the network interface.
 - (2) Interim Program for Connections of Customer-provided Test Equipment

Customer-provided test equipment may also be connected at the premises of the customer to those private line services specified in B.2.a. preceding either directly at the network interface, or through terminal equipment, protective circuitry, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations which does not provide protection for signal power control under the following Interim Program provided that:

- (a) The customer-provided test equipment is limited to transmission signal power generating and/or detection devices, or similar devices, utilized by the customer for the detection and/or isolation of a communications service fault.
- (b) The customer-provided test equipment is of a type that was lawfully directly connected to channel 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 has been subsequently modified.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - e. Connections of Customer-provided Test Equipment (Cont'd)
 - (2) Interim Program for Connections of Customer-provided Test Equipment
 (Cont'd)
 - (c) Direct connection of customer-provided test equipment or connections through Telephone Company provided terminal equipment, or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations are made through Telephone Company provided jacks or as otherwise authorized by the Telephone Company.
 - (d) Customer-provided test equipment must be operated in accordance with the Institutional Procedures for Signal Power Control as specified in (3) following.
 - (e) The customer notifies the Telephone Company of each channel service at each premises to which the customer-provided test equipment will be connected in advance of the initial connection. The customer must also notify the Telephone Company when such test equipment is permanently disconnected at each premises.
 - (f) No customer-provided test equipment or combination of test equipment with terminal equipment, protective circuitry or communications systems subject to Part 68 of the Federal Communications Commission's Rules and Regulations, including but not limited to wiring, may cause electrical hazards to Telephone Company personnel, damage to Telephone Company equipment, malfunction to Telephone Company billing equipment, or degradation of service to persons other than the user of the subject test equipment or the user's calling or called party.
 - (3) Institutional Procedures for Signal Power Control
 - (a) In accordance with (2)(d) preceding, the customer must comply with the following Institutional Procedures:
 - I. The customer must install, operate and maintain the test equipment so that its signal power at the network interface complies with Subpart D of Part 68 of the Federal Communications Commission's Rules and Regulations.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - e. Connections of Customer-provided Test Equipment (Cont'd)
 - (3) Institutional Procedures for Signal Power Control (Cont'd)
 - (a) (Cont'd)
 - II. The operator(s)/maintainer(s) responsible for the test equipment signal power present at the network interface must be trained to perform these functions by successfully completing one of the following:
 - (i) a training course provided by the manufacturer of the test equipment, or
 - (ii) a training course provided by the customer, or authorized representative of the customer, using training materials and instructions provided by the manufacturer of the test equipment, or
 - (iii) an independent training course, e.g., trade school or technical institution, recognized by the manufacturer of the test equipment, or
 - (iv) in lieu of the preceding training requirements, the operator(s)/maintainer(s) is under the control of a supervisor trained in accordance with (i) through (iii) preceding.

Upon request, the customer is required to provide proper documentation to demonstrate compliance with the requirements in this II.

- III. Advance notice must be given to the Telephone Company in the form of a notarized affidavit before the initial connection of the customer-provided test equipment at each premises after April 9, 1981. A copy of the affidavit must also be maintained at the customer's premises. The affidavit must contain the following information.
 - (i) The full name, business address, business telephone number and signature of the customer or authorized representative who has responsibility for the operation of the test equipment.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - e. Connections of Customer-provided Test Equipment (Cont'd)
 - (3) Institutional Procedures for Signal Power Control (Cont'd)
 - (a) (Cont'd)

III. (Cont'd)

- (ii) The line(s) to which the test equipment will be either connected to or arranged for connection to.
- (iii) A statement that all operations associated with the establishment, maintenance and adjustment of the test equipment signal power present at the network interface will comply with Subpart D of Part 68 of the FCC's Rules and Regulations.
- (iv) A statement describing how each operator of the test equipment will meet and continue to meet the training requirements for persons installing, connecting, adjusting or maintaining the test equipment.
- (b) Extraordinary Procedures
 - The Telephone Company may invoke extraordinary procedures to protect the telecommunications network where one or more of the following conditions are present.
 - (i) Information provided in the affidavit gives reason to believe that a violation of Part 68 of the FCC's Rules and Regulations or the Institutional Procedures specified in (a) preceding is likely.
 - (ii) Harm has occurred and there is reason to believe this harm was a result of operations performed under the Institutional Procedures set forth in (a) preceding.

