NORTHEAST UTILITIES
THE CONNECTICUT LIGHT AND POWER COMPANY
THE HARTFORD ELECTRIC LIGHT COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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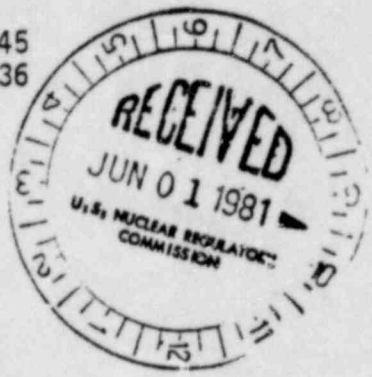
May 18, 1981
Docket No. 50-245
50-336



Mr. Boyce H. Grier, Director
Region I
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Reference: B. H. Grier letter to W. G. Counsil, dated January 16, 1981.
Transmitting I&E Information Notice No. 81-01.

Gentlemen:

Millstone Nuclear Power Station Unit No. 1 and Unit No. 2
IE Information Notice No. 81-01

The above referenced Information Notice was forwarded to provide information and alert licensees and holders of construction permits of a potentially generic problem involving defective coil spools in General Electric type HFA relays. We have reviewed this Information Notice for applicability to our facility and although no specific response is required, we would like to apprise you of our particular findings and planned corrective actions.

A review of the Lexan spool problem with the General Electric Company identified the following significant points.

1. All HFA relays manufactured from 1968 to 1979 are suspect.

2. The cause of the cracking appears to be related to stresses produced during coil winding, relay assembly and service.

3. The degree of cracking is progressive with time.

4. To date, General Electric has had no reports of a relay failing to operate.

5. There exists a potential for mechanical operation of the relay being prevented by material from coil spools.

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As a result of this information, a survey of Millstone Unit 1 and Unit 2 HFA relays was performed. This survey indicates that 710 of 784 HFA relays used in safety related applications have Lexan coil spools. Of the 710 relays with Lexan coil spools, 222 have exhibited cracking to various degrees. It is the

intent of Northeast Nuclear Energy Company to replace all HFA relays having Lexan coil spools. This replacement will be accomplished during outages of sufficient duration and will take several years to complete. Relays having safety importance or severe cracking will be replaced on a priority basis. In addition, a surveillance program will be established to identify the urgency of a replacement program and the replacement priorities.

Northeast Nuclear Energy Company feels that the program outlined above is consistent with the safe operation of the Millstone Units for the following reasons:

1. Although a high percentage of the relays have crack indications, none has ever failed, either electrically or mechanically via this mechanism.

2. Close inspection of relays with loose Lexan pieces did not identify a single instance in which the loose part(s) had lodged in positions that would compromise relay operability.

3. Bench testing demonstrated that the failure of a relay to pick up would not result in currents sufficient to blow the fuse in the coil circuit. This is important as many relays in safety circuits do not in themselves perform safety functions and as such, their failure to pick up does not compromise safety as long as circuit fuses retain their integrity.

4. Electrical integrity of the relay coil is not significantly impacted to warrant concern in G. E.'s and NRC's notices. This is supported by our own bench testing which demonstrated a severely abused coil to be fully operable.

We trust that you will find this information helpful in determining any further course of action with regards to this problem.

Very truly yours,

NORTHEAST NUCLEAR ENERGY COMPANY

W. G. Counsil

W. G. Counsil
Senior Vice President

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