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**NAVY PUBLIC WORKS CENTER
NORFOLK, VIRGINIA
UTILITIES DEPARTMENT**

STANDARD OPERATING PROCEDURE / JOB HAZARD ANALYSIS

TITLE

REMOVE UTILITY POLE - ENERGIZED CIRCUIT

**PROCEDURE NUMBER
WC 624 HVE 009**

**DISTR:
601A
610
620
WC 624**

SIGNED: _____ (DATE)

APPROVED: _____ (DATE)

SAFETY PROFESSIONAL: _____ (DATE)

MANAGEMENT OFFICIAL: _____ (DATE)

DATE: _____

REVISION DATE: _____

REMOVE UTILITY POLE - ENERGIZED CIRCUITS

Purpose:

Remove a utility pole from a pole line whose circuits are still energized.

Potential Energy Sources:

1. Energized conductors within close proximity.
2. Deenergized conductors which have not been properly grounded.

Tools and PPE:

Tools: Bucket truck, auger truck, rubber line hoses, insulating blankets, insulator hoods, insulated pole guards, shovel, tamp, approved lifting sling. PPE: Insulating rubber gloves, insulating rubber sleeves, Nomex coveralls, Nomex hood, hard hat, safety glasses, safety shoes, safety harness, orange vest, and back brace if required by back injury prevention and control program. The class of rubber gloves and sleeves will depend on the exposure voltage as per the following: Class 0 - up to 1,000 volts, Class 1 - up to 7,500 volts, Class 2 - up to 17,000 volts, Class 3 - up to 26,500 volts, Class 4 - up to 36,000 volts.

References:

1. PWC Occupational Safety and Health Program Manual, PWCNORVAINST 5100.33E
2. SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck
3. Occupational Safety and Health Standards for General Industry (29 CFR PART 1910): Subpart I, Personnel Protective Equipment; Subpart R, Electrical Power Generation / Transmission / Distribution; Subpart S, Electrical
4. NFPA 70 E, Approach Distances To Exposed Energized Electrical Conductors and Circuit Parts
5. ANSI C2-1987, National Electrical Safety Code
6. Electrical Transmission and Distribution Safety Manual, P-1060
7. The Lineman's and Cableman's Handbook, 5th ED

Procedures:

1. Set up bucket truck and auger truck. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck, for details.
2. When operating a bucket truck the following safety rules will be followed.
 - a) Only an authorized person, one with a current government license to operate an aerial lift, will operate the bucket.
 - b) Do not use the bucket truck if winds exceed the truck manufacture's specified limit.
 - c) Do not perform energized work in wet weather, unless an emergency.
 - d) Personnel in bucket will wear a safety harness with a lanyard attached to the boom or bucket.

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- e) Do not exceed the bucket's weight limitations.
- f) Stand firmly on the floor of the bucket with both feet. Do not sit on the bucket's edge or use planks, ladders, or other such devices.

3. Insulate all energized overhead circuits which are within 3 feet of working area. Insulate any deenergized overhead circuits that have not been properly grounded as per Lockout and Tagout procedures. Place insulated pole guards on pole. Personnel in the bucket shall wear Nomex coveralls, Nomex hood, safety glasses, safety shoes, insulating rubber gloves and sleeves, and hard hat.

4. To pull the pole personnel should wear hard hats, safety shoes, work gloves, and orange vests if work in adjacent to a road or in a parking lot.

5. Pull the pole. Move the Auger truck's boom into position and attach boom to pole with certified lifting sling and shackle. All ground personnel need to be alert to the boom's movements and non essential persons will stay clear of movement area. Personnel assigned to handle pole during removing operation will wear, in addition to Step 4 PPE, insulating rubber gloves and sleeves, and safety glasses. Remove pole taking care to avoid contact with overhead, energized, circuits. Personnel handling the pole will not place any uninsulated part of their body on the pole. Once the pole is removed, place the boom back in it's cradle.

If the removed pole is in good condition, take to pole to the pole storage location. Follow SOP WC 624 HVE 008; Load, Haul, Unload Utility Pole, to transport pole.

If pole is deteriorated and no longer of use, cut the pole up and haul pieces to disposal site. Personnel will add ear protection and safety glasses to Step 2 PPE. Use proper bending and lifting techniques to load cut pole pieces onto truck. The deteriorated pole can be taken to the disposal site and cut up there. To do this, follow SOP WC 624 HVE 008; Load, Haul, Unload Utility Pole, to transport pole.

6. Backfill and tamp hole. Personnel doing this will add safety glasses to their PPE listed in Step 4. Use shovels to place the dirt back in the hole and pack the dirt firm with a tamp.

7. Remove insulation from the overhead conductors. The insulation is removed in reverse order of placement. Personnel in the bucket shall wear Nomex coveralls, Nomex hood, safety glasses, safety shoes, insulating rubber gloves and sleeves, and hard hat.

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8. Secure bucket and auger trucks. Refer to SOP WC 624 HVE 001, Set Up and Secure Bucket/Auger Truck, for details.