CONNECTION OF TERMINAL EQUIPMENT, PROTECTIVE CIRCUITRY AND COMMUNICATIONS SYSTEMS

- B. REGULATIONS (Cont'd)
 - 2. Basis of Connection to Channel Services (Cont'd)
 - e. Connections of Customer-provided Test Equipment (Cont'd)
 - (3) Institutional Procedures for Signal Power Control (Cont'd)
 - (b) Extraordinary Procedures (Cont'd)
 - II. The extraordinary procedures, which can be invoked by the Telephone Company, include:
 - Requiring the use of protective apparatus which either protects solely against excessive signal power or which assures that all of the requirements of the FCC's Rules and Regulations are met at the network interface.
 - (ii) Disconnecting service.
 - III. A charge specified by the Telephone Company will apply
 when:
 - (i) It is necessary to send a repair person to the premises where the test equipment is connected because a condition as specified in (I) preceding exists, and
 - (ii) A failure to comply with the Institutional Procedures for signal power control is disclosed.

Section 3 Original Page 1

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

A. GENERAL

Customer-provided communications systems and terminal equipment may be connected to facilities of the Telephone Company subject to the regulations specified in other sections of this tariff. This section contains rates for connecting arrangements and Data Access Arrangements provided for connection of customerprovided communications systems and terminal equipment.

Except as otherwise specified in Section 2 of this tariff, installations of connecting arrangements for customer-provided terminal equipment will not be made after July 1, 1979, and installations of new connecting arrangements for customer-provided communications systems will not be made after January 1, 1980. Grandfathered installations which may require such connecting arrangements are defined in Section 2 of this tariff.

B. RATES

- 1. Communications Systems
 - a. Connecting Arrangements Voice Communications
 - (1) Arrangements to permit connection of a customer-provided attendant position to a private branch exchange (PBX) trunk

Per manual arrangement, for each trunk linePer
Monthat a cord switchboardMonthType CDA, conditioned to accept
customer-provided supervisory signals\$3.30

(2) Arrangement to permit connection of customer-provided switching equipment and attendant positions to a PBX trunk

Per automatic arrangement, for each trunk

- (a) In connection with outward service
 - Type CD8
 4.42
 CD8
- (b) In connection with two-way service, outward-only from switching equipment
 - Type CDH
 5.09
 CDH

 Type CED
 4.64
 CED

Section 3

1st Revised Page 2

Cancels Original Page 2

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 1. Communications Systems (Cont'd)
 - a. Connecting Arrangements Voice Communications (Cont'd)
 - (3) Arrangement to permit connection of a customer-provided communications system arranged for dial or automatic signaling, to a tie trunk which connects at the distant end in a branch exchange or Centrex system; arranged for dial or automatic signaling, which has access to the telecommunications network.

		Installation Charge	Per Month	USOC	
	Type CDQ, per automatic arrangement	\$ 5.59	\$ 6.15	CDQ	
(4)	Arrangements to permit the connection of a customer-provided communications system, equipped with channel				(C)
	signaling, to the telecommunications network via a Centrex system				(T)
	(a) Two-wire or four-wire, per connection of a customer- provided line				
	Type C2H, for use with a Centrex system when the dial switching equipment is on the Telephone Company premises*	55.90	17.66	С2Н	
(5)	Arrangement to permit automatic con- nection, where facilities and oper- ating conditions permit, of customer- provided switching equipment to the telecommunications network to accommodate direct inward dialing				
	Type C22, per trunk equipped	22.36	5.76	C22	
en the	e Centrex switching equipment is located	on Telephone C	ompany		

* When the Centrex switching equipment is located on Telephone Company premises, rates and charges apply as specified for tie trunks in this Company's Channel Services Tariff, Section 3, for channels between the serving central office and the customer's premises on which the connecting arrangement is located.

Issued by authority of an Order of the Public Service Commission of West Virginia in Case No. 01-0834-T-T dated 7-19-01.

