Issued 15-Mar-05

## ELECTRIC OPERATIONS ORGANIZATION

Work Standard

W1606

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W1606

\*\*\*\*This standard supercedes BECo Standard WMS2.1-1.7

# TEMPORARY IDENTIFICATION AND PROTECTION OF EXPOSED CONDUCTORS ON NEWLY INSTALLED URD CABLES

### 1.0 Purpose

This standard describes a method to temporarily protect newly installed tape shield and concentric neutral cable ends from moisture contamination and to identify newly installed cables.

### 2.0 Bill of Materials

This standard does not require non-routine parts or equipment.

### 3.0 Safety

- 3.1 This cable end protection is to be applied to newly installed cables only and must be applied immediately after the cable has been installed. The employee applying the end protection must either:
  - A. Have direct knowledge that the cable is not energized, or,
  - B. Must prove the cable de-energized per standard W1605 prior to installing the cable end protection.
- 3.2 Install local tags (if required) per NSTAR Safety manual, Section 9.20, and install terminations on parking bushings or other approved grounding devices as appropriate.

### 4.0 Procedure

- 4.1 Install heat shrink dead-end caps in lieu of plastic bags if cable will be left for extended periods before terminations/splices are completed, or if cable ends will be exposed to visible moisture.
- 4.2 If elbows are installed on cable not under the jurisdiction of system dispatchers, install the completed elbow on a parking bushing and tag the elbow in accordance with local procedures for construction not under the jurisdiction of system dispatchers (ie., white tag) per Section 9.20 of the NSTAR Safety Manual. Do not install elbows on new cable unless a parking bushing is available.

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4.0 Procedure - cont'd

**NOTE:** A dispatcher's DNO tag shall be applied to the first connected switchable device that separates the existing energized system from the new construction.

- 4.3 In a padmounted installation, manhole, vault, or on a riser pole, if the cable is to be left with no elbow installed, coil the newly installed cable, with the cable end pointing downward.
- 4.4 Prepare the Cable End. Refer to Figure 1.
  - A. Remove cable jacket and insulation.
  - B. Wrap one layer of rubber tape around the conductor(s). Bond the conductor(s) to the cable metallic sheath using #2 copper wire, or if the metallic sheath is concentric neutral, twist all concentric neutral wires together and connect them to the conductor.
  - C. Install a 6-mil plastic bag around the cable end and the neutrals. Moisture-seal the bag around the cable jacket using rubber tape.

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#### 4.0 Procedure - cont'd

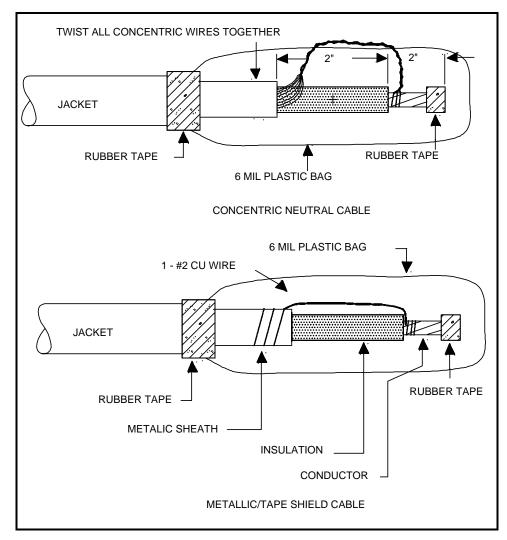


Figure 1 - Cable Ends

D. Prior to removing the 6-mil plastic bag, confirm the #2 copper wire is intact, indicating the conductor has not been energized.

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