

APR 18 1986

Docket No. 50-293

Boston Edison Company M/C Nuclear
ATTN: Mr. William D. Harrington
Senior Vice President, Nuclear
800 Boylston Street
Boston, Massachusetts 02199

Gentlemen:

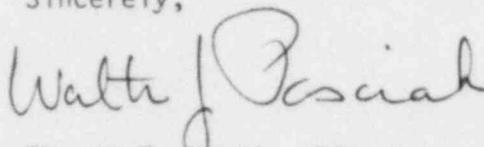
Subject: Inspection No. 50-293/85-27

This refers to your letter dated December 13, 1985, in response to our letter dated November 13, 1985.

Thank you for informing us of the corrective and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,



Thomas T. Martin, Director
Division of Radiation Safety
and Safeguards

cc:

A. V. Morisi, Manager, Nuclear Management Services Department
C. J. Mathis, Station Manager
Joanne Shotwell, Assistant Attorney General
Paul Levy, Chairman, Department of Public Utilities
W. J. Nolan, Chairman, Plymouth Board of Selectmen
Plymouth Civil Defense Director
Senator Edward P. Kirby
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
NRC Resident Inspector
Commonwealth of Massachusetts (2)

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bcc:
Region I Docket Room (with concurrences)
Management Assistant, DRMA (w/o encl)
Section Chief, DRP
W. Raymond, SRI, Vermont Yankee
T. Shedlosky, SRI, Millstone 1&2
H. Eichenholz, SRI, Yankee
P. Leech, LPM, NRR

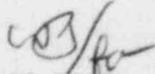
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BOSTON EDISON COMPANY
800 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02199

WILLIAM D. HARRINGTON
SENIOR VICE PRESIDENT
NUCLEAR

December 13, 1985
BECo Ltr. #85-222

Thomas T. Martin, Director
Division of Radiation Safety
and Safegaurds
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

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

Subject: Response to Deviation as contained in
NRC Inspection Report 85-27

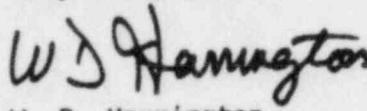
Dear Mr. Martin:

This letter is in response to the subject deviation contained in NRC
Inspection Report 85-27, conducted by Mr. R. Nimitz of your office on
September 16-20, 1985 at Pilgrim Nuclear Power Station.

The subject deviation and Boston Edison's response is enclosed as an
attachment to this letter.

If you should have any further questions regarding this matter, please do not
hesitate to contact me.

Very truly yours,



W. D. Harrington

Attachment

~~85-222-71~~ 3PP

ATTACHMENT

Deviation

The licensee's May 18, 1982 letter (BECo Letter #82-145) to the NRC provided a description of his High Range Containment Monitoring System. This system is used to monitor Drywell and Torus Radiation levels during a Post-Accident situation. The radiation levels are used to estimate core damage. The attachment to the licensee's letter (Page 2, Design and Qualification) states in part that, "The coaxial cable used to carry the signal between the detectors and the Post-Accident Monitoring Panel is located in a harsh environment under accident conditions. ...The cable is installed in conduit, ..."

Contrary to the above, a visual inspection of the detector cables by the NRC on September 19, 1985 found that an estimated 20-30 feet of cable for the redundant Drywell detectors, at the location where they entered the Drywell penetrations, were not installed in conduit. The cable was found laying in an unprotected manner on various valves and pipes at that location.

Pursuant to the provisions of 10 CFR 2.201, Boston Edison Company is hereby required to submit to this office within thirty days of the date of the letter which transmitted this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending this response time.

Response

BECo Letter #82-145 stated "the cable is installed in conduit". This statement was consistent with plant design change PDC 79-61 providing for cable installation in conduit and flex conduit into the penetration sleeve. The PDC also required that slack cable be coiled up and placed inside the penetration sleeve. We admit that the position of the cables, as observed by the inspector on September 19, 1985, deviated from the statement in that sections of loose cable were coiled up and left on the floor in an unprotected manner. Most probable cause was that during a subsequent calibration of the detectors, the cables were not placed back in the originally intended configuration.

Therefore, as corrective action to correct the condition, the sections of flexible conduit that were in place were properly clamped to the edge of the two respective drywell penetration pipes. Also, all loose coaxial cable was coiled up, brought up from the floor and positioned inside the penetration pipes so as to protect it from undue damage. This corrective action was completed on December 7, 1985 and returned the cable to its original design configuration. Since placing the cable in its proper position, we have also determined that there was no cable degradation based on our physical inspection and the fact that there have been no indicative downscale alarm indications on the associated panel.

Corrective action to preclude recurrence is that the Health Physics Group will modify the detector calibration procedure to include a precautionary step which will require the technician to visually ensure, upon finishing the calibration, that the coaxial cable is left in a secured, protected manner inside the penetration pipe. Incidentally, the accepted installation method then (as it is now) is to leave several feet of extra coaxial cable coiled up inside the pipe penetration in the vicinity of the detector. This is to allow for ease in removing and calibrating the detectors when required.

We are confident that the above mentioned corrective actions will provide adequate physical protection of the subject cable. Full compliance was achieved on December 7, 1985 the date upon which the cables were returned to a satisfactory configuration.

We would also like to clarify our environmental qualification position on the coaxial cable. Since the issuance of BECo Letter #82-145 it has been determined that the radiation monitors and the coaxial CXG cable are not required to function for a PBOC (Pipe Break Outside Containment). Environmental qualification has been established for the LOCA condition. Since the cable is not required to function under a PBOC, conduit protection outside the drywell penetration sleeve is not essential for environmental qualification. Revision (7) of the PNPS E.Q. Master List will further reflect this determination.