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Pilgrim Nuclear Power Station
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Docket 50-293

Proposed Change to Pilgrim Technical
Specification Sections 3/4.5, 3/4.7 and 3/4.9

Boston Edison proposes changes to sections 3/4.5, 3/4.7, and 3/4.9 as well as the Bases associated with the affected sections. The proposed changes incorporate Limiting Conditions for Operation and Surveillance requirements for the Shutdown Cooling System and the Core Standby Cooling System during shutdown and refueling conditions. It relocates Containment Cooling requirements to the Containment Systems section, describing what components comprise Containment Cooling. The proposed change also incorporates a new section 3.9.C, "Diesel Generator Requirements - Cold Condition and Subcritical," into Pilgrim's Technical Specifications.

The changes are proposed to address suggestions developed by industry and NRC efforts concerning shutdown and refueling conditions. The requested changes are described in Attachment A and the revised Technical Specification pages are in Attachment B. Attachment C provides existing pages marked-up to show the proposed changes.

R. A. Anderson

PMK/clc/attats

cc: See Page 2

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: April 15, 1999
DATE

NOTARY PUBLIC

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Attachment A

Proposed Changes

Boston Edison proposes changes to sections 3/4.5, 3/4.7, and 3/4.9 as well as the Bases associated with the affected sections. Details of the proposed changes are indicated by change bars in the margins of the modified Technical Specification pages of Attachment B of this letter.

Section 3/4.5

This change proposes the incorporation of Limiting Conditions for Operation (LCO's) and Surveillance requirements for the Shutdown Cooling System and the Core Standby Cooling System (CSCS) during shutdown and refueling conditions. The proposed change also relocates Containment Cooling requirements to the Containment Systems section (3/4.7) and describes what components comprise the Containment Cooling system.

Section 3/4.7

The Standby Gas Treatment System (SGTS) and the Control Room High Efficiency Air Filtration (CRHEAF) system sections are changed by removing "... and the diesel generators" now found in the SGTS and CRHEAF sections. Electrical supply requirements will be governed by the definition of "Operable-Operability." This change is consistent with other sections of Pilgrim's Technical Specifications. When the reactor is cold and subcritical during operations requiring SGTS and CRHEAF, electrical supply requirements will be governed by new section 3.9.C.

This proposed change also removes the requirement to demonstrate all active components of the other train (SGTS or CRHEAF) are operable within 2 hours. This requirement is replaced with a requirement that the other train must be operable when a train is made or found inoperable. This change is consistent with other sections of Pilgrim Technical Specifications.

Section 3.7.C, "Secondary Containment" is changed by incorporating two new restrictions that must be satisfied before secondary containment is not needed. Section 4.7.C.1.b is deleted because it applied only during the first operating cycle and is now obsolete.

Section 3.9.C

This change incorporates a new section, 3.9.C, titled, "Diesel Generator Requirements - Cold Condition and Subcritical." This new section describes the Diesel Generator requirements when the reactor is cold and subcritical.

Reason for Change

New requirements concerning shutdown cooling, core cooling, and diesel generator requirements during shutdown and refueling conditions are being incorporated into Pilgrim's Technical Specifications by this proposed change. Many of the activities are currently required administratively by Pilgrim's procedures, but are not in Pilgrim's Technical Specifications.

Recent NRC and NUMARC activities indicate that plant configuration during shutdown and refueling conditions may warrant greater attention and status than was previously required. We propose the incorporation of 3/4.5.B, "Shutdown Cooling System," and 3/4.5.G "CSCS - Shutdown and Refueling", to provide greater status to and control over activities occurring during shutdown and refueling conditions.

Changes are proposed to SGTS and CRHEAF requirements and Secondary Containment requirements to aid in outage scheduling and to bring these sections into further conformance with BWR Standard Technical Specifications (STS) and other sections of Pilgrim's Technical Specifications.

The addition of section 3.9.C and the incorporation of references to it in other sections reflects that Diesel Generator requirements can be less restrictive when the reactor is cold and subcritical. The adoption of 3.9.C provides greater scheduling flexibility during shutdown conditions without significantly reducing Pilgrim's ability to respond to design basis events.

The proposed changes are based on STS and thereby bring Pilgrim Technical Specifications into further conformance with STS.

Safety Evaluation and Determination of No Significant Hazards

The Code of Federal Regulations, 10CFR50.91 require that at the time a licensee requests an amendment, the licensee must provide to the Commission its analysis, using the standards in 10CFR50.92, 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 does not involve a significant increase in the probability or consequence of any accident previously evaluated.

Recent industry-wide efforts have indicated that greater attention should be paid to plant configurations and activities when in the shutdown or refueling condition. The proposed changes address such concerns by incorporating LCOs and surveillance requirements specifically addressing those conditions. The proposed shutdown and refueling changes do not alter existing Pilgrim configurations or practices, but give greater status to activities related to shutdown and refueling conditions that are now controlled administratively. The proposed changes are based on STS that have been reviewed and approved by the NRC.

