HIGH VOLTAGE PROTECTION SERVICES

LIST OF EFFECTIVE SHEETS

Sheets 1 through 9 of this schedule are cancelled/withdrawn as of the date shown at the bottom of this sheet. Competitive offers are available through the Verizon Product Guide. (N) (N)

Sheet	Original or Number of Revision	
A	1st Revised	*
B	Original	#
1	Original	#
2	Original	#
3	Original	#
4	Original	#
5	Original	#
6	Original	#
7	Original	#
8	Original	#
9	Original	#

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

LIST OF EFFECTIVE SHEETS

Sheets A through 9 of this schedule are effective as of the date shown on each sheet. Original or revised sheets contain all material including changes from the original schedule that are in effect on the date hereof.

Sheet	Original or Number of Revision
A	Original
B	Original
1	Original
2	Original
3	Original
4	Original
5	Original
6	Original
7	Original
8	Original
9	Original (N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

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HIGH VOLTAGE PROTECTION SERVICES (N)

I. GENERAL

A. Applicability

Applicable to High Voltage Protection Services used to isolate or neutralize ground potential rise or induced voltage caused by faults in electric power systems.

B. Territory

Within all exchange areas, as those areas are defined by maps filed as part of the tariff schedules. (N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

II. RATES

	Basic Termination Liability*	Non-Recurring Charge	Monthly Rate
A. Type 1			
Class A, each	$ 2,382.00	$ 386.22	$ 80.25
Class B, each	1,605.00	386.22	57.34
B. Type 2			
Class A, each	$ 2,659.00	$ 386.22	$ 88.40
Class B, each	1,881.00	386.22	65.49
C. Type 3			
Class A, each	$ 1,757.00	$ 386.22	$ 61.83
Class B, each	967.00	386.22	38.55
D. Type 4			
Class A, each	$ 1,791.00	$ 386.22	$ 62.84
Class B, each	1,014.00	386.22	39.94
E. Installation of customer-provided devices	NA	386.22	NA
F. Loop-Back Device	NA	NC	NC (N)

* Basic Termination Liability is reduced 1/288 with each monthly payment.

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS

A. Definitions

Ground Potential Rise (GPR). A voltage difference between two or more ground electrodes caused by earth return currents. GPR on cable pairs can occur, for example, when current from lightning surges flow to ground, but GPR often is associated with voltage generated as the power system fault currents flow to ground. Maximum GPR is developed by the percentage of line-to-ground fault current entering earth through an electrode impedance.

Induction. The resultant electromotive force in a circuit or component caused by changes in the magnetic flux linking with the circuit or component (electromagnetic induction (EMI)) or caused by the longitudinal voltage impressed, under fault conditions, on a telecommunications facility due to the mutual coupling between telecommunications lines and power lines (longitudinal induction).

Interruptible. Self-restoring services which must function before and after power-fault conditions. (Class B.)

Look-back Device. A device that allows transmission testing of special access lines from a testing center or central office.

Non-Interruptible. Services which must function before, during, and after power-fault conditions. (Class A.)

(N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

B. Description

The Utility requires a high voltage protector (HVP) to be installed at any location to which an exchange service is provided and an HVP and a loop-back testing device to be installed at any location to which a private line or special access service is provided if the customer location is an electrical power station or is any other location where hazardous conditions exist due to ground potential rise (GPR), and/or induced voltage caused by faults in the electrical power system.

This service will provide high voltage isolation for telecommunications, while enabling the normal ac and dc signaling between C.O. and substation equipment during GPR environment due to electrical power faults.

C. Regulations

1. Based on data provided by the customer, the Utility shall determine the proper levels of protection required on its network to isolate or neutralize electrical hazard.

2. As a condition to receiving service, potential customers shall provide the Utility, in writing, the technical data necessary for determining the high voltage protection requirements, at the time of application of the initial service, additions to, or changes in the existing service. In addition, the customer shall notify the Utility prior to making changes in the electrical supply which will increase the GPR at the location.

3. The high voltage protection equipment will be located at the Network Interface (NI) or demarcation point for specially protected telephone facilities at power stations. The Utility will be responsible, up to this point, for the provisioning of tariffed channels and/or services regardless of ownership of the special high voltage protection equipment.

(N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

C. Regulations - Continued

4. High voltage protection equipment may also be required on the serving telephone facilities at the Utility's Central Office and at Remote Drainage Locations.

5. The rates, charges, termination liabilities, and conditions of this schedule apply to High Voltage Protection Services placed at the point of demarcation on a customer's premises location along the length of the Excess Footage portion of a line extension or service connection where the Utility determines a High Voltage Protection Service is necessary to prevent damage or harm from faults in high voltage systems located at a customer's premises.

