

Appalachian Power Company Policy / Procedure No. 18:  
Use of Flame Retardant Clothing

1) Policy Summary:

- A. Flame Retardant (FR) Clothing is required:
1. When working within the minimum approach distances.
  2. When rubber gloves and or sleeves are required.
  3. When performing live line tool work.
  4. When bonding on or working bare-hand method.
  5. When grounding lines or equipment
  6. When testing lines or equipment to be de-energized.
  7. When performing switching operations.
  8. When in confined spaces with energized lines or equipment.
  9. When disconnecting/connecting energized customer meter
  10. When working on equipment that is required to be barricaded due to proximity of its operation to energized conductors.
- B. Unless you are wearing an FR t-shirt, undergarments shall be of 100% natural fabrics with no silk-screening. The when a shirt is worn as the outer layer of clothing, sleeves shall be rolled down and buttoned and shirt tails tucked into pants or otherwise secured to prevent the heat and arc from rising up under the shirt.
- C. It is important to determine the rating of the FR clothing you are wearing and to wear the appropriate garment or layers of garment that will provide the level of protection needed.

2) Statement of policy:

Employees who work on or near energized equipment shall not wear clothing that, when exposed to flames or electric arcs, could increase the extent of injury that would be sustained by the employee. Clothing made of the following fabrics are prohibited: 1) Acetate 2) Nylon 3) Polyester and 4) Rayon.

The use of short sleeve Fire Retardant and or 100% natural fiber clothing is prohibited when working on energized equipment or when exposed to flames or electric arcs that could increase the extent of injury as defined within this policy. Employees exposed to flames or electric arcs shall wear approved long sleeve Fire Retardant or 100% natural fiber clothing.

3) Discussion:

Employees shall wear approved Fire Retardant or 100% natural fiber outer layer clothing while working on or near energized equipment within minimum approach distances as listed in the Safety Manual, or otherwise exposed to flames or electric arcs. Natural fiber clothing shall be made of as wool or cotton with a weight of at least 11 ounces or greater. All energized work is included unless specifically exempted.

As a reminder, all undergarments shall be 100% natural fabric. Pants, jeans, etc., shall contain no less that 11 ounces per square yard of 100% cotton or other natural fabric are acceptable. Any embroidery on outerwear or undergarments must be made of natural fibers or those garments shall not be worn; other

decorations (such as silk screening) make those garments unacceptable for outerwear or undergarments in situations where FR clothing is required.

When a shirt is worn as the outer layer, it shall be FR rated with long sleeves. Sleeves shall be rolled down and buttoned. Shirt tails shall be tucked into trousers or, if the shirt tails are left un-tucked, a belt over the shirt tails will provide an acceptable alternative to prevent the heat and arc from rising up under the shirt.

All employees that are covered under this policy shall have their Fire Retardant Clothing readily available on the job site.

F. R. clothing is required in the following situations:

- When working within the minimum approach distances.
- When rubber gloves and or sleeves are required.
- When performing live line tool work.
- When bonding on or working bare-hand method.
- When grounding lines or equipment
- When testing lines or equipment to be de-energized.
- When performing switching operations.
- When in confined spaces with energized lines or equipment.
- When disconnecting/connecting energized customer meter
- When working on equipment that is required to be barricaded due to proximity of its operation to energized conductors.

4) Definitions: none

5) Attachments:

It is important to wear FR clothing with the proper protection (calorie) rating. This will depend on your proximity to a potential arc and your location on the circuit. Button-up shirts and some other clothing has a tag next to one of the pockets indicating whether the garment carries an HRC 1 or HRC 2 rating. Older FR clothing may not carry this label but can be sorted by type.

- Examples of FR Clothing (or clothing combinations) that will yield an **eight** calorie protection rating:
  - A Henley or a button up shirt with an HRC 2 rating by itself
  - An HRC1 rated button up shirt (including Blue Carhartt shirts) with a Dri-fire t-shirt
- Examples of FR clothing combinations that will yield a **twelve** calorie protection rating:
  - A Henley or a button up shirt with an HRC 2 rating with a Dri-fire t-shirt

6) OSHA / Safety Manual References

Safety Manual:

**G1.20:** Employees who are exposed to the hazards of flames or electric arcs shall not wear clothing that, when exposed to flames or electrical arcs, could increase the extent of injury. These requirements apply in any designated area and to all substations where FR rated clothing is required gate-to-gate. Additional information can be found in the *AEP FR Clothing Policy*.

AEP INTRANET: [safety.aepsc.com/policies/documents/FR%20clothing%20policy.pdf](http://safety.aepsc.com/policies/documents/FR%20clothing%20policy.pdf).

OSHA – 1910.269 (1)(6)(iii)

The employer shall ensure that each employee who is exposed to hazards of flames or electric arcs does not wear clothing that, when exposed to flames or electric arcs, could increase the extent of injury that would be sustained by the employee.

7) Date Adopted: 5/2/06