Division of Power – Policies and Procedures Manual	
Standard Policies and Procedures	
Policy Number – AUB-04-04	Revision Number: 5
Subject	Effective Date: 07-01-2022
Underground Service	Superintendent Approval:
	General Manager Approval:

1.0 PURPOSE

The purpose of this policy is to standardize Athens Utilities Board's (AUB) approach to the installation of underground electrical service.

2.0 SCOPE

This policy applies to all new and existing customers purchasing electrical energy from AUB.

3.0 REFERENCES

- (1) Athens Utilities Board, Division of Power, Rules and Regulations and Extension Policies
- (2) Athens Utilities Board, Division of Power, Meter and Wiring Policy, AUB-04-03
- (3) National Electrical Safety Code

4.0 GENERAL

No person shall install or attempt to install underground service that utilizes electrical energy supplied by AUB's Division of Power using piping or equipment that are not specifically approved by AUB in this policy or Policy AUB-04-03, Meter and Wiring Extension Policy.

5.0 DEFINITIONS

AUB – means the Athens Utilities Board, and its duly authorized employees, agents, and representatives **Board** – means the Chairman and all Commissioners but does not include any employees

Customer – Any person, business, or other entity that receives electrical service from Athens Utilities Board, Division of Power

Division – The Athens Utilities Board, Division of Power

Local Control Authority – Superintendent of Power or duly authorized representative

kWhr – Kilowatt-hour, the measurement by which the applicable power rate is purchased

Service Connection – Shall mean the point of connection between the customer's termination point (weather head or meter center) where AUB makes the physical connection to his/her facilities.

6.0 POLICY/PROCEDURES

The following are general requirements for the installation of underground electrical service that apply to residential and commercial customers as specified in *Sections 6.1* and *6.2* of this policy.

- 1. The meter center shall be mounted securely to a vertical surface so the meter will not be tilted in any direction. It will be located so it will not be subjected to accidental damage and shall have a minimum 12-inch clearance from obstructions on either side, above and below the receptacle, and 36 inches in front.
- 2. The center of the meter shall be no less than five feet or more than six feet above **finished grade**. Grading and/or fill **must be completed before the meter will be installed**.
- 3. The meter center shall be utilized as a meter receptacle only, and shall not be utilized for any other purpose, (e.g., a junction box, etc.). Exceptions are collar type sleeves approved by the Local Control Authority used for powering other utility services or other utility purposes. (e.g. sewer grinder pumps, surge protection, generator automatic transfer equipment, etc.)
- 4. Metallic conduits shall be bonded to the ground conductor with approved bonding clamps.
- 5. All conduit ends shall be free of any burrs and sharp or rough surfaces and shall be equipped with bushings to protect the conductors. Seals are recommended NEC 300-5 (g).
- 6. Conduits shall be secured to the structure within 12 inches of the meter center and within six inches above final grade.
- 7. The ground conductor shall be bare copper and shall extend in one continuous piece from the meter center to the ground electrode and shall be installed adjacent to the conduit under the conduit straps. (Aluminum, copper-clad aluminum or steel conductor is not acceptable by AUB.)
- 8. The grounding electrode shall be a driven rod, and at least 18 inches from the foundation of the building or structure where practical and shall not be set at an angle which would cause the rod to be driven under the building or structure into dry soil. The grounding conductor shall not be "jumped" from the building, or structure, to the electrode but shall go down adjacent to the foundation to not less than 6 inches underground and then over to the electrode. All connections shall be made with approved clamps.

Drawing UG-1 represents an AUB-approved residential underground electrical service connection. AUB reserves the right to decline service to any installation where the location and/or method of installation has not been approved by an authorized employee of AUB. All costs incidental to relocating a service entrance installation shall be at the customer's expense.

The developer or customer shall furnish and install primary and secondary conduits according to AUB specifications. The customer will convey title of these facilities to AUB before the installation is energized. Materials specified may vary according to location, type of service, and technique development. The most economical method may be neither desirable nor practical in some situations, in which cases the final decision shall rest with AUB.

