NRC Bulletin No. 88-03

# PHILADELPHIA ELECTRIC COMPANY

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JOSEPH W. GALLAGHER VICE PRESIDENT NUCLEAR SERVICES

September 30, 1988

Docket Nos. 50-277 50-278

License Nos. DPR-44 DPR-46

U.S. Nuclear Regulatory Commission Attn: Document Control Desk Washington, DC 20555

Subject: Peach Bottom Atomic Power Station Response to

NRC Bulletin No. 88-03: Inadequate Latch Engagement in HFA Type Latching Relays

Manufactured by General Electric (GE) Company

Dear Sirs:

The subject Bulletin identified certain latching-type relays supplied by GE with Certificates of Conformance, (qualifying them to the requirements of IEEE-323, "IEEE Standard for Qualifying Class 1E Equipment for Nuclear Power Generating Stations," which includes IEEE-344, "IEEE Recommended Practices for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations") which were malfunctioning. The NRC specifically identified model HFA 151B, HFA 154B and HFA 154E relays with a manufacturing date code prior to November, 1987 as those of which the operability has been brought into question.

Additionally, the following latching-type HFA relays which were not qualified to IEEE-323 by GE, but which may have been qualified and used by "Other Equipment Manufacturers" in Class IE (safety-related) applications were identified as suspect:

Non-Century Series	Century Series
HFA 54	HFA 154
HFA 74	HFA 174
HPA 518	HFA 151B
HFA 71B	HFA 171B

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In accordance with the Bulletin, Philadelphia Electric Company has reviewed HFA Relay applications at the Peach Bottom Atomic Fewer Station and, based upon the results of this review, it has been determined that there are 4 (four) General Electric HFA latching-type relays installed in Class IE applications at Peach Bottom Atomic Power Station Unit 2 and Unit 3.

These relays are designated as the MCA relays associated with the Emergency Diesel Generators El, E2, E3 and E4. The relays were inspected in accordance with the "Actions Requested" delineated in Bulletin 88-03. These actions are reiterated below along with the results of the required inspections (Pass or Fail).

### Action Requested

1. "In accordance with the GE recommendation contained in Attachment 1, measure the distance between the top of the molded contact carrier and the top of the relay armature. This distance should be a minimum of 1/32 inch."

#### Response

The following relays, installed in Class IE Applications, were identified as suspect and inspected in accordance with the above Action Requested. The results are as follows:

Relay			Result
El	Diesel	MCA	Pass
E2	Diesel	MCA	Pass
E3	Diesel	MCA	Pass
E4	Diesel	MCA	Pass

Accordingly, none of the four suspect relays required corrective actions as a result of this inspection.

#### Action Requested

2. "In accordance with the GE recommendation contained in Attachment 1, with the armature fully depressed against the pole piece, check to see if the latch is fully rotated by pulling up on the latch assembly. If the latch is fully rotated, there should be no motion of the latch, since the latch should be held against the armature by spring tension."

### Response

The following relays, installed in Class 15 Applications, were identified as suspect and inspected in accordance with the above Action Requested. The results are as follows:

Relay			Result
El	Diesel	MCA	Pass
E2	Diesel	MCA	Pass
E3	Diesel	MCA	Pass
E4	Diesel	MCA	Pass

Accordingly, none of the four suspect relays required corrective actions as a result of this inspection.

### Action Requested

 "Repair or replace any relay which fails the above inspections, such that the relay satisfies the GE criteria."

### Response

This Action was not applicable to the identified relays since there were no inspection failures.

# Action Requested

4. "Inspect all existing spare HFA relays as above. Future spares received should be inspected prior to their installation if manufactured prior to November 1, 1987."

# Response

There are no spare HFA relays at Peach Bottom Atomic Power Station. All HFA latching-type relays received in the future will be screened during receipt inspection to determine the date of manufacture. This screening will be accomplished using plant administrative methods. If the manufacture date is prior to November 1, 1987 the relay shall be inspected as delineated in the Bulletin.

In accordance with the Bulletin, Philadelphia Electric Company has inspected the HFA relays installed in Class 1E applications at Peach Bottom Atomic Power Station and, based upon the results of these inspections, these General Electric HFA latching-type relays have been found acceptable and no further corrective actions are necessary.

If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

In ballagher

W. T. Russell, Regional Administrator, Region I, USNRC CC:

T. P. Johnson, USNRC Senior Resident Inspector, PBAPS T. E. Magette, State of Maryland

J. Urban, Delmarva Power

J. T. Boettger, Public Service Electric & Gas

H. C. Schwemm, Atlantic Electric

COMMONWEALTH OF PENNSYLVANIA

SS.

COUNTY OF PHILADELPHIA

J. W. Gallagher, being first duly sworn, deposes and says:

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That he is Vice President of Philadelphia Electric Company, the Licensee herein; that he has read the foregoing response to NRC Bulletin 88-03, "Inadequate Engagement in HFA Type Latching Relays Manufactured by General Electric (GE) Company" for Peach Bottom Atomic Power Station Units 2 and 3 and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

Vice President

Subscribed and sworn to before me this  $30^{TM}$  day of September, 1988.

Notary Public

NOTARIAL SEAL JUDITH Y FRANKLIN, Notary Public City of Philadelphia, Phila, County My Commission Expires July 28, 1991