

**COMMENT ON NFPA NEC COMMITTEE REPORT ON PROPOSALS FOR 1999
NATIONAL ELECTRICAL CODE**

DATE: 9/30/97 **NAME:** Wm H. King, Jr. **TEL. NO:** 301-504-0508

ORGANIZATION: U.S. Consumer Product Safety Commission

ADDRESS: 4330 East West Hwy, Bethesda, MD 20814-4408

ORG. REPRESENTED: U.S. Consumer Product Safety Comm. staff

1. SECTION/PARAGRAPH: 210-12-(New)

2. COMMENT ON PROPOSAL NO: 2-129

3. COMMENT RECOMMENDS

☒	new text
☐	revised text
☐	deleted text

4. COMMENT:

Accept the panel action in the ROP for Proposal 2-129.

5. STATEMENT OF PROBLEM AND SUBSTANTIATION FOR COMMENT:

Bedrooms are the most frequently reported areas of origin for fires involving the residential electrical distribution system, according to a study by the U.S. Consumer Product Safety Commission.¹ Often these circuits are remote from the service equipment or loadcenter, presenting more opportunities for damage to the branch circuitry resulting in electrical arcing. The common failure modes resulting in branch circuit wiring fires noted in the CPSC report are mechanical damage, poor/loose splices, and ground faults. The branch circuits that serve these rooms especially deserve the added protection afforded by arc-fault circuit-interrupters (AFCIs). In the order of descending frequency, living rooms, kitchens, closet/storage areas, garages, bathrooms, laundries, halls, and dining rooms are the other functional locations in the home where electrical wiring fires are reported.

Explanations for negative votes regarding the arc-fault circuit protection proposals in the ROP indicate concerns about the magnitude of the requested change and the availability of product. The concern regarding the scope of the change has to be matched against the toll of fires attributed to the residential electrical distribution system as reported in the latest available loss figures (42,900 fires, 370 civilian deaths, \$615 million property loss).² Regarding availability, CPSC staff has obtained listed AFCIs and plans to confirm the performance characteristics of the technology.

¹ Report "Residential Electrical Distribution System Fires", U.S. Consumer Product Safety Commission, Dec. 1987, Table 4 and Table 12.

² Report "1994 Residential Fire Loss Estimates", U.S. Consumer Product Safety Commission, Table 4.

6. THIS COMMENT IS ORIGINAL MATERIAL.

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This proposal represents the views of the writer and not necessarily the official position of the CPSC.

William H. Keigh

Signature