



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 62 TO FACILITY LICENSE NO. DPR-35

BOSTON EDISON COMPANY

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

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1.0 Introduction

By letter dated March 19, 1982, Boston Edison Company (the licensee) requested changes to the Pilgrim Nuclear Power Station Technical Specifications (TS) to: 1) clarify present limiting conditions for operation (LCOs) concerning the alternate rod insertion (ARI) system, 2) revise the tables of hydraulic and mechanical snubbers, 3) clarify testing requirements associated with the core spray and low pressure coolant injection systems, and 4) clarify testing requirements related to starting and loading of the diesel generators from the alternate shutdown station.

2.0 Evaluation

2.1 Limiting conditions for operation concerning the alternate rod insertion system

The licensee proposed modifying the limiting conditions for operation for the ARI system to clarify that this system need only be operable when the reactor is in the run mode. The Anticipated Transient Without Scram (ATWS) recirculation pump trip (RPT) system is provided as a means of substantially reducing maximum reactor vessel pressure in the unlikely event of a failure to scram, and the ARI system provides a diverse means for initiation of control rod insertion. The ARI system acts as a backup to the electrical portion of the current scram system, and thus serves to increase the scram reliability, thereby reducing the probability of an ATWS event.

We have reviewed the licensee's proposed TS changes for ATWS RPT/ARI and find the capacity of the safety/relief valves installed at Pilgrim is far in excess of the steam generation rate achievable in any mode other than RUN, and therefore, no potential exists for vessel overpressurization in modes other than run. In addition, the reactor is operated for only relatively short periods of time in the STARTUP mode and sufficient time is available at the power levels achievable in the STARTUP mode to take alternative action in case of an ATWS event (such as initiation of the standby liquid control systems) to shut down the reactor before excessive suppression pool temperature rise occurs. Consequently, we find the licensee's proposed TS changes acceptable.

2.2 Revisions to tables of hydraulic and mechanical snubbers

The changes proposed by the licensee to the tables of snubbers reflect upgrading of three existing hydraulic snubbers, the addition of two new hydraulic snubbers, and the changing of mechanical snubber designations to make them consistent with the designations provided in the table of hydraulic snubbers.

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We have reviewed the Technical Specification changes proposed by the licensee and find them acceptable since they a) correct the list of snubbers to which the Technical Specifications apply and b) improve the quality of the Pilgrim TSs by providing for consistent snubber designations between the lists of hydraulic and mechanical snubbers.

2.3 Clarification of testing requirements associated with the core spray (CS) and low pressure coolant injection (LPCI) systems.

The licensee has proposed TS changes to eliminate the once per cycle operability testing of the core spray and low pressure coolant injection system pumps required to be performed from the alternate shutdown panel. This proposed change would reflect the fact that direct operation of the CS and LPCI pumps is not associated with any alternate shutdown panels. Spurious control signal isolation for the CS and RHR pumps in case of fire in the cable spreading room is accomplished at the 4160 V breaker for the RHR or CS pumps and not at an alternate shutdown panel as implied in the TS. Other required surveillance of these pumps and their corresponding systems would not be affected by the proposed TS changes.

We have reviewed these proposed TS changes and find that they would correct errors in the TS regarding surveillance of the CS and LPCI pumps to reflect the surveillance of these pumps which can be performed. Consequently, we find them acceptable.

2.4 Clarification of testing requirements related to starting and loading of the diesel generators from the alternate shutdown station.

The licensee has proposed changes to the Pilgrim TS to change the surveillance requirement for manually starting and loading the diesel generators from the alternate shutdown station once per cycle, to one which more accurately reflects the surveillance which can be performed. The licensee proposes to change the requirements of the existing TS to require that the diesel generator control circuits shall be isolated from the cable spreading room and the diesel generator started and loaded locally.

This change is requested because the diesel generator cannot be manually started and loaded from the alternate shutdown station as the existing TS imply. The requested change in this surveillance requirement would correct this error and modify the Technical Specifications to require the necessary surveillance of the as-installed systems. Consequently, we find this change acceptable.

3.0 Environmental Considerations

We have determined that the amendment does not involve a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR Section 51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

4.0 Conclusions

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered, does not involve a significant decrease in a safety margin and does not create the possibility of an accident of a type different from any previously evaluated, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 5, 1982