Section 3 Original Page 3

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 1. Communications Systems (Cont'd)
 - b. Connecting Arrangements Data Communications

Arrangements to permit connection of customer-provided data communications system to the telecommunications network	Installation Per Charge Month US	SOC
<pre>(1) Type CDT, including control key, per manual agreement</pre>	Rates and Charges are C as specified for Type CDT Data Access Arrangement following.	DT
<pre>(2) Type CBS, a voltage type control interface, per automatic arrangement</pre>	Rates and Charges are C as specified for Type CBS Data Access Arrangement following.	EBS
(3) Type CBT, a contact closure type control interface, per automatic arrangement	Rates and Charges are C as specified for Type CBT Data Access Arrangement following.	BT
(4) Power Supply, for use with type CBT connecting arrangement, each	Rates and Charges are C as specified for Power Supply for use with Type CBT Data Access Arrangement following.	CBV

Section 3 Original Page 4

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 2. Terminal Equipment
 - a. Connecting Arrangements

(1) Arrangements to permit automatic connection of customer-provided answer-only terminal equipment to central office lines excluding PBX trunks and Centrex lines Installation Per Charge Month			Per Month	USOC
	Type RDMZR, per line equipped where two-way transmission is required*	\$22.36	\$4.81	RDMZR
	Type RDY, per line equipped where an automatic volume limited receive signal is required*	22.36	5.70	RDY
(2)	Arrangement to permit automatic connection of customer-provided originate only or originate and answer terminal equipment to central office lines, excluding PBX trunks and Centrex lines			
	Type SU6AQ, per line equipped	22.36	5.03	SU6AQ
(3)	Arrangement to permit automatic connection of customer-provided voice transmitting and receiving terminal (typically telephone stations) to central office lines excluding PBX trunks and Centrex lines			
	Type STC, per line equipped	22.36	7.04	STC
(4)	Arrangement to permit automatic connection of customer-provided supervisory tone sending and receiving equipment (typically alarm systems) to central office lines excluding PBX trunks and Centrex lines			
	Type STS, per line equipped	22.36	6.88	STS
	to the regulations contained in Section 1 of ording of two-way telephone conversations.	f this tariff re	garding	

Issued by authority of an Order of the Public Service Commission of West Virginia in Case No. _____ dated _____.

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Section 3 Original Page 5

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 2. Terminal Equipment (Cont'd)
 - a. Connecting Arrangements (Cont'd)

(5)	Arrangement to permit the automatic con- nection of customer-provided voice trans- mitting and receiving terminal equipment (typically button telephone stations) to central office lines excluding PBX trunks and Centrex lines	Installation Charge	Per <u>Month</u>	USOC
	Type C2ACP, per line equipped	\$27.95	\$7.60	C2ACP
(6)	Arrangement to permit automatic connection of customer-provided bridging equipment to a central office line excluding PBX trunk and Centrex lines to permit the bridging of that line to another central office line excluding PBX trunk and Centrex lines			
	Type C2AKS, per line equipped	27.95	7.60	C2AKS
(7)	Arrangement to permit the automatic connection of customer-provided terminal equipment (primarily button telephone systems) to central office lines, loop start PBX trunks not equipped for call diversion, Centrex lines or loop start WATS access lines			
	Type STP, per line equipped	33.54	6.20	STP
(8)	Arrangements to permit the automatic connection of customer-provided radio or loudspeaker paging systems, dictation equipment or information retrieval systems to Telephone Company provided Centrex systems			
	Type DCL, for use with a Centrex system when the switching equipment and the connecting arrangement are located on			
on diffe 2001, Ch	different premises, each* tion, when the switching equipment and the co erent premises, rates and charges specified f nannels in this Company's Channel Services Ta necting arrangement.	or two Series 2	2000, typ	

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Section 3 Original Page 6

CONNECTING AND DATA ACCESS ARRANGEMENTS FOR USE WITH CUSTOMER-PROVIDED COMMUNICATIONS SYSTEMS AND TERMINAL EQUIPMENT

B. RATES (Cont'd)

- 2. Terminal Equipment (Cont'd)
 - a. Connecting Arrangements (Cont'd)

	(9) Arrangement to permit connection of c tomer-provided automatic telephone an swering devices, arranged to provide timed cycle or voice control discon- nect features, to central office, and Centrex lines		Per <u>Month</u>	USOC
	Type GTS, per line equipped	\$16.77	\$3.47	GTS
3.	Data Access Arrangements			
	For Use with Customer-provided Equipment which Modulate and Demodulate Data Signals			
	Type CDT, including control key, for attended sending and receiving, each	5.59*	2.24	CDT
	Type CBS, a voltage type control interface, for unattended sending and receiving, each	11.18*	6.71	CBS
	Type CBT, a contact closure type control interface, for unattended sending and receiving, each	11.18*	4.75	CBT
	Power supply, for use with Type CBT data access arrangement, each	11.18†	1.68	CBV
4.	Charges for changes do not apply where changes in type or style of station equipment are made at the option of the			

- Telephone Company in order to furnish the data access arrangement.
- * No Installation Charge applies when installed at the same time as the telephone service with which it is associated.
- + No Installation Charge applies when installed at the same time as the data access arrangement with which it is associated.

