

NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D. C. 20555

IEB 76-02
3/12/76
2 pages

Inspection and Enforcement Bulletin (IEB)
Number 76-02, March 12, 1976

RELAY COIL FAILURES - GE TYPE HFA, HGA, HKA, HMA RELAYS

DESCRIPTION OF CIRCUMSTANCES:

A failure of a General Electric (GE) model 12 HFA 51A42H Relay occurred recently in a safety related circuit at the Turkey Point facility. The relay failed during reactor safeguards systems testing. Earlier failures of a similar nature involving GE type HGA relays were reported from Florida Power and Light Company in 1973.

The relay manufacturer has determined that open circuit coil failures of the relay windings had been caused by corrosion. Halogens from a class of nylon coil spools (or bobbins) plus humid conditions were attributed as the fundamental causes of the corrosion and resulting coil failure.

The relays identified by the manufacturer which may have this nylon spool include HFA, HGA, HKA, HMA relay types, made by GE prior to 1969, and they may be identified by a white, nylon coil spool. Portions of a GE service letter containing information about these relays are attached to this bulletin. Further instructions regarding repair procedures can be obtained from the GE Service Engineering Department, Philadelphia.

ACTION TO BE TAKEN BY LICENSEES AND PERMIT HOLDERS:

FOR ALL POWER REACTOR FACILITIES WITH AN OPERATING LICENSE OR CONSTRUCTION PERMIT:

1. If you have received the attached GE service letter, describe what action you have taken regarding replacement of the older style nylon coil bobbins with the recommended Lexan type bobbins in the types of relays identified in the enclosed GE letter.
2. If you have not received the attached GE service letter, describe what action you plan to take if relays of the type and vintage described in the enclosed GE letter are in use or planned for use in safety related systems.

ACTION TO BE TAKEN BY LICENSEES AND PERMIT HOLDERS (continued)

Reports for facilities with operating licenses should be submitted within 30 days after receipt of this bulletin, and reports for facilities with construction permits should be submitted within 60 days after receipt of this bulletin. Your report should also include the date when the above actions were or will be completed.

Reports should be submitted to the Director of the NRC Regional Office and a copy should be forwarded to the NRC Office of Inspection and Enforcement, Division of Reactor Inspection Programs, Washington, D. C. 20555.

Approval of NRC requirements for reports concerning possible generic problems has been obtained under 44 U.S.C. 3152 from the U. S. General Accounting Office.
(GAO Approval B-180255(R0072), expires 7/31/77)

ATTACHMENT:

Extract from General Electric Service Letter:
HFA, HGA, HKA, HMA RELAYS
NYLON COIL BOBBINS