## NFPA Technical Committee Document Proposal Form

Note: All proposals must be received by 5:00 p.m. EST/EDST on the published proposal closing date. FOR OFFICE USE ONLY For further information on the standards-making process, please contact Log #:\_ Codes and Standards Administration at 617-984-7249. Date Rec'd For technical assistance, please call NFPA at 617-770-3000. CD ROM | paper Please indicate in which format you wish to receive your ROP/ROC: (Note: In choosing the download option you intend to view the ROP/ROC from our Website. No copy will be sent to you.) 301-504-0508, ext. 1296 Name William King Telephone Date Oct. 1, 2002 Company U.S. Consumer Product Safety Commission State MD Zip 20814-4408 Address 4330 East West Highway City Bethesda Please indicate organization represented (if any) U.S. Consumer Product Safety Commission 1. a) NFPA Document Title National Electrical Code b) NFPA No. & Edition 70-2002 c) Section/Paragraph 210.8 (B) 2. Proposal Recommends (check one): new text revised text 3. Proposal. (Include proposed new or revised wording, or identification of wording to be deleted.) Note: Proposed text should be in legislative format, that is, use underscore to denote wording to be inserted (inserted wording) and strikethrough to denote wording to be deleted (deleted wording). (See attachment for Proposal) Statement of Problem and Substantiation for Proposal. Note: State the problem that will be resolved by your recommendation. Give the specific reason for your proposal including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication. (See attachment for Statement of Problem and Substantiation for Proposal) 5. | | This Proposal Is Original Material. Note: Original material is considered to be the submitter's own idea based on or as a result of his/her own experience, thought, or research and, to the best of his/her knowledge, is not copied from another source. This Proposal Is Not Original Material; Its Source (if known) is as Follows: This proposal represents the views of the writer and not necessarily the official position of the CPSC. I hereby grant NFPA all and full rights in copyright to this proposal, and I understand that I acquire no rights in any publication of NFPA in which this proposal in this or another similar or analogous form is used. Signature (Required) William H Kung L

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## PROPOSAL.

Section/Paragraph: Article 210, Part I, General Provisions, para. 210.8 (B)

Add the following new item to paragraph 210.8 (B) covering GFCI requirements for "Other Than Dwelling Units:

(4) Places frequented by public and community segments at-large -- where the receptacles are installed for cord- and plug-connected appliances that are intended to be readily accessible to contact by populations at-large (for example, receptacles for such appliances located at schools, stores, theaters, shopping malls, restaurants, museums, houses of worship and other commercial, private and government structures, in corridors and lobbies, along sidewalks, plazas, parks, promenades, etc).

## STATEMENT OF PROBLEM AND SUBSTANTIATION FOR PROPOSAL.

The U.S. Consumer Product Safety Commission (CPSC) estimates that there were 170 accidental electrocutions associated with consumer products in 1999 in the United States. the latest year available. Based on information provided on death certificates, CPSC identified six product categories involved in significant numbers of electrocutions: powered tools and equipment, installed wiring, antenna products, large appliances, small appliances, and lighting products. CPSC conducted its own follow-up investigations of a selection of the electrocution deaths that occurred over the seven-year period (1994-2000) in the United States to find causal factors. In total, 209 incidents were documented with sufficient detail (many included on-site visits by CPSC representatives, photographs, investigation reports by local authorities, and interviews with people with relevant knowledge). From these in-depth investigation reports, conditions that led to death were noted. Practical solutions to reduce the risk of electrocution under similar circumstances in the future emerged.

While most electrocutions to consumers occur in and around the home, electrocutions frequently are reported in public and community settings associated with cord-connected power equipment and large appliances, such as coin-operated machines, tools, pumps, and cleaning equipment. Providing GFCI protection for receptacle outlets, both indoor and outdoor, located at public and community access areas patronized by consumers will address these high-risk locations. The following is a partial list of electrocutions that occurred at areas covered by this proposal.

Williston, ND October 8, 1996 A 9-year-old male electrocuted at an indoor

recreation center by a cord- and plug-connected coin-operated

machine. CPSC Case No. 970922CCC2427.

Waco, TX May 29, 1997 A 44-year-old male electrocuted on public

property while servicing a cold drink dispensing machine. CPSC

Case No. 980402CCC3732.

Clanton, AL August 21, 1995 A 10-year-old male electrocuted at a motel

when he came in contact with a vending machine. CPSC Case No.

950823CCN2720.

Melbourne, FL June 24, 1998 A 19-year-old male electrocuted at a rented

unit in a public storage facility when he came in contact with an electric guitar and microphone plugged into a receptacle outlet not

properly grounded. CPSC Case No. 98073CCC1613.

Tallahassee, FL November 11, 1988 A 26-year-old male electrocuted after he

contacted a change machine and a snack machine simultaneously at a college student lounge. CPSC Case No. 881202CCC1072.

Corwith, IA May 4, 2000 A 16-year-old male electrocuted when he

contacted a power tool plugged into a receptacle outlet within a shelter in a municipal park. CPSC Case No. 000530HCC2576.

The GFCI has been in service on selected circuits for 30 years. Reductions in the number of electrocutions have occurred for receptacle outlets and equipment that are required by code to be provided with GFCI protection. The average cost of the GFCI device has decreased substantially since the early period, with the retail cost for a receptacle GFCI below \$10. It is time to expand the scope of GFCI protected areas to provide the same level of electrocution protection as now provided at those receptacle locations that were identified in the early years on the basis of priority. The unit cost of a GFCI is offset by the increased protection.

GFCIs manufactured to the current industry-supported safety standard (UL 943) are more reliable than those units manufactured in the past. UL 943 requires stringent voltage surge testing, improved resistance to corrosion, and resistance to false tripping from electronic interference.