

U.S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 50-293/82-08

Docket No. 50-293

License No. DPR-35 Priority -- Category C

Licensee: Boston Edison Company
800 Boylston Street
Boston, Massachusetts 02199

Facility Name: Pilgrim Nuclear Power Station

Inspection at: Plymouth, Massachusetts

Inspection conducted: February 16-18, 1982

Inspectors: A. E. Finkel
A. E. Finkel, Reactor Engineering
Inspector

March 12, 1982
date signed

Approved by: S. D. Ebner
S. D. Ebner, Acting Chief, Plant
System Section, DE&TP

3/18/82
date signed

Inspection Summary:

Inspection on February 16-18, 1982 (Report No. 50-293/82-08)

Areas Inspected: Unannounced inspection of the plant Fire Protection/Prevention Program including: implementation of administrative controls; fire brigade training; observation of ignition source and combustible material control; and observation of critical plant areas. The inspection involved 28 hours onsite by one NRC regional based inspector.

Results: Of the areas inspected, no items of noncompliance were identified.

DETAILS

1. Persons Contacted

Boston Edison Company M/C Nuclear

- *A. Caputo, Fire Protection Engineer
- *C. Hulteen, Senior Construction Engineer
- R. Kirvin, Project Engineer Fire Protection Mods.
- *R. Machon, Nuclear Operations Manager
- *T. Mc Looghlin, Senior Compliance Engineer
- R. Ven Kartarman, Project Manager Fire Protection Mods.
- *E. Ziemianski, Management Services

U.S. Nuclear Regulatory Commission

- *H. Eichenholtz, Resident Inspector

*denotes personnel present at site exit meeting.

2. Fire Protection/Prevention Program Review

a. Administrative Controls

The inspector reviewed the following licensee administrative procedures:

- 1.4.2, Smoking in Station
- 1.4.3, Storage of Flammable, Combustible Materials and Transient Combustible Control. Revision 8, January 14, 1980, and
- 1.4.8, Hazardous and Restricted Material Control, details on handling, storage and fire fighting of hazardous materials.

The inspector verified that the licensee has developed administrative controls which include:

- (1) Special authorization for the use of combustible, flammable or explosive hazardous material in safety related areas.
- (2) Prohibition on the storage of combustible, flammable or explosive hazardous material in safety related areas.
- (3) Requirements for the removal of all wastes, debris, rags, oil, spills or other combustible materials resulting from the work activity following completion of the activity or at the end of each work shift, whichever is sooner.
- (4) Requirements that all wood used in safety related areas is treated with flame retardant. Requirements for periodic inspection for accumulation of combustibles.

- (5) Prohibition on smoking in safety related areas, except where "smoking permitted" areas have been specifically designated by plant management.

The implementation of the above requirements and the detailed inspections to support the requirements of Housekeeping Procedure 1.4.6 appears to be inadequate. The inspector identified the following areas which did not comply with the licensee requirements. Similar type of items were identified by the licensee in their Fire Protection Audit dated August 26, 1981 Report No. QAD-81-11.

- Control Room - The top of wall mounted Scott Air Pack Case #5 being used as an ash tray.
- Control Room - Paper, paper boxes and electrical test equipment found inside the electrical cabinets.
- Air Breathing Reservoir - This unit which is located in the control room was being used as a coat rack, untreated wood placed in front of the equipment with paper boxes and trash cans blocking the side of the equipment.
- Switch Gear Room B - Paper, boxes, and an untreated cable reel in the area. Floor dust was placed in a paper box which was placed on an energized electrical box.

This item is unresolved pending NRC review of licensee actions to resolve these programmatic items. (82-08-01)

b. Fire Brigade Actions and Training

The inspector reviewed the following licensee documents:

- . Procedure No. 5.5.1, General Fire Procedure, September 13, 1978.
- . Pilgrim Nuclear Power Station Fire Protection Plan, October 10, 1978.

The inspector verified that the licensee has developed fire fighting procedures and fire brigade training procedures which include:

- (1) Actions to be taken by the fire brigade.
- (2) Coordination of fire fighting activities with offsite fire departments.

- (3) Actions to be taken by plant superintendent and security guards after notification of fire.
- (4) Instructions for plant operators and general plant personnel during a fire.
- (5) Requirement for announced and unannounced drills.
- (6) Requirement that at least one drill per year be performed on a "back shift" for each fire brigade.
- (7) Requirement that local offsite fire department participate in at least one annual drill.

