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SUPERINTENDENT  
NUCLEAR OPERATIONS DEPARTMENT

September 27, 1979

BECO. Ltr. #79-191

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

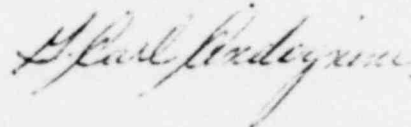
License No. DPR-35  
Docket No. 50-293

Annual Report of Tests, Changes or  
Experiments Performed at Pilgrim I

Dear Sir:

In accordance with 10 CFR 50.59(b), Boston Edison Company hereby submits a report containing a brief description and a summary of the safety evaluations of all modifications implemented and tests conducted at Pilgrim Nuclear Power Station between July 1, 1978 and July 1, 1979.

Very truly yours,



cc: Director  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
c/o Distribution Services Branch, DDC, ADM  
Washington, D. C. 20555 (40 copies)

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REPORTABLE PILGRIM NUCLEAR POWER STATION

MODIFICATIONS IMPLEMENTED BETWEEN

JULY 1, 1978 AND JULY 1, 1979

The following are modifications to the Pilgrim Nuclear Power Station Unit #1 as described in the Safety Analysis Report which were implemented between July 1, 1978 and July 1, 1979, under the authorization of 10 CFR 50.59(a) without prior Commission approval. Preceding the implementation of the modification, it was determined that:

1. The modification would not increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report;
2. The modification would not create a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report; and
3. The modification would not reduce the margin of safety as defined in the basis for any Technical Specification.

Water Shielded Viewing Windows (PDCR 78-18)

Water shielded viewing windows were installed in selected pump and tank room shield walls to permit both monitoring essential tank levels and detecting pump seal failures. These windows decrease personnel radiation exposure by eliminating unnecessary entries to investigate equipment problems.

This change affects FSAR Figure 12.1-1.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

Recirculation Pump Suction Valves (PDCR 78-35)

The automatic closure feature was removed from the recirculation pumps suction valves MO-202-4A & 4B to assure that these valves remain open aiding vessel depressurization for LOCA when a piping break occurs between the recirculation pump suction and discharge valves.

This change affects FSAR Section 4.3.4

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

Shielding Walls (PDCR 78-M-14)

Concrete block walls were installed at various locations in the station to provide additional radiation shielding.

This change affects FSAR Figures 12.1-2 and 12.1-6.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

Control Rod Drive System Pressure Controller (PDCR 78-M-16)

An accumulator was added to the CRD supply pressure controller sensing line to dampen out oscillation in the process fluid used to control the valve.

This change affects FSAR Section 3.4 and Figures 11.8.1 and 11.9.1.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

Safety Related Snubbers (PDCR's 79-07, 07A, 07B & 07C)

In response to IE Bulletin 79-07, a reanalysis was performed on the Main Steam System and the Reactor Recirculation System. This analysis was extended to the Residual Heat Removal System and the High Pressure Coolant Injection System. Based on the results of the reanalysis, modifications were made to the relief valves of various safety related snubbers and both the snubber steel and the structural steel associated with safety related snubbers.

This change affects FSAR Sections 12.2 and 2.5.3.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

Drywell Floor & Equipment Sump Pumps (PDCR 79-M-6)

In response to IE Bulletin 79-08, the control logic for the drywell floor and equipment sump pumps was modified to eliminate the potential for an automatic transfer of water from the drywell.

This change affects FSAR Sections 5.2.4 and 9.2.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

RHR & CS Testable Check Valve Bypass Valves (NOD Memo 79-457)

It has been theorized that a failure of a solenoid valve associated with the air operated bypass valves around the RHR and CS testable check valves could defect the containment isolation function of the testable check valves. Therefore, SV-1001-95A & B, SV-1400-51A & B have been closed and the air supplies to the valves isolated. Administrative controls have been established to insure this isolation continues until the potential failure problem is resolved.

This affects FSAR Sections 5.2.3 and 7.3.1.

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59 (a) or a change in Technical Specifications.

FSAR Amendment 34 (NED Memo 79-253)

"In this reporting period, Boston Edison has reviewed the status of work previously performed and to be performed relative to FSAR Amendment 34. Table 4 of the original Amendment 34 lists the electrical work originally intended to be performed. All this work has been completed except for replacement of 2 valve motor operators. The attached Table 1 lists additional cables that were relocated at the same time this work was accomplished.

A safety evaluation has been performed relative to the additional cables re-routed and it has been determined that these changes do not involve an unreviewed safety question as defined in 10CFR50.59(c)."

FSAR Table 12.4.1 Update (NOD Memo 79-116)

Technical Specification Amendment #36, issued to Boston Edison Company, changed licensed conditions for receipt, possession, and use of special nuclear, source and byproduct material at Pilgrim Nuclear Power Station. The NRC Safety Evaluation accompanying Amendment #36 required that the FSAR table which lists quantity limits for possession of source materials, be updated to reflect the latest source inventory.

This affects FSAR Table 12.4.1

- \* This change does not involve an unreviewed safety question as defined in 10 CFR 50.59(a) or a change in Technical Specifications.

TABLE 1  
CABLES RELOCATED THAT WERE NOT  
INCLUDED IN ORIGINAL AMENDMENT 34

<u>Scheme</u> <u>Cable No.</u>	<u>Circuit Function</u>
SBA603A*	RHR Pump 203B Feeder
SBA606A*	RHR Pump 203D Feeder
SBD1021A*	250V DC MCC D9 Feeder
SBD176A*	125V DC MCC D8 Feeder
SBG14BAH	DG B Neutral Grounding Transformer Voltage Leads (Relocate)
SBA609D	DG B Control (Relocate)
SBA609E	DG B Control (Relocate)
K31J	DG B Control (Relocate)
SAD731A*	RWCU Valve 1201-5 - Feeder
SAD731D*	RWCU Valve 1201-5 - Control
SAD731F*	RWCU Valve 1201-5 - Control
SBNS25F	Torus Atmosphere Temperature
SATE5047B	Torus Temperature
SBFT8127B	Flow to Stack

\*Included in revisions identified in BLE-167, 2/1/74

PDCR's

Safety Evaluation Nos.

78-18

78-SE-14

78-35

555, 555A

78-M-14

78-SE-29

78-M-16

78-SE-32

79-07

636

79-07A

626

79-07B

625, 629, 635

79-07C

627, 628, 632, 634, 637

79-M-6

79-SE-13

Memo's

NOD-79-457

631

NED-79-253

231

NOD 79-116

78-5