

Appalachian Power Company Policy No. 10
Maintenance of Hot Sticks

1) Statement of Policy:

Distribution employees use and depend on live-line tools for protection daily, therefore proper care and maintenance of these tools is critical. The use of tools that have lost their insulating value pose a threat of causing injury or death to the person(s) operating such. The users of live-line tools must understand and follow inspection, cleaning and testing procedures.

2) Discussion:

AEP requires, at a minimum that compliance with OSHA guidelines relating to the care and maintenance be strictly adhered to. A summary of OSHA 1910.269 (j) (2) requires that live-line tools be wiped clean and visually inspected daily before use. In addition, the live-line tools shall be cleaned, waxed and electrically tested at least every two years, or if it fails any visual inspection.

Should a live-line tool be contaminated, cracked, or contain moisture, there is a good chance that it has lost the required insulating properties.

3) Definitions:

None

4) Attachments:

MAINTENANCE OF HOTSTICKS

Visual inspection

The following are the steps that should be done during a visual inspection, which shall be done daily, before use. Should there be any question, the stick should be tagged and removed from service until it can be electrically tested and determined safe for use.

1. Wipe the stick clean
2. Check that the metal attachments are secure
3. Check for cracks or deep scratches on the fiberglass
4. All hardware is secure and operating properly

It is recommended that sticks be waxed approximately once a month. This not only helps it maintain its insulating value but also prolongs the life of the stick.

Biennial (every other year) inspection

The biennial test shall consist of the following:

1. Inspect the general condition of the stick
2. Thoroughly clean the stick with a dry cloth
3. Wax the stick
4. Perform electrical test(s)
5. After the stick has been proven safe for use, by passing an electrical test it shall be tagged with a 3 7/8" x 1" label. This label should be placed in the middle of the stick or at the handle end.

HOT LINE TOOL INSPECTION
Do Not Use Beyond This Date: _____
Inspected By: _____
Tested By: _____
In accordance with OSHA 1910.269 (f) (III)

Should any portion of the stick fail the test it shall be removed from service until repairs are made and it passes the test, or be permanently removed from service.

5) Safety / OSHA Manual References:

Safety Manual:

E2.09 - The insulation of live-line tools and hollow aerial lift arms shall be clean and conform to the following table

Electrical Table 2.09

Nominal System kV	Minimum Insulation	
	Feet	Inches
46 and Below	3	0
72.5	3	6
138	4	0
345	9	4
500	12	4
765	17	0

E 2.10 Live-line tools shall be wiped clean and visually inspected for defects before use each day. If a defect or contamination that could adversely affect the insulation qualities of the tool is found, the tool shall be removed from service until cleaned and waxed or repaired, refinished and electrically tested before use as required.

E 2.11 Live-line tools used for primary employee protection shall be removed from service and inspected every two (2) years. Hollow shaft live-line tools shall be electrically tested every two (2) years.

OSHA Regulations:

1910.269(j)(2)(i) Each live-line tool shall be wiped clean and visually inspected for defects before use each day.

1910.269(j)(2)(ii) If any defect or contamination that could adversely affect the insulating qualities or mechanical integrity of the live-line tool is present after wiping, the tool shall be removed from service and examined and tested according to paragraph (j)(2)(iii) of this section before being returned to service.

1910.269(j)(2)(iii) Live-line tools used for primary employee protection shall be removed from service every 2 years and whenever required under paragraph (j)(2)(ii) of this section for examination, cleaning, repair, and testing as follows:

1910.269(j)(2)(iii)(A) Each tool shall be thoroughly examined for defects.

1910.269(j)(2)(iii)(B) If a defect or contamination that could adversely affect the insulating qualities or mechanical integrity of the live-line tool is found, the tool shall be repaired and refinished or shall be permanently removed from service. If no such defect or contamination is found, the tool shall be cleaned and waxed.

1910.269(j)(2)(iii)(C) The tool shall be tested in accordance with paragraphs (j)(2)(iii)(D) and (j)(2)(iii)(E) of this section under the following conditions:

1910.269(j)(2)(iii)(C)(1)

After the tool has been repaired or refinished; and

1910.269(j)(2)(iii)(C)(2) After the examination if repair or refinishing is not performed, unless the tool is made of FRP rod or foam-filled FRP tube and the employer can demonstrate that the tool has no defects that could cause it to fail in use.

Date Adopted: May 2, 2006