Proposed changes concerning Diesel Generator availability during shutdown and refueling relax requirements during these conditions. The operability of A.C. power sources when in shutdown and refuel conditions assures: (1) adequate coolant makeup for the irradiated fuel in the core in case of an inadvertent draindown of the vessel; (2) mitigation of a fuel bundle handling accident; (3) sufficient power for required support systems (e.g., decay heat removal, refueling activities, component cooling); and (4) sufficient instrumentation and control capability for monitoring and maintaining the unit status.

Although satisfying the safety functions requires specified systems to have redundant loops or trains, it is unnecessary to require the sources of emergency power to be completely redundant during the Shutdown and Refueling conditions. Proposed specification 3.9.C considers emergency electrical power bus requirements met with offsite power and one emergency diesel generator operable. The remaining bus is considered operable with just a source of offsite power available.

The proposed specifications are consistent with STS and require that equipment needed to mitigate design basis events postulated for the shutdown and refueling conditions is available, as is the normal and emergency AC power source to such equipment. If necessary equipment is not available, shutdown and refueling activities are constrained. Activities such as work that can drain the vessel or moving irradiated fuel cannot continue until the inoperable equipment, including the associated Diesel Generator, is made operable.

Removing the specific Diesel Generator requirement from SGTS and CRHEAF does not significantly increase the probability or consequence of an accident previously analyzed because the definition "Operable-Operability" currently requires, and will continue to require, normal and emergency power sources to be available for a system to be considered operable. Diesel requirements for these systems (as well as other systems) will be unchanged except when the reactor is shutdown and subcritical; then section 3.9.C will apply. Section 3.9.C is consistent with STS.

Removing the SGTS/CRHEAF requirement to "demonstrate" the active components of the other train as operable within 2 hours does not significantly increase the probability or consequences of any accident previously analyzed because the other train, to be considered operable, must be within its surveillance interval and meet all conditions demanded by the definition "Operable-Operability." Removing the need to retest an operable system reduces wear on the equipment and places less burden on personnel. This proposed change is consistent with STS and other sections of Pilgrim Technical Specifications.

The proposed change also makes minor administrative changes, such as references to other Technical Specification sections, and deleting obsolete section 4.7.C.1.b.

The net impact of these changes is to impose new LCOs and Surveillances on unchanged plant configurations. It does relax current Diesel Generator requirements, but such relaxation does not significantly increase the probability or consequences of any accident previously evaluated because operations that have the potential to result in an event requiring the operation of a safety system must be suspended if both emergency buses are supplied by only one source of power. This reduces the probability of an adverse event and maintains the reactor in a safe condition while additional sources of power are restored. It also relaxes certain SGTS and CRHEAF requirements, but still requires the operability of the redundant train to continue operations with a train inoperable. Hence, the operation of Pilgrim in accordance with the proposed amendment does not involve a significant increase in the probability or consequence of any accident previously evaluated.

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.

The operation of Pilgrim Station in accordance with the proposed amendment will not create the possibility of a new or different kind of accident because the amendment does not change the physical configuration of the plant. It does impose new LCOs and surveillances for shutdown and refueling conditions, and it relaxes the requirements for diesel generators when the reactor is cold and subcritical. However, the relaxation does not affect the operability of equipment associated with the diesel generator beyond removing the need to consider a system inoperable solely because its diesel is inoperable. When offsite power is available and a single diesel is inoperable with the reactor subcritical and cold, other necessary systems may be considered operable. If a train or loop of a required system is inoperable and its redundant train or loop is operable but supplied power by an inoperable diesel, more restrictive LCO's apply and certain plant activities are prohibited. Hence, the change results in an insignificant reduction in the emergency diesel generator requirement's impact on determining equipment operability during shutdown and refueling conditions, and does not create the possibility of a new or different kind of accident.

Deleting certain SGTS and CRHEAF surveillance requirements for the remaining train when a train of SGTS or CRHEAF is made or found to be inoperable reduces wear on the operable train. The changes do not create the possibility of a new or different kind of accident because the other train is required to be operable as defined in the Technical Specification definition.

Therefore operating Pilgrim in conformance with this proposed amendment does not create the possibility of a new or different kind of accident.

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 imposes new LCO's and surveillances during shutdown and refueling. In general, they impose stricter requirements on Pilgrim than were previously in force. There are also new diesel generator requirements for cold and subcritical conditions that relax requirements as applied to systems associated with an inoperable diesel generator. The new restrictions conform to STS and to suggestions resulting from NRC and industry efforts concerning shutdown and refueling safety. They are undertaken to enhance the safe operation of Pilgrim. The proposed changes to diesel generator requirements also conform to STS and do not significantly reduce the safety-margin because operations having the potential to result in an event requiring the operation of a safety system must be suspended if both emergency buses are supplied by only one source of power. This reduces the probability of an adverse event and maintains the reactor in a safe condition while additional sources of power are restored.

Deleting certain SGTS and CRHEAF surveillance requirements for the remaining train when a SGTS or CRHEAF train is made or found to be inoperable reduces wear on the operable train. The change does not involve a significant reduction in a margin of safety because the redundant train is required to be operable as defined in the Technical Specifications.

Therefore, operating Pilgrim in conformance with this proposed amendment will not involve a significant reduction in a margin of safety.

This proposed 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 will be implemented within 30 days following BECo's receipt of its approval by the NRC.