No items of noncompliance were identified.

c. Ignition Source Control

The inspector reviewed the following licensee procedure:

1.5.5 Cutting and Welding, Revision 11, January 14, 1980.

The inspector verified that the procedure provides administrative controls and requirements for special authorization for activities involving welding, open flame, or other ignition sources and that they take cognizance of nearby flammable material, cable trays or critical process equipment.

No items of noncompliance were identified.

d. Fire Protection Modifications Required by Amendment 35 to DPR-35

The inspector verified that the modification identified in Table 3.1 and 3.2 of Amendment 35 have been completed with the following exceptions:

-- Item 3.2.8 CO₂ System Discharge Test

This system has been changed to a Halon System with system design and completion scheduled dates forwarded to NRC.

-- Items 1C, 1E, 1F, 1H, 1I and 1J as referenced in Licensee letter of March 18, 1981 (#81-59) requires addition design and installation data. The licensee indicated that a submittal will be made approximately March 1982, to the NRC with details of the design and proposed scheduled implementation dates.

This item is unresolved pending NRC review. (82-08-02)

3. Fire Pumps

Plant procedure No. 8.C.14 Revision 5, dated August 26, 1981 entitled "Weekly Pilot Cell and Overall Battery Check" as one of the inspection check points requires a verification of evidence of corrosion on battery terminals of the Diesel Start fire pump system. During this inspection evidence of corrosion was not only found on the battery cables and terminals but on the case and case holder. Also the inspector found candy wrappers on top of the battery. In reviewing the weekly reports issued by the operators for 1981, the inspector identified the following MR requests written by the operators identifying corrosion on the batteries and requesting service.

<u>MR Request Date</u>	<u>MR #</u>	<u>MR Status</u>
9-9-81	81-46-306	Open
9-23-81	81-46-246	Open
10-2-81	81-46-302	
	81-46-306	Open
	81-46-246	

On the following dates the operators identified a corrosion problem with the batteries, but no MR was written.

11-3-81 and 12-8-81

The weekly report for this period of time (February 16-18, 1982) was not available for review.

The Fire Protection Engineer does not verify that MR's written against the Fire System are completed which appears to be in conflict with the licensee's Fire Protection Program.

This item is unresolved pending review of the overall Fire Protection Program. (82-08-03)

4. Maintenance Request (MR)

The Maintenance Request (MR) Procedure No. 1.5.3 Revision 14 dated January 28, 1982 and Unplanned Maintenance Procedure No. 1.5.7 Revision 11 dated November 28, 1979 requires notification of the Fire Prevention/Protection Officer, but it appears that the FPPO is not aware of the overall status of the Fire System. The MR's indicated in 3 above, have not been completed, but these items are not part of any overall Fire System Status report.

This item is unresolved pending review of the overall Fire Protection Program. (82-08-04)

5. Fire System Equipment

It appears that the safety related parts of the Fire System are not under control of the site calibration program.

- There is not evidence that the Breathing Air Reservoir in the control room has been calibrated. There also appears to be a design problem dealing with the use of PSIG gauges. A value of 95 psig is required to be read from a meter that is graduated from 0 to 1000 PSIG as the first mark on the meter face. A blue line on the meter glass face has been marked, but no record of this setting is documented in the calibration system.

While touring the plant, the inspector identified other fire system meters that had calibration stickers on them, but were either pegged at zero, or reading a system pressure that was inconsistent with the system design.

This item is unresolved pending review of the overall Fire Protection Program. (82-08-05)

6. Fire Protection Plan

The organizational responsibilities of the Fire Prevention and Protection Officer as described in the Licensee "Fire Protection Plan" dated August 10, 1978, appear to be such that the FPPPO cannot perform this responsibility with his present staff.

This item is unresolved pending a review of the FPPPO staff requirements to implement the Fire Protection Plan. (82-08-06)

7. Unresolved Items

Unresolved items are matters about which more information is required to ascertain whether they are acceptable items, items of noncompliance, or deviations. Unresolved items disclosed during the inspection are discussed in paragraphs 2, 3, 4, 5 and 6.

8. Exit Interview

The inspector met with the licensee representatives denoted in Details (paragraph 1) at the site on February 18, 1982, and summarized the purpose and scope of the inspection findings.