6. If equipment for high voltage protection is disconnected at the request of the customer or because the customer's telephone service is disconnected in accordance with Utility's tariffs, the customer shall pay the remaining basic termination charges. Basic termination charges for fractional portions of a month shall be prorated.

7. The Utility shall be indemnified and held harmless for any and all loss, claims, demands, suits or other action or liability whatsoever, whether suffered, made, instituted or asserted by the customer or by any other party or person, for any injury to or death of a person or persons, or for any loss, damage or destruction of any property, whether owned by the customer or others, caused or claimed to have been caused directly or indirectly by the installation, operation, failure to operate, maintenance, removal, presence, condition, location, or use of equipment and services associated with high voltage protection equipment furnished by the Utility or with customer equipment when combined or connected with facilities of the Utility. Services provided by the Utility shall not cause the Utility to become responsible for damage, loss, or claims caused by electrical hazards resulting from a customer's electric power system. (N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

C. Regulations - Continued

8. Interruptions or outages of exchange or private line services provided to customers at electric power stations may occur for reasons, such as facility damage due to storm loading, vehicle accident, lightning strike, or other acts of God. Circuit failures caused by such events cannot be prevented by services provided in accordance with this schedule (however, interruptions and service outages due to fault-produced ground potential rise and induction can be minimized). The Utility expressly states that provision of the equipment provided in this schedule cannot prevent such service outages as may normally occur due to the proceeding circumstances. It is the responsibility of the customer to provide sufficient protection to prevent damage caused by such events.

9. Ground start circuits will be provided by the Utility in accordance with the Utility's tariffs.

10. Non-Interruptible services may require alternative routing. Alternative routing will be provided on an individual case basis.

D. Rates and Charges

1. The rates and charges specified in this schedule apply to high voltage protection equipment furnished by the Utility but do not apply to equipment, cabinets, or mounting arrangements provided by the customer or the Utility. Additional charges may be applicable for Utility-provided equipment, cabinets, and mounting arrangements. Additional charges as set forth in Schedule Cal. P.U.C. No. A-9, Inside Wire, may also be applicable and are not included here.

2. In addition to the rates and charges set forth in this tariff schedule, rates and charges in Schedule Cal. P.U.C. No. G-14, Private Line Services, shall apply.

(N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

E. Service Types

Type 1 - Services requiring either dc transmission or ac and dc transmission, such as, Basic Exchange Access Line Services and Private Line Services. Available as Class A (non-interruptible) or Class B (interruptible).

Type 2 - Private Line Services requiring dc transmission or ac dc transmission for pilot wire protective relaying or dc tripping. Available as Class A (non-interruptible) or Class B (interruptible).

Type 3 - Service for Private Line Services requiring ac transmission for supervisory control and data. Available as Class A (non-interruptible) or Class B (interruptible).

Type 4 - Service for Private Line Services requiring ac transmission for audio tone protective relaying. Available as Class A (non-interruptible) or Class B (interruptible).

F. Service Performance Objective Classifications

Because of the customer's need for service continuity during power system faults on some types of telecommunication services provided to power stations, the following system of service performance objective classifications has been established for the purpose of permitting the customer to specify the performance objectives for most types of telecommunication services provided to power stations.

1. Class A - Non-interruptible service performance (must function before, during, and after the power fault).

2. Class B - Self-restoring interruptible service performance (must function before and after the power fault condition). (N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

G. Provision of High Voltage Protection Equipment

Based on the customer's technical data provided to the Utility, the Utility will provide the necessary high voltage protection equipment at the Utility's local loop demarcation point on the customer's premises, at the Utility Central Office, and at the remote drainage location. The placement of the equipment by the Utility shall in no way release the customer of its responsibility for damage, loss or claims caused by electrical hazards resulting from the customer's electric power system. GTEC's liability for damage, loss or claims is set forth in Schedule Cal. P.U.C. No. D&R.

The customer may elect to furnish the equipment at its premises to isolate or neutralize the electrical hazard subject to the approval of the Utility; however, such approval by GTEC shall not relieve customer of its responsibility to install or maintain adequate high voltage protection equipment.

When the customer provides the high voltage equipment at its premise, the Utility will provide the necessary high voltage equipment at the central office and remote drainage location. (N)

Continued

HIGH VOLTAGE PROTECTION SERVICES (N)

III. SPECIAL CONDITIONS - Continued

G. Provision of High Voltage Protection Equipment - Continued

The high voltage protection equipment at the power station will either be exclusively owned by the Utility or the customer.

The Utility will inspect and verify adequacy of the high voltage protection equipment when service is established and at such future times as deemed necessary due to additions, deletions, rearrangements, routine maintenance or for the purpose of verifying the adequacy of the high voltage protection equipment. (N)

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