




**National Rural Electric
Cooperative Association**

A Touchstone Energy® Cooperative 

July 14, 2006

Occupational Safety and Health Administration Docket Office
Docket No. S-215
U.S. Department of Labor
200 Constitution Avenue, NW, Room N2625
Washington, DC 20210

**Re: Proposed Revision of OSHA Regulations Addressing Electric Power Generation,
Transmission, and Distribution; and Electrical Protective Equipment**

Dear Sir or Madam:

I am writing to provide the comments of the National Rural Electric Cooperative Association (NRECA) on the proposed revision of the Occupational Safety and Health Administration (OSHA)'s regulations addressing electric power generation, transmission, and distribution and addressing electrical protective equipment. The proposed revisions are printed in the *Federal Register* of June 15, 2005. NRECA filed written comments on January 11, 2006. A hearing on the proposal was held in March of this year. NRECA testified at the hearing and asked questions of other participants.

NRECA is the national service organization that represents the nation's 916 private, not-for-profit, consumer-owned cooperative electric utilities, which provide electric service to 37 million people in 47 states. NRECA is responding to the above-referenced proposed revision on behalf of its members.

In these post hearing comments, we expand upon three points touched upon in our prior written and oral comments: flame resistant clothing is not "Personal Protective Equipment", OSHA should continue to allow 100% cotton clothing, and the cost of estimating maximum available heat energy is greater than OSHA recognizes.

I. FLAME RESISTANT CLOTHING IS NOT "PERSONAL PROTECTIVE EQUIPMENT".

Much of the testimony at the March hearing evidenced the following unspoken – and false – reasoning:

First Premise: Arc protective clothing is Personal Protective Equipment (PPE).

Second Premise: Flame Resistant (FR) clothing is arc protective clothing.

Conclusion: FR clothing is PPE.

Because the two unspoken premises here are incorrect, the conclusion does not hold. The mere fact that FR clothing also has an arc protective rating does not make it PPE. (In fact, having an arc protective rating does not, in itself, render a garment PPE.)

It is important to keep the terms FR and PPE distinct, because only PPE is subject to rules which may result in mandatory payment for the equipment by employers. Payment for FR, on the other hand, is rightly subject to negotiation by employer and employee.

Let us start with the first unspoken premise: “arc protective clothing is Personal Protective Equipment”. This sounds like it ought to be true. After all, both terms use the word “protective”. And, as noted in the Preamble to the proposed rule, “OSHA considers the *protective* clothing required by [the proposal] to be PPE.” *Federal Register* 34868 (emphasis added). The problem is that “PPE” is a term of art requiring more than just the offering of protection. Indeed, OSHA has had a rulemaking ongoing since 1999 addressing the nature of PPE and who should pay for it. It is in that rulemaking that the issue should be decided whether arc protective clothing is “PPE”. At this point, it is still an open question.

The second unspoken premise is that “FR clothing is arc protective clothing”. At times OSHA appears to use the terms interchangeably. Note the following exchange between Lauren Goodman of OSHA and Jim Tomaseski of IBEW:

Ms. Goodman: How are employers going about selecting the FR clothing presently?

Mr. Tomaseski: How are they selecting it?

Ms. Goodman: Right, in terms of the level of protection that it provides.

Transcript, p. 997.

And earlier:

Ms. Goodman: Your first answer was, yes, some of them are providing FR clothing. So my follow-up is how are those utilities that are providing it deciding what level of protection to provide?

Transcript, p. 554.

The muddling of the terms “FR clothing” and “arc protective clothing” is understandable, as all arc protective clothing is first FR. But just being FR does not give clothing an arc protective value. The arc protective attribute is an add-on, separate from the FR attribute. The distinction between the terms was well articulated by Mr. Tomaseski of the IBEW, who serves on ASTM F-18, the committee that set the standard for the “FR” designation:

Mr. Glazier: Does a material have to meet an arc protective, have to have an arc protective value in order to be rated FR?

Mr. Tomaseski: No. It would be rated for FR, but all FR garments then go through the 1959 test and are arc rated.

Mr. Glazier: But in order to be FR, there is no requirement to have an arc rating?

Mr. Tomaseski: No, no.

Mr. Glazier: Are there other attributes of FR materials besides arc rating?

Mr. Tomaseski: I am assuming there could be, yes.

Mr. Glazier: Do FR materials have a weight?

Mr. Tomaseski: Oh, sure.

Mr. Glazier: They might have a color?

Mr. Tomaseski: Exactly.

Mr. Glazier: And nowadays they have arc ratings, is that your testimony?

Mr. Tomaseski: Yes.

Transcript, pp. 936-37.

So, upon examination, it appears that both premises in the unspoken reasoning evidenced at the hearing are false: Arc protective clothing is not at this time PPE. Nor is FR clothing arc protective clothing. As a result, the conclusion to which the premises point is also false. That is, FR clothing is not PPE. Accordingly, the payment rules that apply to PPE do not apply to FR clothing. The question of who pays for FR clothing remains, as it is now, a subject of negotiation between employer and employee.

II. OSHA SHOULD CONTINUE TO ALLOW WEARING 100% NATURAL FIBER CLOTHING THAT DOES NOT MELT OR IGNITE AND CONTINUE TO BURN.

OSHA's current electrical maintenance standard prohibits clothing that "could increase the extent of injury". 1910.269(1)(6)(iii). OSHA and the regulated community have come to understand that the standard prohibits clothing that either will melt or will ignite and continue to burn. That, in turn, means that allowed clothing is either FR, or is comprised of 100% natural fibers – such as cotton or wool.

As noted at the hearing by Frank Owen Brockman of Farmers Rural Electric Cooperative, many utilities now allow their employees to wear 100 percent cotton clothing. Transcript, p. 1294. The proposed rule, however, would require FR clothing – not merely clothing that will not melt or will not ignite and continue to burn, but FR clothing -- when an employee is "subject to contact with energized circuit parts operating at more than 600 volts". Proposed 1910.269(l)(11)(iv)(A) and proposed 1926.960(g)(4)(i). Arguably, this means that 100 percent cotton and other natural fiber clothing cannot be worn by employees doing rubber glove work on parts energized above 600 volts. As a result, many utilities that have been successfully allowing 100 percent cotton clothing will have to change to the more expensive, and difficult to maintain, FR clothing. The record simply does not support this move away from the extensive and safe use of 100% natural fiber clothing.

III. THE COST OF USEFULLY ESTIMATING MAXIMUM AVAILABLE HEAT ENERGY IS FAR GREATER THAN OSHA RECOGNIZES.

OSHA's proposed rule would require "the employer to make a reasonable estimate of the maximum available heat energy to which an employee would be exposed". Proposed 1910.269(l)(11)(ii) and proposed 1926.960(g)(2). Let us assume OSHA overcomes the considerable challenge of devising an acceptable estimation procedure. Let us assume that employers become familiar with the procedure and know how to do the calculation. The problem is that it is not just one calculation. Because heat energy is dependent on fault current and on clearing time, an estimate, to be useful, must take into consideration every location where a change in fault current or clearing time occurs. Such changes can occur at every protection device. So a meaningful, useful estimate would require a calculation at every such device. On a small rural electric system, this could require hundreds of calculations. On a large system, it could be thousands. OSHA does not appear to include this cost in the estimation of the cost of its proposal. The true cost of the proposal, therefore, is far greater than OSHA recognizes.

Thank you for the opportunity to submit these post hearing comments and for considering NRECA's views in this process.

Sincerely,



Jonathan Hemenway Glazier
Association Counsel