

August 30, 1979

Secretary of The Commission
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Docketing and Service Branch

Gentlemen;

RE: DRAFT REGULATORY GUIDE AND VALUE/IMPACT STATEMENT:
TASK RS 809-5: QUALIFICATION TEST FOR CABLE PENETRATION
FIRE STOPS FOR USE IN NUCLEAR POWER PLANTS

We have the following comments regarding the above referenced documents:

- B. The latest revision of ANSI/ASTM E 119 should be referenced. In this case ANSI/ASTM E 119-76.
- C.2. The Guide should allow "worst case" testing for fire stop qualification. To require testing of every possible type configuration for every plant will increase costs and cause long delays in qualification of fire stops. Our experience has shown that "worst case" testing for generic acceptance is a valid method.
- C.2.b Differential pressure across the stop has been considered by American Nuclear Insurers, IEEE and ASTM during preparation of test requirements. We do not object to such a requirement; however, it should be stated that the method used to achieve the pressure differential shall not obstruct vision, normal air flow or reduce available air for combustion at the unexposed surface of the fire stop.
- C.4 It is essential that a standard cable length be used on both the exposed and unexposed sides. The three (3) feet on the unexposed side gives a standard heat sink. The one (1) foot on the exposed side is based upon the maximum length that can be accommodated by most wall furnaces. To extend this length into the furnace will cause disruption of the heat distribution and give inaccurate results. The time temperature curve provides the standard fire exposure and we need not rely on the cable jacket and insulation as a heat source.

- C.6 The requirement for three (3) thermocouples at each interface is excessive and should be reduced. Single point measurements have proven effective and when any particular point is questionable, additional readings can be taken to verify that information. This requirement could substantially increase test costs with minimal benefit.
- C.7 "Passage of Flame" should be further clarified. Progressive charring on the unexposed side must be considered a failure, whether or not visible flaming occurred.
- C.8 We have no objection to the use of the "hottest spot" temperature requirement of IEEE - 634 but question the benefit of also taking temperature readings one (1) inch away from interfaces.

A point that must be considered is the possible temperature rise on the fire stop material itself. This material can involve a relatively large area and if the temperature rise is not limited we can have a large radiant panel effect on the unexposed side. The "hottest spot" concept does not address this concern as most "hottest spot" points will be small "point sources" of radiant heat.

Temperature rise on the unexposed surface of the fire stop material should be limited to 325° F.

American Nuclear Insurers position is that the minimal hose stream test called for in IEEE-634 does not provide an adequate mechanical impact on the fire stop. Consideration should be given to calling for an adequate hose stream test.

Respectfully submitted,

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