Section 4 Original Page 1

Reserved For Future Use

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

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Section 5 Original Page 2

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

Various customer-provided terminal equipment may be connected with facilities provided by the Telephone Company subject to the regulations and rates specified herein.

A. GENERAL

Except as otherwise provided in Section 2 of this tariff, installations of connecting arrangements for customer-provided terminal equipment will not be made after July 1, 1979. Regulations pertaining to grandfathered installations which include such connecting arrangements are covered in Section 2 of this tariff.

- B. RATES
 - 1. Recording, Reproducing and Automatic Answering and Recording Equipment
 - a. Recording of Two-way Telephone Conversations

Regulations pertaining to the recording of two-way telephone conversations are as specified in Section 1 of this tariff.

b. Recording of Incoming Messages Only

Except as otherwise specified, direct electrical connection of customer-provided recording equipment, with the facilities of the Telephone Company for the recording of incoming messages only, shall be made through recorder coupler equipment furnished, installed and maintained by the Telephone Company. Recorder coupler equipment permits an attendant to use telephones furnished on the same line to monitor the recording of incoming messages but physically prevents recording during two-way telephone conversations. A recorder tone is not required.

c. Transmission of Prerecorded Messages

Except as otherwise specified, direct electrical connection of customer-provided reproducing equipment, with the facilities of the Telephone Company for the transmission of prerecorded messages, shall be made through recorder coupler equipment furnished, installed and maintained by the Telephone Company.

d. Automatic Answering and Recording Equipment

Except as otherwise specified, direct electrical connection of customer-provided automatic answering and recording equipment, with facilities of the Telephone Company for transmitting a prerecorded message to the calling party (if desired) and recording an incoming message only, shall be made through recorder coupler equipment furnished, installed and maintained by the Telephone Company. Such recorder coupler equipment will automatically trip the ringing and hold the connection.

Section 5 Original Page 3

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - Recording, Reproducing and Automatic Answering and Recording Equipment (Cont'd)
 - e. Basis of Connection

Recorder coupler equipment is available for use with exchange, branch exchange, Centrex lines and channels except that recorder coupler equipment used for unattended operation is only available where full selective ringing is employed.

f. Connecting Equipment

Recorder Coupler Equipment

Installation Charge	Per Month	USOC
\$22.36	\$4.36	RDL
	Charge	<u>Charge</u> <u>Month</u>

- 2. Alarm Sending Equipment (Alarm Coupler)
 - a. Customer-provided alarm sending equipment may be connected with the facilities of the Telephone Company by means of an Alarm Coupler provided by the Telephone Company.
 - b. An Alarm Coupler provides facilities to connect a customer-provided alarm sending device to an individual, branch exchange, or Centrex line. The Alarm Coupler, upon receipt of proper signals from a customer's device, will seize a telephone line, transmit dial pulses to the line, provide a one-way transmission path to the line for transmission of the customer's prerecorded voice alarm message and disconnect from the line. The Alarm Coupler will also arrange Premises Wiring associated with the telephone line such that a customer may monitor the progress of an alarm call.
 - c. The Telephone Company does not represent the Alarm Coupler and the equipment and service associated with it to meet all requirements for burglar and fire alarms and other alarms essential to the protection of life and property.
 - d. A customer-provided alarm sending device must provide signals acceptable to the Telephone Company for the operation of the Alarm Coupler.

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 2. Alarm Sending Equipment (Alarm Coupler) (Cont'd)
 - e. The Alarm Coupler is connected to a customer-provided alarm sending device through a jack associated with the Alarm Coupler. The customer will provide a suitable plug, cable and any other equipment or arrangements necessary to connect an alarm sending device to the Alarm Coupler.
 - f. The Alarm Coupler is provided for use as an adjunct to a dial or Touch-Tone® Calling Service equipped telephone service where facilities and operating conditions permit.

			Installation	Per	
			Charge	Month	USOC
g.	Alarm Coupler,	each	\$22.36	\$3.24	CAU

- 3. Public Address or Loudspeaker Paging system
 - a. Customer-provided public address or loudspeaker paging systems, which include amplifiers, receiving speakers and associated wiring used to transmit paging messages or announcements in one direction only, may be used in connection with Telephone Company facilities for Centrex Service.
 - b. Customer-provided public address or loudspeaker paging systems may be connected with the facilities of the Telephone Company by means of connecting equipment or arrangements provided by the Telephone Company. The connecting equipment or arrangements will include a connecting block or equivalent to which the customer-provided public address or loudspeaker paging system will be connected.
 - c. Telephone Company facilities when so connected may be used only to transmit messages or signals to customer-provided public address or loudspeaker paging systems. Such public address or loudspeaker paging systems may not be used to originate messages into Telephone Company facilities.

