MINIMUM APPROACH DISTANCES
TO EXPOSED ENERGIZED POWER CONDUCTORS

1. GENERAL

1.01 This section covers the safe approach distances to energized power conductors. This will apply primarily where nonstandard clearance exists.

1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.

1.03 This section does not change the Bell System rules regarding wearing insulating gloves and is not to be construed as encouraging the handling of energized power conductors. It further does ***NOT*** authorize the construction of telephone plant with nonstandard power clearances.

1.04 At locations, where clearances between telephone plant and energized power conductors are less than standard as outlined in Sections 620-210-012, 620-216-012, and 013, 627-070-015, -016, -017, the safe approach distances listed in this section are controlling.

1.05 When work prints dealing with pole placing, moving, or removing bear a notice that approach distances cannot be maintained, this requires either that the pole be insulated or that the power company must do the work. (See Section 621-205-010 for voltage limitations.) Alternatively, the power company may temporarily insulate the power wires.

1.06 Insulated as defined in this section means:

(a) It is insulated in a suitable manner for the conditions to which it is subjected (ie, as found in Section 621-205-010). Otherwise, it is uninsulated.

(b) Separated from the other conducting surface by a dielectric substance (including air space) offering a high resistance to the passage of current.

1.07 The approach distances (Table A) apply not only to the employee (hand, head, shoulder, feet, etc) but also to any noninsulating material or tool (ie, digging bar, uninsulated pole, or pole derrick, etc) he handles unless:

(a) The employee is insulated from the energized parts (insulating gloves, blankets, pole guards, etc, as appropriate to the work operation and rated for the voltage involved shall be considered adequate insulation).

(b) The energized parts are insulated or guarded from the employee and any other conductive part of a different potential.

(c) The power conductors and equipment are deenergized and grounded.

1.08 The minimum approach distances (Table A) do ***not*** apply to the following types of power conductors:

(a) Lead sheath power cables

(b) Concentric neutral power cable

(c) Jacketed concentric neutral cable

(d) Insulated conductors lashed to a grounded messenger

(e) BX cable

(f) Romex cable (operated within its voltage rating)

(g) Any insulated conductor operated within its voltage rating

(h) Power conductors in conduit or under molding

(i) Grounded cases of transformers, voltage regulators, capacitors and other power equipment

1.09 The approach distances do not alter the requirements for protective equipment appropriate to the work operations as called for in other Bell System sections (ie, Sections 621-205-010 and 627-230-201).

2. APPROACH DISTANCES

2.01 The minimum approach distances, listed in Table A, apply to the following:

(a) Bare energized power wires

(b) Covered (not insulated) energized power wires

(c) Insulated power wires operated ***above*** their rated voltage

(d) Uninsulated bus bars

(e) Uninsulated, exposed and energized parts such as transformer or capacitor terminals, etc.

TABLE A

MINIMUM APPROACH DISTANCES TO EXPOSED ENERGIZED POWER CONDUCTORS

VOLTAGE RANGE (PHASE-TO-PHASE)	VOLTAGE TO GROUND	DISTANCE
300 V and less	173 V and less	Avoid Contact
Over 300 V, not over 750 V	Over 173 V, not over 434 V	12 inches
Over 750 V, not over 2 kV	Over 434 V, not over 1.16 kV	18 inches
Over 2 kV, not over 15 kV	Over 1.16 kV, not over 8.65 kV	24 inches
Over 15 kV, not over 37 kV	Over 8.65 kV, not over 21.4 kV	36 inches
Over 37 kV, not over 87.5 kV	Over 21.4 kV, not over 50.5 kV	42 inches
Over 87.5 kV, not over 121 kV	Over 50.5 kV, not over 70.0 kV	48 inches
Over 121 kV, not over 140 kV	Over 70.0 kV not over 81.0 kV	54 inches