



**BOSTON EDISON**

Pilgrim Nuclear Power Station  
Rocky Hill Road  
Plymouth, Massachusetts 02360

10CFR50.90  
RG 1.97

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U.S. Nuclear Regulatory Commission  
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License DPR-35  
Docket 50-293

Proposed Technical Specification  
Change to Section 3/4.2: HPCI Instrumentation

Boston Edison proposes the attached changes to Section 3/4.2 "HPCI Instrumentation" of the Pilgrim Nuclear Power Station Technical Specifications in accordance with 10CFR50.90. The proposed change supports a modification planned for RFO #9 of the control circuit for several valves in the HPCI system. The modification will upgrade the circuitry to provide valve position indication in the Control Room in accordance with our Regulatory Guide 1.97 program implementation.

The requested change is described in Attachment A, the revised Technical Specification pages are in Attachment B, and the current Technical Specification pages, annotated to indicate the requested revisions, are in Attachment C.

R. A. Anderson

MTL/clc/hpciinst

Attachments

1 Signed Original and 37 Copies

cc: See Next Page

Commonwealth of Massachusetts)  
County of Plymouth )

Then personally appeared before me, Roy A. Anderson, 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  
DATE

Robert M. Kahler  
NOTARY PUBLIC

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Proposed Change

The proposed changes to the Pilgrim Technical Specification Table 3.2.B replace the HPCI Steam Line Low Pressure (100>P>50 psig) isolation signal with the Reactor Low Pressure (100>P>50 psig) signal and remove HPCI from Note 5 of the table.

The proposed change to Table 4.2.B removes HPCI from Item 13.

Reason for Change:

This proposed Technical Specification Change reflects a planned modification to improve reliability of the HPCI low pressure isolation logic. Presently the HPCI system will isolate on low pressure sensed at the HPCI turbine steam inlet piping. The planned modification will change the low pressure isolation signal from the HPCI steam inlet piping to the reactor vessel as sensed by the Analog Trip System.

Changing to the reactor vessel pressure signal ensures a divisional single failure-proof isolation logic design that is an improvement when compared to the existing HPCI steam inlet pressure isolation logic. After this logic change, the following Group IV HPCI components will isolate on low reactor vessel pressure vs. low HPCI steam inlet pressure:

HPCI Turbine	
MO 2301-4	HPCI Steam to Turbine
MO 2301-5	HPCI Steam to Turbine
MO 2301-35	HPCI Pump Suction from Torus
MO 2301-36	HPCI Pump Suction From Torus
MO 2301-14	HPCI Miniflow Bypass to Torus
CV 9068A	Turbine Exhaust Drain Pot Isolation
CV 9068B	Turbine Exhaust Drain Pot Isolation

Timing of this Technical Specification change is driven by a window of opportunity created by planned replacement of the two Turbine Exhaust Drain Pot Isolation valves CV-9068 A & B. These valves are being changed to meet the Regulatory Guide 1.97 requirement for position indication in the control room. During change out of CV9068 A & B, a convenient opportunity exists to make the previously discussed improvement in our HPCI Group 4 isolation logic.

In addition to improving reliability of the HPCI low pressure isolation logic, this change will also reduce radiation exposure of workers conducting HPCI surveillance tests.

Determination of No Significant Hazards

The Code of Federal Regulations, 10CFR50.91 requires that at the time a licensee requests an amendment, it must provide to the Commission its analysis, using the standards in 10CFR50.92, about the issue of no significant hazards consideration. Therefore, in accordance with 10CFR50.91 and 10CFR50.92 the following analysis has been performed.

1. The operation of Pilgrim Station in accordance with the proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.

The HPCI steam line low pressure signal is an operational interlock that trips the HPCI turbine and closes system valves to shutdown the HPCI system when inadequate steam pressure is available to run the HPCI system with the closure of the HPCI vacuum breakers by eliminating the potential for a situation where HPCI is running and the vacuum breakers are closed. Therefore, using the Reactor Low Pressure signal (100>P>50 psig) to initiate a Group 4 HPCI isolation is equivalent to using the HPCI Steam Line Low Pressure signal (100>P>50 psig) and does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Replacing HPCI Steam Line Low Pressure with Reactor Low Pressure on Tables 3.2.B and 4.2.B does not affect the instrument functional test or calibration frequency of the Analog Trip System. The valve functional and system operability test frequencies remain unchanged.

2. The operation of Pilgrim Station in accordance with the proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated because HPCI will continue to operate as designed and the HPCI Steam Line Low Pressure and Reactor Low Pressure signals are functionally equivalent Group 4 initiation signals. The change does not affect the HPCI system's ability to shutdown and isolate when required. This change improves the coordination of the shutdown of the HPCI system with the closure of the HPCI vacuum breakers by eliminating the potential for a situation where HPCI is running and the vacuum breakers are closed.

3. The operation of Pilgrim Station in accordance with the proposed amendment will not involve a significant reduction in a margin of safety.

The proposed amendment does not involve a significant reduction in a margin of safety because the new Group 4 isolation initiation signal is functionally equivalent to the existing initiation signal. This change does not affect the HPCI system's ability to shutdown and isolate when required. This change improves the coordination of the shutdown of the HPCI system with the closure of the HPCI vacuum breakers by eliminating the potential for a situation where HPCI is running and the vacuum breakers are closed.

This change has been reviewed and recommended for approval by the Operations Review Committee and reviewed by the Nuclear Safety Review and Audit Committee.

#### Schedule of Change

This change is requested on or before February 1, 1993, to allow the valve modification to be performed during RFO #9. This change will be implemented following completion of the modification and prior to plant startup.