



BOSTON EDISON

Pilgrim Nuclear Power Station
Rocky Hill Road
Plymouth, Massachusetts 02360

10CFR50.90

E. T. Boulette, PhD
Senior Vice President — Nuclear

February 9, 1995
BECO Ltr. #95-016

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

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

Proposed Change to the PNPS Technical Specifications
to Increase the Reactor High Water Level Isolation Trip
Level Setting

Boston Edison Company proposes changes to the Pilgrim Nuclear Power Station Technical Specifications regarding the Reactor High Water Level Isolation Trip Level Setting. The proposed changes are described in Attachment A, the revised technical specification pages are presented in Attachment B and the existing technical specification pages, marked up to show the proposed changes are presented in Attachment C.

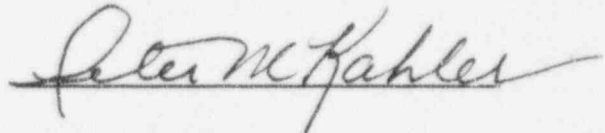
This change will be implemented following receipt of an approved amendment to the PNPS technical specifications.


E. T. Boulette, PhD

Commonwealth of Massachusetts)
Country of Plymouth)

Then personally appeared before me, E. T. Boulette, who being duly sworn, did state that he is Senior Vice President - Nuclear of Boston Edison Company and that he is duly authorized to execute and file the submittal contained herein in the name and on behalf of Boston Edison Company and that the statements in said submittal are true to the best of his knowledge and belief.

My commission expires: October 5, 1995



ETB/RAH/nas/TS/ATS_RHWL

Attachment

cc: see next page

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ADD 1

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Attachment A

Description of Change:

The proposed change will increase the Reactor High Water Level Trip Level Setting for the Group 1 isolation. The change will allow us to increase the MSIV high water level isolation setpoint. The remaining high water level trip signals (HPCI, RCIC etc.) will not be changed. The MSIV high water level isolation parameters are summarized below:

| | Existing Values | Proposed Values |
|---|----------------------|------------------------|
| Analytical Limit: | +48 inches indicated | +60 inches indicated |
| Trip Level Setting: (TS allowable value) | +48 inches indicated | +55.4 inches indicated |
| Setpoint: | +45 inches indicated | +55 inches indicated |

This change will also result in a new calibration range for the following instruments:

| | |
|------------------|---------------------|
| LT263-57A and B | LS263-57A-1 and B-1 |
| LT263-58A and B | LS263-58A-1 and B-1 |
| LIS263-57A and B | LS263-57A-2 and B-2 |
| LIS263-58A and B | LS263-58A-2 and B-2 |

The calibration range will be increased from " - 50 to + 50 inches indicated"
to " - 50 to + 60 inches indicated".

This, in turn, will result in a change in the Technical Specification allowable value for the Reactor Low Level Trip Level Setting. The allowable value will change from " ≥ 11.7 inches" to " ≥ 11.6 inches". The increase in the calibration range will also result in a change in the Technical Specification allowable value for the Reactor Low Low Water Level Trip Level Setting. The allowable value will change from " ≥ -46.3 inches indicated level" to " ≥ -46.4 inches indicated level". These changes will not impact plant safety.

The changes were evaluated in accordance with the guidance provided in Regulatory Guide 1.105 and Generic Letter 91-04, "Change in Technical Specification Surveillance Intervals to Accommodate a 24 Month Fuel Cycle".

Purpose of the Change:

The purpose of the change is to increase the operating margin associated with the MSIV isolation. The increased operating margin will allow the operator to control the reactor water level and pressure more effectively during a controlled shutdown. It will also reduce the likelihood of spurious isolations.

Determination of No Significant Hazards:

The proposed change will increase the reactor water level at which the MSIV isolation signal occurs. The isolation signal is provided to minimize Reactor Vessel inventory loss in the event of a pressure regulator failure and to prevent gross moisture carryover.

General Electric analyzed a rapid depressurization caused by a pressure regulator malfunction at low reactor power. MSIV closure was initiated by low reactor pressure approximately 30 seconds into the event. No credit is taken for MSIV closure on high level. The resulting reactor water level swell was not sufficient to reach the main steam lines. The revised analytical limit is 52 inches below the bottom elevation of the main steam lines.

The proposed change does not affect the safety function of the Group 1 isolation. HPCI and RCIC will trip on reactor high water level at the existing setpoints.

In accordance with 10 CFR 50.91, Boston Edison submits the following analysis addressing the no significant hazards consideration. The proposed changes do not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated.

Operation of the station in accordance with the proposed Trip Level Setting will not significantly increase the probability or consequences of an accident previously evaluated. The MSIV high water level isolation signal is provided to protect against rapid depressurization due to a pressure regulator malfunction during plant startup. The high water level isolation signal is not functional when the mode switch is in the RUN position. A high water level in the reactor vessel indicates that fuel is covered.

Increasing the Trip Level Setting will have minimal effect on moisture carryover in the event of a pressure regulator failure at low reactor power. MSIV closure (Group 1) is initiated by low reactor pressure (810 psig) approximately 30 seconds into the event. The resulting reactor water level swell is not sufficient to reach the bottom elevation of the main steam lines.

The proposed Technical Specification allowable value for the Reactor Low Level Trip Level Setting and the Reactor Low Low Water Level Trip Level setting does not involve significant increase in the probability or consequence of an accident.

- (2) Create the possibility of a new or different kind of accident from any previously analyzed.

The proposed change does not affect the Group 1 isolation safety function. The change does not involve any plant hardware changes that could introduce any new failure modes or effects; thus, the change can not create the possibility of a new or different kind of accident from any previously analyzed.

- (3) Involve a significant reduction in a margin of safety.

The proposed change does not affect the Group 1 isolation safety function. The proposed change is consistent with the FSAR and Technical Specification basis associated with reactor vessel inventory control and main steam line flooding.

The proposed change to the instrument calibration range does not affect the margin of safety for systems or components affected by the change. Operating Pilgrim in accordance with the proposed Trip Level Setting does not involve a significant reduction in the margin of safety.

Summary:

The proposed change has been evaluated in accordance with the criteria in 10CFR 50.92. The change was reviewed by the Operations Review Committee, the Station Director and the Nuclear Safety Review and Audit Committee.

Schedule:

This change will be implemented within 90 days of the receipt of the Amendment.

Attachment B