

ARAB ELECTRIC COOPERATIVE, INC.
P. O. BOX 770
331 SOUTH BRINDLEE MTN PARKWAY
ARAB, AL 35016
TELEPHONE 256-586-3196
FAX 256-586-4943

**THREE-PHASE ELECTRIC SERVICE ENTRANCE REQUIREMENTS
FOR UNDERGROUND SERVICE FROM A PAD MOUNTED TRANSFORMER**

(1) PRIMARY:

- Primary riser pole conduit, straps, and grounding bushing furnished by contractor installed by AEC.
- Ditching and back fill is provided by contractor.
- Conduit is furnished by contractor and installed by contractor to AEC specifications. All conduits above finished grade line must be rigid galvanized.
- Conductors are furnished by AEC and installed by AEC.
- Terminations at transformer are made by AEC.

(2) SECONDARY:

- All conduits, ditching and back fill is furnished and installed by contractor.
- Conductors are furnished and installed by contractor if “CT” metered, 800 amp and over.
- Conductors are furnished and installed by AEC 200 amp - 600 amp self contained meter base.
- Termination lugs are furnished and installed by AEC, on the secondary side of the transformer.
- Terminations at main switch gear are made by contractor if “CT” metered.
- Terminations at main switch gear are made by AEC 200 amp – 600 amp self contained meter base.
- The service entrance conductors will feed one main switch board with a maximum of six disconnect switches as per NEC ART 230-71.
- Terminations at transformer are made by AEC.

(3) TRANSFORMER:

- Transformer is furnished and installed by AEC however customer will be required to pay the difference between overhead and underground.
- Transformer size will be calculated by AEC based on individual customers requirements submitted to AEC engineering department.

- The maximum available three phase fault current calculated in amperes, at the secondary terminals of the source transformer will be made available to customer at their request.

(4) TRANSFORMER PAD:

- Pad is furnished and installed by customer to AEC specifications.
- Pad dimensions and specifications will be made available to contractor thru AEC engineering office.

(5) METERING:

- 200 amp – 600 amp self contained meter base will be furnished by customer or contractor. AEC will furnish wire to meter base. Customer or contractor to open ditch and furnish pipe per AEC policy.
- “CT” Meter location is at the transformer. The meter base will be furnished and installed by AEC. The cost of required “CT” meter socket will be billed to the contractor.
- Metering in most all instances shall be on the secondary and hot side of the transformer.

NOTE: Any questions, or additional information required by customer or contractors should be directed to AEC Engineering Department at 256-586-3196.