



10CFR50.59

BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

W. C. Rothert
General Manager Technical

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

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

Report of Changes, Tests and Experiments
Performed at Pilgrim Nuclear Power Station

In accordance with 10CFR50.59(b), Boston Edison is submitting this report of the changes, tests and experiments at Pilgrim Nuclear Power Station for the period of January 1 through December 31, 1993.

A listing of reportable changes and tests completed in the reporting period is attached. Each listing contains a brief description, a reference to the relevant Final Safety Analysis Report (FSAR) section, and a reference to the supporting Safety Evaluation(s).

No experiments were performed during the report period.


W. C. Rothert

WCR/MTL/nas/5059RPT

Attachments

cc: Mr. R. Eaton, Project Manager
Division of Reactor Projects - I/II
Mail Stop: 14D1
U. S. Nuclear Regulatory Commission
1 White Flint North
11555 Rockville Pike
Rockville, MD 20852

U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Senior Resident Inspector
Pilgrim Nuclear Power Station

9407110288 931231
PDR ADDCK 05000293
R PDR

JEH 7/1

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Page 1 of 6

Trash Rack Rake Addition

PDC No: 85-080D

SE No: 2111

FSAR Reference: 11.6.3

This modification added a trash rack rake to the screenhouse to remove accumulating debris and marine life from the trash rack.

The change did not constitute an unreviewed safety question because the change did not affect any Class I structures or systems.

Relocate Equipment for Hydrogen Water Chemistry Shieldwall

PDC No: 85-083A

SE No: 2661

FSAR Reference: 10.9.3.4.3

This change removed Turbine Building Ventilation Fans (VSF 102A,B,C) to allow construction of a shield wall to reduce radiation exposure to station personnel during Hydrogen Water Chemistry System operation.

This change did not involve an unreviewed safety question because the fans did not perform any safety related function.

Station Blackout Diesel Generator Operability and Modifications

PDC No: 89-043

SE No: 2682

FSAR Reference: 8.4.5.1, 8.10.3, F7.4-11, F7.4-13

This change modified an existing diesel to meet the Station Blackout Rule (10CFR50.63) requirements for use as an alternate AC power source. These changes were previously discussed in BECo letter 89-057 dated April 17, 1989 and did not constitute an unreviewed safety question.

ATTACHMENT

Page 2 of 6

SBO Diesel Generator Testing Modifications at 23kv Substation

PDC No: 89-044

SE No: 2435

FSAR Reference: F8.2-1

This change involved modifications to the 23 KV substation to provide protection to the 23 kv line during load testing of the Station Blackout Diesel Generator. This change did not constitute an unreviewed safety question because it has no impact on and does not directly affect any safety related systems, subsystems or components.

Instrument Air System Upgrade

PDC No: 89-061

SE No: 2432

FSAR Reference: 10.11.3.1, 10.11.3.2

This modification installed new flow meters, filter differential pressure gauges, a dew point monitor, and replaced a filter in the instrument air system. These modifications were necessary to enable the system to meet the requirements of Generic Letter 88-14 and did not constitute an unreviewed safety question.

Relocation of the Recirc MG set AC Lube Oil Pump DC Motor Power Supply Control Circuits

PDC No: 89-071

SE No: 2493

FSAR Reference: F8.6-1

This change relocated the DC control power supply of the recirculation MG sets AC Lube Oil pumps to increase the reliability of both recirculation MG sets.

This modification did not constitute an unreviewed safety question because the function of the recirculation MG set AC Lube Oil Pumps has not been altered.

ATTACHMENT

Page 3 of 6

Control Room Lighting Upgrade

PDC No: 90-040

SE No: 2649, 2494

FSAR Reference: 10.16.2

This change involved upgrading the lighting system in the control room to assure compliance with NUREG 0700 and did not affect 10CFR50 Appendix R compliance as it relates to control room emergency lighting.

This modification did not involve an unreviewed safety question because the modified equipment is functionally similar and introduces no new failure modes.

Salt Service Water Piping Replacement

PDC No: 91-010A

SE No: 2572, 2575 and 2663

FSAR Reference: F10.7-1

This was the first in a series of plant changes to support the Salt Service Water (SSW) Piping Replacement Project. This change relocated existing buried pipe and conduit in preparation for the construction of a concrete vault (separate change) adjacent to the south wall of the Intake Structure. This part of the project did not involve any safety related portion of the SSW system or plant structures, and did not constitute an unreviewed safety question.

Replacement of Carbon Steel Pipe Between Water Box Scavenging Pump and the Scavenging Pump Seal Water Pumps

PDC No: 91-011

SE No: 2560

FSAR Reference: F11.6-1

This change replaced carbon steel pipe with plastic pipe between the water box scavenging pumps (P-145A/B) and the scavenging pump seal water pumps (P-157A/B) in the circulating water system.

