

LOG OF MEETING

16 MAR 1994

SUBJECT: Test Lab Certification for Electrical Appliances

DATE: March 3, 1994

PLACE: Room 611
East West Towers

DATE OF LOG ENTRY: March 3, 1994

SOURCE OF LOG ENTRY: William H. King, Jr., ES *WAK*

CPSC PARTICIPANTS: William H. King, Jr., ES
A. Albert Biss, ES

NON-CPSC PARTICIPANTS:

Chester Atkins, ADS Ventures
Glen Dash, Inchcape Testing Services

SUMMARY:

Mr. Atkins requested this meeting to discuss the subject matter. Mr. Atkins indicated that he was interested in finding out, on behalf of his client, Inchcape, whether CPSC staff had noted any differences in the level of safety between those electrical products that were listed and certified by a nationally recognized testing laboratory as meeting safety standards, and those that were not. Mr. Atkins was also interested in the sources of electrical hazard data used by the CPSC staff. After learning of a draft CPSC staff-developed project candidate covering his area of interest (copy attached), Mr. Atkins, who is a former congressman, indicated that he would seek to have the congressional committee involved with CPSC appropriations take up this matter with the CPSC at upcoming hearings.

Mr. Atkins was informed that the draft project candidate was never the subject of Commission review and was one of numerous staff-generated candidates for internal staff review at the technical level.

Mr. Atkins was further informed of other staff members who could supply him with information about electrical hazard data. Specifically, he was directed to the National Injury Information Clearinghouse and the Office of Compliance and Enforcement.

Mr. King indicated to Messrs. Atkins and Dash that, in his professional opinion, based on examining electrical products from an engineering perspective for over 30 years, that typical non-listed, non-certified electrical products represent significantly greater risks of electric shock and electrically caused fires. Mr. King also indicated that the problem of non-listed, non-

certified electrical products is a small percentage of electrical products in general (perhaps five to ten percent), and often involve relatively inexpensive merchandise marketed through retail outlets, such as "five-and-ten-cent" stores and mail-order establishments.

copy: Robert J. Wagner, CR

**1994 PRIORITY PROJECT CANDIDATE
TEST LAB CERTIFICATION FOR ELECTRICAL APPLIANCES**

Summary

The Commission has been plagued since it started operations in 1973 with having to deal on an individual basis with unsafe electrical products which were never independently evaluated for adherence to minimum electrical safety requirements for electrical shock and fire hazards. This problem still exists. Consumers continue to be the guinea pigs for irresponsible companies that bring electrical products intended to be powered from the household electrical supply to the market without meeting elementary electrical safety provisions. An independent laboratory certification or listing should be an essential part of the cost of doing business in this industry. This priority project would seek to address this problem, examine strategies for accomplishing the solution, present the findings to the Commission, and carry out the selected approach.

The 1994 effort will be the initial year for the project. A multi-disciplinary project team will be assembled. Identifying the product lines, assembling hazard data, forming communication links with outside groups (industry, state/local government, retail organizations, etc.), defining specific tasks, and setting up a timetable will be some of the activities for the team to address. This initial phase will have as its objective to prepare a comprehensive report to the Commission to go over the whole problem with all its ramifications and issues. (Contact: William H. King, Jr., Engineering)

Purpose of the 1994 Project

The purpose of the project is to promote the concept that all electrical appliances and electrical wiring devices intended for use on household electrical circuits should conform to at least minimum standards for electrical shock and fire protection. Evidence of conformance could be the symbol of the testing laboratory that performed the evaluation.

The goal of the project is to reduce injuries and deaths associated with unsafe electrical products. Data collected by the Commission show that approximately 300 persons lose their lives each year by electrocution in or around the home, or associated with a consumer product. In addition, there are annually about 160,000 residential fires of electrical origin that cause approximately 900 deaths. Although the numbers of injuries and deaths attributed to non-certified electrical products as a percentage of the totals are not available, the number of hazard reports involving non-certified electrical products investigated by the Commission staff appears to

represent a disproportionately large segment of these reports, given the relatively fewer non-certified or non-listed electrical products in the marketplace.

Previous Accomplishments

The Commission has over the years focused on removing individual, non-certified and unlisted electrical appliances and devices from the market. These have included Christmas lights, hair dryers, extension cords, portable lamps, trouble lamps, worm probes, night lights, aquarium pumps and heaters and small cooking appliances. This has been accomplished through the Section 15 provisions of the Consumer Product Safety Act.

