

Appalachian Power Company Policy No. 7: Replacing Poles in Energized Lines

1) Statement of policy:

When poles must be replaced near energized facilities without interrupting service to our customers, maximum care shall be exercised to ensure the safety of all crewmembers involved and the public.

2) Discussion:

Prior to starting this type of job, a thorough job briefing shall be conducted and a log-on with the DDC shall take place. The discussion with the DDC might also include placing the circuit breaker on 'one-shot' or manual operation if the pole to be replaced is in the circuit's first zone.

Initially and most importantly, the digger derrick truck must be positioned so that the pole to be replaced can be reached. Once this is done and the truck has been properly set up for digging the pole hole and setting the pole, the truck's load tables should be consulted (or known by the operator) to ensure that the truck is able to lift the pole to be set.

All tools, IPE, and PIPE needed should be removed from the truck. The crew shall verify that all utilities have marked their underground facilities that are nearby. In setting this pole between primary conductors, the minimum clearances outlined in Table 6.03 shall be adhered to.

When digging a new hole, care should always be given to the surroundings near the boom. The operator must maneuver this boom in a skillful manner without striking any close objects. The new hole should be dug in line and as reasonably close to the existing pole as possible. The hole should also be dug wide enough to allow for some adjustments to the pole.

Before the new pole is set, all energized conductors and/or equipment that may come within the minimum approach distance of the pole while it is being set or after it is set must be covered. Pole guards may be installed on the pole to provide protection where this method of cover up is more practical. Pole guards should not be used when the guard will be in direct prolonged contact with an energized conductor.

With the pole properly hooked over balance and guards installed on the pole, if needed, the crew may move it from its resting place toward the pole hole butt first. Ground members should keep the butt close to the hole while the top portion of the pole is raised cautiously to a vertical position between two of the primary conductors without contacting them. The new pole should be installed such that the neutral and secondary conductors remain on the 'same side' of the new pole as on the pole being replaced.

The 'removal' of a pole is basically the reversal of setting a pole in an energized area. As stated above, this procedure involves:

- Positioning and setting up the digger where it can properly lift the pole.
- Cover energized conductors and protective pole guards, if not already done.
- Ground personnel shall wear appropriate PIPE per 2.01.

- Catch pole with pole claws from digger above the balance point of the pole.
- Place sling at a point on the pole as high as crewmembers on the ground can reach then attach the winch line to sling, draw winch line in until sling is at proper height.
- Apply tension to the winch line to see if pole can be easily removed. If not, use a pole jack and chain at base of pole to jack pole up ~1 foot from ground.
- The crew shall maintain proper control of the butt near the pole hole until the pole is lowered below the energized conductors being mindful to avoid any contact with the overhead primary

3) Definitions:

Hook over balance: The position on the pole where a sling or choker can be placed and the pole can be balanced end to end when lifted.

4) Attachments:

(Import photographs/Figures of a line truck setting a pole in line.)

5). OSHA / Safety Manual References:

Safety Manual: E 2.01, 2.02, 2.03, 2.04, 2.07, 2.21, 2.22, 2.28
APCo Procedure No. 6 – Load and Unload Poles

6) Date Adopted: May 2, 2006