This change did not involve an unreviewed safety question because the new pipe meets ANSI B31.10-1967 and has no safety related function.

ATTACHMENT

Page 4 of 6

Replacement of 125V DC Battery Chargers

PDC No: 92-038

SE No: 2712

FSAR Reference: 8.6.3, F8.6.1

The modification replaced the 125V DC battery chargers to improve the DC system's voltage response to AC input voltage transients.

This change did not involve an unreviewed safety question because the new chargers are essentially the same as the old chargers and the function remains unchanged.

Augmented Fuel Pool Cooling - Phase I Modifications

PDC No: 92-041

SE No: 2697

FSAR Reference: 4.8.5.6, 10.4.3

This change implemented a modification to the Fuel Pool Cooling System to create a new operating mode (Mode 1) which uses the Residual Heat Removal/Fuel Pool Cooling Intertie to divert a portion of shutdown cooling flow to the fuel pool to provide augmented fuel pool cooling.

This modification did not constitute an unreviewed safety question. The Mode 1 of augmented fuel pool cooling enhances the cooling capability of the Fuel Pool Cooling System and all postulated accidents, transients and equipment failures are bounded by existing analysis.

Change Various DC MCV Stroke Times

SE No: 2776

FSAR Reference: 4.7.5, 6.5.2.3, T7.3-1, T5.2-4, 7.4.3.2.5

This change modified various DC motor stroke times. The systems affected by these changes are HPCI, RCIC, Main Steam Drains, RHR, and RWCU.

These changes did not constitute an unreviewed safety question. Valve stroke times do not affect accident probabilities and all stroke times are bounded by existing analyses. No new types of accidents were postulated.

ATTACHMENT

Page 5 of 6

Fire Protection Surveillance Frequencies in Locked High Radiation Areas

SE No: 2801

FSAR Reference: 10.8.4.2.2, 10.8.4.5.2

This change reduced the Fire Protection Surveillance frequencies in Locked High Radiation Areas during power operation. The affected components are valves and hose stations in Locked High Radiation Areas only. This change is consistent with Condition of License #3.F and no potential unreviewed safety questions have been identified.

Change RWCU Precoat Material

SE No: 93-02

FSAR Reference: 9.3.4.2.1

This change replaced the Reactor Water Cleanup Filter Demineralizer precoat material from "SOLKA-floc" to a higher grade material to preclude sodium spikes when placing the filter demineralizer in service.

This change did not constitute an unreviewed safety question because the new precoat material performs the same function as the material it is replacing. No new failure modes have been introduced.

Surveillance Testing for PASS

SE No: 93-06

FSAR Reference: 10.19.3, 10.19.5

The change is to permit sample comparisons between Post Accident Sample System (PASS) samples and normal grab samples. These samples are compared to determine that the samples from the PASS are representative of the system being sampled within a factor of 2 as required by NUREG 0737 and INPO Good Practice CY-707. This change does not involve an unreviewed safety question.

ATTACHMENT

Page 6 of 6

Annual Update to Emergency Plan

SE No: 93-22

FSAR Reference: App. N

This evaluation was for the annual review and revision of the Pilgrim Station Emergency Plan and did not constitute an unreviewed safety question because no safety related structures, systems or components were affected.

Revise the Initial Conditions for Performance of the Manual Opening of the ADS Valves

SE No: 93-26

FSAR Reference: 8.5.6.2

The initial conditions for manual opening of the ADS relief valves (RV203-A,B,C,D) were changed from reactor pressure at 375 psig (approximately 11% power) to 20% reactor power to take advantage of increased plant stability (at higher power levels). This change also reduces water fluctuation induced by cycling the relief valves.

This change does not involve an unreviewed safety question because opening the valve at a higher pressure does not increase the potential for equipment failure.

Integrity Testing of the Emergency Diesel Generator Oil Storage Tanks

SE No: 93-29

FSAR Reference: 8.5, 14.3, G.5

A test of the Emergency Diesel Oil Storage Tanks (T126A/B) was performed to verify the integrity of these underground tanks. The test did not impair the ability of the Emergency Diesels to perform their safety function and the volume of diesel oil required by Technical Specifications was maintained.

This test did not involve an unreviewed safety question. The primary fuel sources for the diesels (Day Tanks T124A/B) were verified to have sufficient fuel for 2.5 hours of diesel operation prior to the start of the test. This was sufficient time for operators to abort the test and return the storage tanks to normal service had the diesels been required for plant operations.