



**GPU Nuclear Corporation**

Post Office Box 388

Route 1 South

Forked River, New Jersey 08731-0388

609 971-4000

Writer's Direct Dial Number:

July 18, 1984

Mr. Richard DeYoung, Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
IE Bulletin 84-02

Dear Mr. DeYoung:

The purpose of this letter is to respond to the directives set forth in IE Bulletin 84-02 which is concerned with failure, replacement and surveillance of G.E. HFA relays being used in class IE safety systems. Our response to the specified action items in the subject bulletin are in an attachment to this letter.

If you have any questions, please call me or the Oyster Creek Licensing Manager at (609)971-4643.

Very truly yours,

Peter D. Fiedler  
Vice President and Director  
Oyster Creek

PBF/DGH/dam  
Attachment

cc: Dr. Thomas E. Murley, Administrator  
Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

NRC Resident Inspector  
Oyster Creek Nuclear Generating Station  
Forked River, NJ 08731

8407250240 840718  
PDR ADOCK 05000219  
PDR

IE11  
11

ATTACHMENT

Item No. 1a

Develop plans and schedule 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 replacement relays and any replacement made in the future should meet the requirements of the applicable IEEE standards. The replacement program for energized and de-energized relays should be performed on a "best effort" basis during plant outages of sufficient duration. The entire replacement program should be completed within two years from the date of this bulletin.

The replacement schedule should consider the following recommended priority:

- Nylon or Lexan normally energized in the reactor trip system.
- Nylon or Lexan normally energized in other safety related applications.
- Nylon normally de-energized in the reactor trip system
- Nylon normally de-energized in other safety related applications

Response to Item 1a

Prior to plant startup from our present refueling outage:

- 1) All Lexan and nylon HFA relays in normally energized Reactor Protection Trip Systems will be replaced;
- 2) All Lexan and nylon HFA relays in normally de-energized Reactor Protection Trip Systems will be replaced;
- 3) All nylon HFA relays in normally energized Reactor Trip Systems will be replaced;
- 4) All Lexan HFA relays in other normally energized safety related applications will be replaced;
- 5) All Lexan HFA relays in other normally de-energized safety related applications will be replaced;

All nylon HFA relays on both normally energized and normally de-energized safety related systems will be replaced during our next scheduled refueling outage.

Item No. 1b

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

1) Monthly functional tests of all Reactor Trip System normally energized relays that verify relay contacts change state when the relay coil is de-energized.

2) Visual inspections should be accomplished in conjunction with the monthly functional test and should verify that relay coils are not deteriorating (e.g., inspect coil bobbins for visible cracks or melting and confirm cleanliness of relay pole pieces).

Response to Item No. 1b

1) As of this date all Reactor Trip System normally energized relays have been replaced, therefore, no additional testing as stated in this bulletin will be performed for the Reactor Protection Trip System.

2) Oyster Creek is presently conducting visual inspections of the normally energized HFA relays in other safety related systems on a monthly basis. These inspections will continue until the relays are replaced.

Item No. 1c

Provide a basis for continuing operation for the period of time until the normally energized relays are replaced. This basis should include a discussion of those measures addressed in items 1a and 1b and any other preventive and/or corrective measures taken or planned.

Response to Item No. 1c

Normal plant operation during this period should not be affected for the following reasons:

The only relays requested to be replaced remaining at the plant in normally energized safety related applications are of the nylon type.

No related failures other than the random end of life failures have been recorded for nylon coil HFA relays. These were occurring on normally energized relays only.

With a visual inspection program in effect, the plant will be able to detect any cracks or signs of internal heating of the coil bobbins. This, combined with confirming cleanliness of the relay pole pieces will allow us to replace a relay before a failure occurs. Our experience shows all failures were preceded by humming and buzzing.

None of the affected relays are in the Reactor Trip Systems. It is not likely to have failures in two systems at one time, and redundant systems are available for each safety related function. If a failure occurred, it would not affect the plant shutdown capability.