**LOG OF MEETING**

**DIRECTORATE FOR ENGINEERING SCIENCES**

**SUBJECT:** Robert Northedge, Engineering Sciences, met with Mr. Darryl Robinson, P.E. of Ekstrom Industries to discuss safety issues pertaining to electric meters that provide electric power to older homes. The meeting was held in room 605 at 9:00 a.m. The meeting was requested by Mr. Robinson.

**DATE OF MEETING:** February 14, 1996

**PLACE:** CPSC Headquarters, 4330 East West Highway, Bethesda, MD.

**LOG ENTRY SOURCE:** Robert L. Northedge

**DATE OF ENTRY:** February 21, 1996

**COMMISSION ATTENDEES:**
William King, Jr.
Anna Luo
Nicholas Mogan
Mai Ngo
Robert Northedge

**NON COMMISSION ATTENDEES:**
Darrell Robinson, Ekstrom Industries
Maureen Cislo, Product Safety Letter

**SUMMARY OF MEETING:**
Mr. Robinson began the meeting by indicating he believed there were several unsafe conditions associated with the service entrance area of the electrical distribution system for residential dwellings. He provided a description of the problems he believed existed with respect to conditions of overcurrent, overvoltage and responsibility for this area of the distribution system. He believes there needs to be a more clear-cut indication of the responsibilities of the homeowner, electric utility, local authority and electrical contractors. He believes this lack of clear-cut responsibility "causes confusion and works to prevent the upgrades and maintenance of the service-entrance."

Mr. Robinson continued his presentation by describing various products manufactured by Ekstrom Industries - meter socket adapters, test equipment and metering accessories. The meter socket adapter is the main product produced. The socket adapter holds the meter used by the electrical utility to monitor the amount of electricity used by its customers. The meter is usually located on the outside of a dwelling receiving electrical power. The service entrance wires, from the utility's service drop wires, enter the socket adaptor at one location and exit at another. From the exit location the service entrance wires continue to the customer's electrical panel.

Mr. Robinson described several product solutions Ekstrom Industries developed to address some of the overcurrent and overvoltage concerns. For example, Mr. Robinson expressed concern that the size of wires forming the service entrance and those inside some older meter adapters may be too small for the electrical load being placed on them by todays modern appliances. To help control potentially dangerous over heating in older socket adapters and the service entrance wires exiting the adapter Ekstrom Industries can provide overcurrent protection and current limiting features in their adapters.

In addition to overcurrent problems, Mr. Robinson discussed concern about overvoltage problems or voltage surges entering the dwelling through the wiring. To help control potential arcing problems resulting from overvoltage Ekstrom Industries can provide voltage surge arrestor features in their adapters. In fact, Ekstrom Industries has combined overcurrent and surge protection into one adapter.

At the conclusion of the meeting Mr. Robinson provided a seven-page document, protected by copyright, that covers much of the information he presented in the meeting. The document is entitled, PROBLEMS AND SOLUTIONS AT THE ELECTRIC SERVICE-ENTRANCE AND COST-EFFECTIVE WAYS TO MAKE THEM SAFER.