1994 Priority Work

The proposed priority project would investigate the concept of all electrical consumer products intended for use with household electrical power being certified and bearing the mark of a testing laboratory. The mark indicates that the product meets the minimum electrical safety standard represented by the nationally recognized voluntary consensus standard for the product (when available) or a standard based on the National Electrical Code and provisions of other representative product standards until a nationally recognized consensus standard is available. The investigation would consider all facets of the concept including the need and a fully developed rationale for such certification. The legal aspects of the concept will also be developed including whether the concept can be mandated under the existing legislation (e.g., the CPSA), whether additional legislation is needed and viable, and whether model state legislation with assistance from CPSC to all state governments for development, implementation and enforcement is appropriate. Currently, the State of Maryland (under Section 13-308 of the Annotated Code of Maryland) has a requirement that all electrical consumer products must have the seal of a testing laboratory. This provision has been in effect for over twenty years. The State of New York is currently considering similar legislation. No other states are known to have such rules. The City of Los Angeles has a rule requiring laboratory safety certification, and there are other cities with some type of requirement for selected electrical consumer products. The proposed priority project would examine all known existing and proposed rules at all levels of government. Rules requiring safety certification for electrical products that exist in other countries, both the economically developed nations, the European Community, U.S. trading partners, and third world countries will be explored.

The project will attempt to determine the extent of non-certified or non-listed electrical appliances and devices that exist in the American marketplace, with a breakdown of individual classes of products. The project will also attempt to allocate hazard data to the non-certified, non-listed products. The project will also

include some engineering assessment of the hazards presented by noncertified, non-listed products.

Priority Criteria Considered

o Frequency and Severity of Injury: Each year about 900 deaths and 160,000 fires are attributed to fires of electrical origin, about one half of the deaths involve electrical appliances and plug-in electrical products of various descriptions. About 240 electrocutions occur annually in and around the home.

o Causality of Injuries: The deaths and injuries are caused by fires and electric shocks associated with electrical consumer products. The products of those manufacturers who choose to ignore accepted safe design practice and independent, third-party assessment of their designs are believed to represent a greater risk to the public.

o Chronic Illness and Future Injuries: With increased foreign trade and movement toward a global economy, it is becoming more important than ever before to find a procedure for assuring that Americans have at least a minimum ground floor level of electrical protection. Such protection could be achieved through independent test lab certification of electrical consumer products to harmonized, international safety standards. The current haphazard patchwork of state and local electrical product safety regulations is an impediment to improved foreign trade, and will foster increased risks for consumers in the future as more importers enter the marketplace with electrical products from third world and former Eastern Block nations.

o Cost/Benefit: The cost for the actual evaluation of an appliance or other electrical consumer product is minimal when compared to the costs of production, distribution and marketing of a product. The cost of redesigning an unsafe electrical product to one that would comply to a minimum safety standard could be significant, depending on the nature of the required changes. However, the benefit of substantially reduced risk can provide an offset against such costs. Increased foreign trade can be another monetary incentive.

o Unforeseen Nature of Risk: The general population expect that the normal use of an electrical product will not result in serious harm or death. This expectation is based on the fact that most manufacturers of these products conform to minimum safety standards as determined by independent testing facilities. However, unscrupulous manufacturers and importers can take unfair advantage by bringing products into the marketplace which offer dangerous characteristics of material, assembly and/or performance that would have otherwise been ferreted by engineers

conducting safety design analyses at any one of the numerous reputable independent testing and certification laboratories.

o Vulnerability of Population at Risk: Population exposed includes children, the elderly and the infirmed. These groups are often less able to recognize substandard products and may not be cognizant to look for labels that identify electrical products as certified for conformance to safety standards.

o Probability of Exposure to Hazard: Everyone in American society comes in contact with electrical appliances and other electrical products. They are pervasive in today's daily existance.

Resources

I. Professional Staff Months:

<u>Directorate</u>	<u>PSM</u>
Economic Analysis	9
Engineering Sciences	17
Epidemiology	9
Field	4
Health Sciences	-
General Counsel	4
Total	43

II. Contracts/Travel:

\$ 1,000. Travel
1,000. Purchase of documents