U.S Consumer Product Safety Commission
LOG OF MEETING

SUBJECT: Evaluation of Strategic Goal on Electrocution

DATE OF MEETING: October 1, 2001

LOG ENTRY SOURCE: Robert T. Garrett, LSE (EXPE)

DATE OF LOG ENTRY: October 10, 2001

LOCATION: CPSC Headquarters, Bethesda, MD

CPSC ATTENDEE(S):
Robert Garrett, LSE (EXPE)
N.J. Scheers, EXPE
Micheal Gidding,CLD
William King, ES
Susan Kyle, EPHA
Elizabeth Leland, ECPA
Russell Roegner, EPHA
George Rutherford, EPHA

NON-CPSC ATTENDEE(S):
Carl Belchschmidt, Verhalen Associates

The meeting convened at 11:00 am in Room 709. Mr. Garrett presented an agenda and gave a brief review of the evaluation task and the activities that had been carried out to prepare for the evaluation, then opened the table for discussion.

Mr. King said that he believed CPSC had reached its goal but that the agency should continue to focus on identifying other activities to sustain the reduction in incidents and continue lowering the death rate.

Mr. Blechschmidt identified ground fault circuit interrupters (GFCIs) as the main cause of the reduction in the estimated death rate. Mr. King added that Engineering Sciences' (ES) sustained effort has been to promote electrical safety through proper grounding methods, insulation, and GFCIs. He continued by suggesting that the next phase in voluntary standards activity might be to propose codes to require GFCI installations throughout homes and residential areas.

In discussing Compliance work with Corrective Action Plans (CAPs), Mr. Gidding made clear that recalls generally affect only appliances with manufacturing defects and, with rare exception, not old or aging appliances. Moreover, when existing voluntary standards are relied upon to determine whether to enact a recall or other corrective action, the recall is "prospective," covering only products manufactured after the standard went into effect. It was also observed that effects of use and aging increase the risk of causing electrical injury - older swimming pools, extension cords, and lamps being cited as typical examples. Mr. Gidding reiterated that the age of a product is a significant issue because some potentially dangerous appliances can have very long life cycles. The key point is that a historical perspective will be essential to this evaluation because much work was done before 1994, the effect of which may not be experienced until many years later. A short-term survey will be ineffective and not properly represent the agency's work.

A general discussion ensued on how to organize data to reveal underlying patterns that show CPSC's effectiveness. A range of ideas emerged including:

- Examine electrical injury and death data before and after corrective actions.
- Group products affected by CPSC activities and compare data with products outside our activity area.
- Examine three groups of death statistics --
  - Those that could have been prevented if protective systems (GFCI, double insulation, grounding, etc) had been in place
  - Those for which no physical intervention was possible
  - Those that may have been preventable but were not a CPSC focus
- Classify deaths by situational involvement --
  - High voltage / power line
  - Cords and other external wiring
  - Internal appliance wiring and circuitry faults

- Water, moisture, wet ground

The focus of discussion returned to evaluating GFCIs and CPSC's role in increasing their use in the consumer arena. It was recognized that at least two appliances, hair dryers and pressure washers, are now required to have GFCIs or like protection built into the appliance to prevent shock when immersed or exposed to water and that death rates plummeted when those interventions were in effect. But the question remains how to show GFCI effects in the home environment. The National Electrical Code (NEC) adopted use of GFCIs over a span of more than twenty years starting with ouotdoor receptacles in 1973. We need to examine the market penetration of GFCIs in homes and residential areas and to contrast situations where GFCIs are effective with situations where they are not. We may also want to look for situations where GFCIs were in place but defective, damaged, or incorrectly applied.

The meeting closed with agreement among staff to review In-Depth Investigation reports (IDIs) to extract more detailed information, to explore methodologies employed by others in earlier studies (e.g., hairdryer briefing package) and to examine earlier papers, such as those on CB antenna labeling effectiveness and power tool insulation.