

U.S. CONSUMER PRODUCT SAFETY COMMISSION WASHINGTON, DC 20207

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To: Code Making Authorities Considering the Adoption of the 2008 National Electrical Code

The U.S. Consumer Product Safety Commission (CPSC) staff¹ understands that you and your Committee are considering adoption of the 2008 National Electrical Code (NEC) but have been lobbied to reject select revisions of the 2005 NEC that were approved during the latest code revision cycle. It is our understanding that particular objections have been raised regarding the expansion of arc fault circuit interrupters (AFCIs) to all 120-volt, single-phase, 15- and 20-ampere branch circuits in living areas, the removal of exceptions for receptacle locations requiring ground-fault circuit-interrupter (GFCI) protection in 210.8 (A)(2) and 210.8 (A)(5) of the 2005 NEC, and the addition of a new requirement for tamper-resistant receptacles in dwellings.

AFCIs: The CPSC staff is a strong proponent of the implementation of AFCIs as a powerful tool in mitigating fires that originate in the electrical distribution system. AFCIs are a significant upgrade in electrical fire safety over conventional circuit breaker and fuse technology. The CPSC staff supports the implementation of AFCI technology as a means to reduce these electrical fires based on a thorough analysis of electrical wiring fire incidents, a complete engineering assessment of arc fault detection technology, and a comprehensive laboratory evaluation of AFCI products. The expansion of AFCIs to all 120-volt, single-phase, 15- and 20-ampere branch circuits supplying outlets installed in dwelling unit family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sun rooms, recreation rooms, closets, hallways, or similar rooms will provide an improvement in fire safety in these living areas.

GFCIs: The CPSC staff advocates the implementation of GFCIs as a highly effective means of reducing incidents of electric shock, electrocutions and thermal burns. Evidence of improved electric shock safety is discussed in the report, *An Evaluation of the U.S. Consumer Product Safety Commission's Electrocution Reduction Program* (Garrett, Robert and Kyle, Susan; U.S. CPSC Office of Planning and Evaluation; November 2002).

<u>Tamper-resistant Receptacles</u>: The new requirements in 406.11 for tamper-resistant receptacles will help to reduce the incidence of thermal burn and electric shock incidents that occur to small children and toddlers.

¹ These comments are those of the CPSC staff and have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

The CPSC staff urges that the authorities having jurisdiction adopt the 2008 edition of the *NEC* in its entirety as approved by the NFPA Standards Council on July 26, 2007.

Additional information regarding AFCIs, GFCIs, and the *NEC* is available on the CPSC website under voluntary standards and electrical/fire and electrocution safety (http://www.cpsc.gov/volstd/standards.html). Please let me know if we can provide any additional information that might be of assistance to you. We appreciate this opportunity to comment.

Sincerely,

Andrew M. Trotta