

BOSTON EDISON COMPANY
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BOSTON, MASSACHUSETTS 02199

G. CARL ANDONINI
MANAGER
NUCLEAR OPERATIONS DEPARTMENT

February 2, 1979

BECo. Ltr. #79-33

Mr. Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

License No. DPR-35
Docket No. 50-293

Response to IE Bulletin #78-14

Dear Sir:

In a letter dated December 19, 1978, you transmitted IE Bulletin #78-14 titled, "Deterioration of Buna-N Components in Asco Solenoids". Boston Edison Company was requested to take the following actions in a review of this problem at Pilgrim Nuclear Power Station:

1. Review Buna-N material applications in your control rod scram systems and determine the time since installation, and for installed material, the time since packaging.

Response

A review of station records was conducted to determine when the components containing Buna-N materials were installed at PNPS. Receipt and Inspection documents established the fact that the hydraulic accumulator assemblies for the control rod drive system were received in two separate shipments. The first arriving on June 2, 1969 and the second on July 14, 1969. The pre-operational test check-off sheets were reviewed to determine when operability of these components was first verified. This date was September 30, 1971. Based upon the available information, the actual date of installation could not be determined. However, based on the date these items were received on site, the estimated total life from cure date of nine years, as identified in SIL #128 Rev. 1 dated January 30, 1976, has been exceeded for all in-service components.

2. Report the results of the review set forth in item 1 above and describe your schedule for replacement, both in response to this Bulletin and for periodic maintenance.

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Mr. Thomas A. Ippolito, Chief
February 2, 1979
Page 2

Response

On December 29, 1979, PNPS issued Licensee Event Report 78-055/03L-0 which addressed our program for replacing the installed components and our preventive maintenance program. LER 78-055/03L-0 stated that a program would be established to replace all pilot heads and Buna-N parts such as the diaphragms and body gaskets and that this program would commence with the next outage (scheduled or unscheduled) as a non-critical path item. This LER also stated that, henceforth, these parts would be replaced on a 5 year basis.

Since this LER was issued we have modified our replacement program to include replacing components in these HCUs that could be scram tested at reduced power (<60%). This program was initiated on January 25, 1979 with our first power reduction for a condenser backwash.

3. Describe the bases for your schedule of replacement identified in response to item 2 above. Justify any proposed replacement time in excess of three years.

Response

The justification for our replacement program for original equipment is based on the fact that PNPS has not experienced a single failure caused by deterioration of the Buna-N materials addressed in IE Bulletin 78-14. In addition, an evaluation of scram times was conducted in accordance with Technical Specification 4.3.C.2 to provide reasonable assurance that proper control rod performance was being maintained. This evaluation disclosed that, since September 15th 1978, 144 of the 145 control rod drives had had scram times within the requirements of Technical Specification 3.3.2.c.

It is not the intention of Boston Edison to ignore the potential problems associated with deterioration of Buna-N materials and our replacement program will be conducted in a timely manner; however, due to the extremely high levels of radiation involved and the unavailability of all required replacement parts, commitment to an immediate, all out, replacement program is not practical nor feasible.

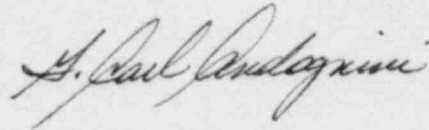
Justification for our five year preventive maintenance program is based on our commitment to an affirmative ALARA program and the fact that actual operating experience at BWR facilities has confirmed the estimated total life from cure date of nine years to be reasonable. A more frequent replacement, unjustified by operating experience, conflicts with our efforts to maintain radiation exposures as low as reasonably achievable.

BOSTON EDISON COMPANY

Mr. Thomas A. Ippolito, Chief
February 2, 1979
Page 3

We believe that the actions described above adequately respond to your concerns.
Should additional information on this subject be required, please contact us.

Very truly yours,

A handwritten signature in cursive script, appearing to read "A. Paul Cardagnini".

cc: U.S. Nuclear Regulatory Commission
Office of Inspection & Enforcement
Division of Reactor Operations Inspection
Washington, D. C. 20555