

EXCHANGE WIRE RECORD PROTECTION

1. GENERAL

- 1.01 This section describes a method of entering protection data in the record.
- 1.02 It has been revised to include 116 and 118 type protectors, which replace the 83 and 99 type protectors. Since this is a general revision, marginal arrows have been omitted.
- 1.03 There are several types of protectors designed to remove or reduce foreign voltages on exchange wire lines. Their primary purposes are:
- (a) Safeguarding public and personnel.
 - (b) Minimizing public property damage.
 - (c) Minimizing plant damage.
- 1.04 Although Exhibit 1 shows 116 and 118 type protectors, the same general principles should be applied for other type protectors.

2. PROTECTORS, TYPE 104, 108, 116, AND 118

104 and 108 Type Protectors

- 2.01 These protectors are designed to reduce low-frequency voltages that are induced in wire telephone plant as a result of exposure to power circuits.

116 Type Protector

- 2.02 This protector is designed to protect cable plant against foreign voltages, whether

power or lightning. It is usually installed at the junction of wire and cable plant for all wires entering the cable terminal. When so used it is shown on the assignment cable record as a protected terminal.

- 2.03 The 116 type protector is sometimes used in open wire leads and it is then posted to the wire record as shown in Exhibit 1.

118 Type Protector

- 2.04 This protector is designed to protect telephone plant on circuits installed on joint use poles and exposed to current of more than 2,900 volts to ground or 5,000 volts between power wires.

3. 104, 108, 116, AND 118 TYPE PROTECTORS ENTRIES ON EXCHANGE WIRE RECORD

- 3.01 The engineer will be responsible for determining the need for protection devices. He will indicate the type of protection and installation location on work orders.
- 3.02 The assignment forces will enter these data on the record as shown in Exhibit 1.
- 3.03 When authorizing wire to be placed the assignment forces shall indicate locations where protection devices have been installed. If additional protectors are required at any of these locations, the assignment forces shall so state.

NOTES ON EXHIBIT 1

Note

- 1 Place this notation on each wire record form when the exchange wire is on jointly used poles (carrying more than 5000 volts) equipped with a multigrounded neutral wire. If the power system is not equipped with a multigrounded neutral wire the proper notation is "HV".
- 2 Enter "HV" at jointly used crossing poles. This shows a higher voltage joint use pole or pole line.
- 3 Identify sections of jointly used pole leads as shown.
- 4 (—) The dash shows that a protector is placed on the circuit.
- 5 Enter the type of protection.