Section 5 Original Page 5

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

B. RATES (Cont'd)

- 3. Public Address or Loudspeaker Paging system (Cont'd)
 - d. Connecting Equipment

	Installation	Per	
	Charge	Month	USOC
Arrangement for use with or without			
<pre>music cut-off, each</pre>	\$27.95	\$5.25	ES8
Paging Service Line	-	2.74	ER8

- 4. Telephotograph Equipment
 - a. Telephotograph equipment provided by the Press may be connected to lines of the Telephone Company for use by the Press for the transmission and reception of pictures and similar material for publication. Telephotograph equipment provided by law enforcement agencies may be connected to lines of the Telephone Company for use by law enforcement agencies for the transmission and reception of fingerprints, ballistic data, identification photographs and similar law enforcement material. Telephotograph equipment provided by the armed forces of the United States may be connected to lines of the Telephone Company for use by the armed forces of the United States for transmission and reception of information of military necessity essential to the national defense. Telephotograph equipment provided by civilian defense agencies may be connected to lines of the Telephone Company for use by civilian defense agencies for the transmission and reception of information essential for the discharge of their responsibilities in emergencies. Telephotograph equipment provided by the United States Weather Bureau may be connected to lines of the Telephone Company for the transmission and reception of weather information.
 - b. The direct electrical connection of customer-provided telephotograph equipment shall be made by means of protective connection equipment furnished by the Telephone Company. The connection of telephotograph equipment may be made by the customer only to the terminals of the protective connection equipment.
 - c. Portable protective equipment will be furnished, if desired, for use with portable telephotograph equipment of the customer.
 - d. The telephotograph equipment may be used in connection with any class of business service, except Network Controlled Coin Lines, furnished to the Press, law enforcement agencies, the armed forces, civilian defense agencies, or the United States Weather Bureau. Portable protective equipment may be used also at branch exchange stations in guest rooms of hotels, subject to the consent of the hotel concerned.

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 4. Telephotograph Equipment (Cont'd)
 - e. For protective connection equipment, including connection equipment, monitoring receiver, key and, for portable installations, cord for connection to telephone facilities, with terminals for the direct connection of the telephotograph equipment:

Per	
Month	
\$1.29	

- 5. Electrocardiogram and Electroencephalogram Transmitting and Receiving Equipment Provided by Members of the Medical Profession and Hospitals
 - a. Equipment provided by members of the medical profession and hospitals for the transmission and reception of electrocardiograms and electroencephalograms used in connection with medical diagnosis and treatment may be connected to lines of the Telephone Company. The direct electrical connection of such customer-provided equipment shall be made by means of protective equipment furnished by the Telephone Company for this purpose.
 - b. The customer's equipment may be used in connection with any class of service, except Network Controlled Coin Lines, furnished to members of the medical profession and hospitals.
 - c. Portable protective equipment will be furnished, if desired, for use with portable equipment of the customer.
 - d. For protective connection equipment, including connection equipment, monitoring receiver, key and, for portable installations, cord for connection to telephone facilities, with terminals for the direct connection of the customer's equipment:

Per Month

\$1.29

CONNECTION OF VARIOUS CUSTOMER-PROVIDED TERMINAL EQUIPMENT

- B. RATES (Cont'd)
 - 6. DC Power Source
 - a. A customer-provided dc power source may be connected to certain Telephone Company provided connecting arrangements; however, the connection shall be made only through voltage-current protective connecting arrangements provided by the Telephone Company.
 - b. The connection of the customer-provided dc power source to certain Telephone Company provided connecting arrangements is limited to 24 or 48 volt power sources with a maximum current rating of 30 amperes.
 - c. Connection arrangement to permit connection of a customer-provided dc power source to certain Telephone Company provided connecting arrangements

	Installation	Per	
	Charge	Month	USOC
Type VCP, for each customer-provided power			
source	\$42.48	\$.56	VCP24

7. Answering Devices Incorporating an Authorized Protective Connecting Module

Regulations pertaining to answering devices incorporating an authorized protective connecting module are as specified in Section 2 of this tariff.