



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038

Nuclear Department

July 13, 1984

Dr. Thomas E. Murley, Administrator  
U. S. Nuclear Regulatory Commission  
Region 1  
631 Park Avenue  
King of Prussia, Pa. 19406

Dear Dr. Murley:

IE BULLETIN 84-02  
FAILURES OF GENERAL ELECTRIC TYPE HFA RELAYS  
IN USE IN CLASS 1E SAFETY SYSTEMS  
SALEM GENERATING STATION  
UNITS NO. 1 AND 2  
DOCKET NOS. 50-272 AND 50-311

The purpose of IE Bulletin 84-02 is to inform users of General Electric Type HFA relays of relay failure due to the degradation of the operating coils in normally energized relays, and a request for users to indicate to the NRC, plans and schedules for implementing corrective measures. A summary of the applicable sections and PSE&G's method of compliance is presented below:

ITEM 1a

Develop plans and schedules for replacing (1) Nylon or Lexan coil spool-type HFA relays used in normally energized safety-related applications and (2) Nylon coil spool-type HFA relays used in normally de-energized safety-related applications. The entire replacement program should be completed within two years from the date of this bulletin.

The replacement scheduling should consider the following recommended priority:

Nylon or Lexan normally energized - Reactor Trip System

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Nylon or Lexan normally energized - other Safety-Related Applications

Nylon normally de-energized - Reactor Trip System

Nylon normally de-energized - other Safety-Related Applications

RESPONSE:

Presently there are a total of 128 HFA relays with Lexan or Nylon coil spools installed in Salem Units 1 and 2. All relays are normally de-energized and function in equipment purchased as safety-related. Replacement cores and coils for all HFA relays are being purchased. Replacements will be made during outages or as relays are made available through tagging out of equipment for routine surveillance or maintenance. Availability of replacement cores and coils from General Electric remains a source of possible delays. It is anticipated that all coils will be replaced by March 1986.

ITEM 1b

During the period before relay replacement, develop and implement surveillance plans that include:

1. Monthly functional tests of all RTS normally energized relays that verify relay contacts change state when the relay coil is de-energized.
2. Visual inspections of all safety-related normally energized relays as soon as practical upon receipt of this bulletin. Thereafter, similar inspections should be accomplished in conjunction with the monthly functional test.

RESPONSE:

A visual inspection was performed on all safety-related relays. Five (5) coil spools were found to have evidence of cracking and were replaced in kind pending receipt of new coils. Although the relay coils are inspected as part of the routine relay maintenance, a procedure for regular inspections of the subject HFA relays will be prepared by September 1984 and implemented to insure relay integrity prior to replacement.

ITEM 1c

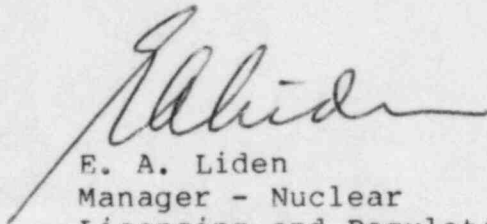
Provide a basis for continuing operation for the period of time until the normally energized relays are replaced.

RESPONSE:

As indicated in the response to Item 1a, all the relays are normally de-energized. Accordingly, Item 1c is not applicable to Salem Units 1 and 2.

Should you have any questions, please contact us.

Sincerely,



E. A. Liden  
Manager - Nuclear  
Licensing and Regulation

Attachments

C Mr. Donald C. Fischer  
Licensing Project Manager

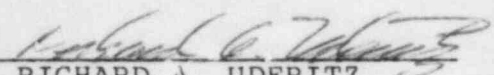
Mr. James Linville  
Senior Resident Inspector

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D. C. 20555

STATE OF NEW JERSEY )  
 ) SS:  
 COUNTY OF SALEM )

RICHARD A. UDERITZ, being duly sworn according to law deposes  
 and says:

I am a Vice President of Public Service Electric and Gas  
 Company, and such, I find that matters set forth in our response  
 dated July 13, 1984, to IE BULLETIN 84-02 "Failures of General  
 Electric Type HFA Relays in use in Class 1E Safety Systems," are  
 true to the best of my knowledge, information and belief.

  
 RICHARD A. UDERITZ

Subscribed and sworn to before me  
 this 13<sup>th</sup> day of July, 1984

  
 Notary Public of New Jersey

My Commission expires on \_\_\_\_\_  
 RUDOLPH S. VON FISCHER JR.  
 Notary Public of New Jersey  
 My Commission Expires Sept. 10, 1985