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August 21, 1991

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Posted Correction to Amdt. 162 to DPR-56

Docket Nos. 50-277
and 50-278

Mr. George J. Beck
Director-Licensing, MC 5-2A-5
Philadelphia Electric Company
Nuclear Group Headquarters
Correspondence Control Desk
P.O. Box No. 195
Wayne, Pennsylvania 19087-0195

Dear Mr. Beck:

SUBJECT: CORE AND CONTAINMENT COOLING SYSTEMS SURVEILLANCE REQUIREMENTS FOR PEACH BOTTOM ATOMIC POWER STATION, UNITS 2 AND 3

In a January 30, 1990 letter, the licensee filed an application for license amendments to Facility Operating License Nos. DPR-44 and DPR-56. The application requested changes to the Peach Bottom Technical Specifications (TS) to delete testing requirements for redundant trains when one train becomes inoperable for various core and containment cooling systems. By letter dated January 24, 1991, the NRC staff sent a request for additional information (RAI) and clarification for four items in the licensee's application.

On April 9, 1991, the licensee responded to the staff's requests. In response to item 2 of the RAI, the licensee submitted a revised page 141 of the TS Bases. In response to item 3 of the RAI, the licensee submitted a revised page 135 of the TS Bases.

On June 12, 1991, the Commission issued Amendment Nos. 160 and 162 to Facility Operating License Nos. DPR-44 and DPR-56 for Peach Bottom Atomic Power Station, Unit Nos. 2 and 3. However, through oversight, the NRC inadvertently used the original page 135 and 141 submittals in the amendment package. Enclosed are the correct revisions for TS Bases pages 141 and 135, as provided by the licensee's letter of April 9, 1991, which are to be substituted for those previously issued with Amendment Nos. 160 and 162 for DPR-44 and DPR-56, respectively.

Sincerely,
/S/
Joseph W. Shea, Acting Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosure:
Technical Specification Pages

cc w/enclosure:
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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3.5.A BASES (Cont'd)

The allowable repair times are established so that the average risk rate for repair would be no greater than the basic risk rate using the methods described in Reference (1). Using the results developed in this reference, the repair period is found to be 1/2 the test interval. This assumes that the core spray subsystems and LPCI constitute a 1 out of 3 system; however, the combined effect of the two systems to limit excessive clad temperatures must also be considered. The test interval specified in Specification 4.5 is 1 month.

Should one core spray subsystem become inoperable, the remaining core spray and the LPCI system are available should the need for core cooling arise. To assure that the remaining core spray and LPCI subsystems are available, they are verified to be operable (see 4.5 Bases).

Should the loss of one LPCI pump occur, a nearly full complement of core and containment cooling equipment is available. Two LPCI pumps in conjunction with the core spray subsystem will perform the core cooling function. Because of the availability of the majority of the core cooling equipment, which will be verified to be operable (see 4.5 Bases), a thirty day repair period is justified. If the LPCI subsystem is not available, at least 1 LPCI pump must be available to fulfill the containment cooling function. The 7 day repair period is set on this basis.

(1) Jacobs, I. M., "Guidelines for Determining Safe Test Intervals and Repairs Times for Engineered Safeguards", General Electric Co. A.P.E.D., April, 1969 (APED 5736)

4.5 BASES

Core and Containment Cooling Systems Surveillance Frequencies

The performance of individual emergency core cooling systems (HPCI, LPCI, Core Spray and ADS) and the integrated performance of the emergency core cooling systems are described in analyses referenced in Section 6.5 of the Updated Final Safety Analysis Report. Periodic surveillance of pumps and valves is performed in accordance with ASME Code, Section XI, to the extent described in the Inservice Testing Plan, to verify that the systems will provide the flow rates required by the respective analyses. HPCI and RCIC flow tests are performed at two pressures so that the systems' capability to provide rated flow over their operating range is verified. HPSW flow tests verify that rated flow can be delivered to the RHR heat exchangers.

The testing interval for the core and containment cooling systems is based on industry practice, sound engineering judgment and practicality. The core cooling systems have not been designed to be fully testable during operation. For example, in the case of the HPCI, automatic initiation during power operation would result in pumping cold water into the reactor vessel which is not desirable. Complete ADS testing during power operation causes an undesirable loss-of-coolant inventory. To increase the availability of the core and containment cooling systems, the components which make up the system; i.e., instrumentation, pumps, valves, etc., are tested frequently. The pumps and motor operated injection valves are also tested each month to assure their operability. A simulated automatic actuation test once each cycle combined with frequent tests of the pumps and injection valves is deemed to be adequate testing of these systems.

When components and subsystems are out-of-service, overall core and containment cooling reliability is maintained by verifying the operability of the remaining redundant cooling systems that the Limiting Conditions for Operation require to be operable during the allowable out-of-service time period. Verifying operability in this context means to administratively ensure that the remaining required systems or subsystems are not known to be inoperable (for example: confirming that equipment necessary for the systems or subsystems to perform their safety functions are not blocked out of service for maintenance). Performance of operability tests is not required.

4.5 I&J Surveillance Requirements Bases

Average and Local LHGR

The LHGR shall be checked daily to determine if fuel burnup or control rod movement has caused changes in power distribution. Since changes due to burnup are slow and only a few control rods are moved daily, a daily check of power distribution is adequate.

3.5.A BASES (Cont'd)

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