6.1 Residential

Underground electrical service will be provided when the following conditions have been met:

- 1. Primary conduit sized, designed and specified by AUB is installed to AUB specifications. AUB will then install primary cable and operate and maintain the primary system. (See Specification Drawing UG-3)
- 2. On services where underground primary has been installed, the customer will be required to install a conduit sized and approved by the AUB Local Control Authority from the meter center on the house to AUB's transformer. This conduit run shall consist of only two long sweep turns unless approved by the AUB Local Control Authority. The conduit shall be Schedule 40 PVC and be buried at a minimum depth of 30 inches. All conduit and fittings that extend above finished grade shall be Scheduled 80 PVC. All joints shall be glued together. A ¼-inch pull rope of continuous length shall be installed inside the conduit. AUB will install the service conductor to the house inside the conduit and make the appropriate connections at the meter center and transformer. (See Specification Drawing UG-1 Sheet 1)
- 3. If the service is across the street from the transformer, AUB will stub out under the street with three-inch PVC and the customer will connect to the stub. AUB will stub out from the transformer, and the customer will be required to attach at this point on services on the same side of the street. AUB will run the service conductor from the transformer to the house and make the appropriate connections when needed. (See Specification Drawing UG-1 Sheet 3)
- 4. If the customer's service is from an overhead line, he/she will be required to run three-inch conduit from the meter center to the base of the pole and extend the conduit 30 to 36 inches above ground level. AUB will attach to the customer's conduit and extend up the pole to the required height and run the service conductor at no cost. (See Specification Drawing UG-1 Sheet 2)
- 5. All conduit installations <u>will</u> be inspected <u>prior</u> to back-filling for proper depth and material used. AUB personnel will do this only during normal business hours. If the ditch is backfilled before inspection, the customer will be required to uncover conduit at locations determined by AUB.
- 6. The AUB Engineering Department shall determine all AUB meter center locations. Meter centers are preferred to be located on the side of the house closest to the transformer. If a meter center is located in the back of the house, it should not be more than 10 feet from the corner of the house or additional charges may be incurred.
- 7. Underground-fed security lights shall be installed within 15 feet of a driveway or graveled roadway. The conduit system feeding these lights shall be installed by the customer to AUB specifications.
- 8. Facilities will be installed in accordance to all applicable codes. Installation of primary conduit and transformers will be such that all applicable depths and clearances will be met after all areas are at final grade. Any relocation, repair or re-installation of any facilities after the initial installation will result in an additional payment for actual work done. This will be charged to the person or persons responsible and could result in a delay of service.

- 9. The installation of the underground primary, secondary crossings and service conduits should precede any paved covering or any landscaping. Failure to install the underground electric conduit prior to construction of any roads or landscaping may result in additional costs being billed to the contractor/owner
- 10. AUB will assume ownership of the conduit system after the service has been energized. This does not include the ditch in which it lies.

6.2 Commercial and Industrial

- 1. Underground electrical facilities will be installed at no cost for commercial and industrial customers provided there is sufficient load to justify the cost of providing a pad mount transformer.
- 2. All service entrance conductors from AUB's transformer to the customer's main panel will be owned, installed and maintained by the customer.
- 3. All primary conduits of underground service shall be installed by the customer and maintained by AUB.
- 4. A final site plan and load sheet will be provided to AUB prior to any electrical facilities being installed. The location of all transformers, conduits, cable, etc., shall be determined by AUB and agreed upon by the contractor prior to installation. Any relocation, repair or reinstallation made necessary by changes after the initial installation of AUB facilities will result in the associated costs being charged to the contractor/owner and payable prior to final service.
- 5. The customer will construct a concrete pad to AUB's specifications at the agreed upon location including all necessary primary and secondary conduits being stubbed out.
- 6. The feasibility of underground electrical facilities shall be based on soil and terrain conditions as determined by AUB's Engineering Department.