CABLE PROTECTIVE DEVICE ALARM, CABLE INSULATION ALARM AND PERMANENT SIGNAL ALARM CIRCUIT SD-31912-01 PROCEDURE IN CASE OF ALARM STEP-BY-STEP AND COMMUNITY DIAL OFFICES

1. GENERAL

1.01 This section covers the procedure to be followed when responding to alarms associated with the cable protective device alarm circuit, the cable insulation alarm circuit and the permanent signal alarm circuit.

1.02 This section is issued to change the title, to add a cable protective device alarm procedure, and to indicate that the operated position of the sensitrol relay is at the extreme left instead of right.

1.03 The cable protective device alarm responds to a contact closure from cable protective devices in the outside plant such as, gas reservoir contactors, manhole high water level indicator, cable pressurizing equipment, etc.

1.04 The cable insulation alarm is used to give an alarm for indicating an impending cable failure where the breakdown of the insulation occurs more or less gradually. Complete service interruption may thus be forestalled when the alarm is transmitted sufficiently in advance of complete breakdown.

1.05 The permanent signal alarm is used to give an alarm when a specified number of permanent signals, considered to be excessive, occur simultaneously.

2. METHOD

2.01 When the audible alarm sounds and the aisle pilot lamp, where provided, and red MP lamp light, it indicates that a cable protective device alarm has operated, or that the insulation resistance of the cable pair or pairs is too low, or that there is an excessive number of permanents in the office.

2.02 Momentarily operate the RS (restore) switch, if provided; otherwise dial the number of the alarm checking terminal and then release the call. This will cause the circuit to recheck the alarm condition.

2.03 If the aisle pilot and MP lamps are extinguished and the audible alarm is silenced, it indicates that the condition which caused the alarm did not persist and that no further action is required at this time.

2.04 If the aisle pilot and MP lamps remain lighted, and the audible alarm continues to sound, it indicates that the condition causing the alarm still exists and it will be necessary to observe the alarm circuit equipment to determine which feature has operated. Momentarily operate the AL (alarm) switch, if provided, to silence the audible alarm.

2.05 Observe the CA relays. If any are operated the alarm circuit of the cable protective device connected to the associated cable conductor has operated. Disconnect the cable pair, operate RS switch, or dial the number of the alarm checking terminal to release the alarm. Local instructions should be followed for reporting or clearing the trouble. When trouble is cleared reconnect the cable pair.

2.06 Observe the CI relays. If the pointer of any is at the extreme left, the operated position, indicating an impending cable failure, disconnect all the cable conductor pairs from the circuit. Operate the RS switch, or dial the

number of the alarm checking terminal to release the alarm. Local instructions should be followed for reporting or clearing the trouble. When trouble is cleared reconnect cable pairs.

2.07 Observe the SR relay. If pointer is at the extreme left, the operated position, it indicates that an excessive number of permanents exists. Proceed in accordance with (a) or (b) or both to determine whether a cable failure is indicated.

(a) If the permanent signal alarm circuit is arranged for operating the alarm from the first selectors, trace the permanent signals to their source.

(b) In community dial offices, if the subscriber line circuits are arranged for permanent signal lock-out, check for operated lock-out relays in the line circuits.

2.08 Test individual subscriber lines causing permanent signals as determined in 2.07 (a) or (b) in accordance with local approved procedures.

2.09 To retire the alarm, momentarily operate the RS switch, if provided; otherwise dial the number of the alarm checking terminal and then release the call.