Proposed Technical Specification Change

Proposed Change

Reference is made to Pilgrim Nuclear Power Station, Unit #1 Technical Specification Appendix A, Section 4.5.B, "Surveillance Requirement, Containment Cooling Subsystem" and Bases 3.5.B. "Containment Cooling System."

Replace Item 4.5.B.1.b with the following:

	Item	Frequency
b.	Each RBCCW Pump shall deliver 1700 GPM at 70 ft. TDH	Once/3 months

Add the following as 4.5.B.1.d:

	Item	Frequency
d.	Two operable SSW pumps in each SSW cooling loop shall deliver sufficient flow to demonstrate the capability to remove 65 x 10^6 BTU/hr at a salt water inlet temperature of 65°F.	Once/month

See Page 106 attached, for format example of above changes.

Change Bases 3.5.B (first paragraph), which currently states:

> Each system has the capability to perform its function; i.e., removing 64 x 10^6 BTU/hr...

by substituting:

> "...removing 65 x 10^6 BTU/hr..."

This change is shown on Page 115 attached.

This proposed revision also deletes the asterisk and footnote on page 106.

Special Note

Please note that in our letter of July 11, 1983, which transmitted a proposed Amendment concerning Fire Protection, reference to testing pump and valve operability from the Alternate Shutdown Station was removed from 4.5.B.1.a and placed in a new section, 3.12.G, entitled "Alternate Shutdown Panels". That proposal may be emplaced before this amendment is approved. Therefore, we request special attention be paid to the status of 4.5.B.1.a to preclude inadvertent reinstatement of the deleted section.

Reason for Change

There are two changes being presented in this proposed Technical Specification change. The reasons for the changes are discussed separately below:

1. The first change deals with removing the SSW pump capacity test requirement from Item 4.5.B.1.b and creating a new Item 4.5.B.1.d which expresses it as a cooling requirement for the SSW loops. The change to Bases 3.5.B is made to reflect this.

   Boston Edison Company (BECo) submitted LER 82-026 on August 30, 1982, reporting to the NRC that PNPS Technical Specifications did not reflect the FSAR design requirements for heat removal of the RBCCW system. The corrective action is to submit this Technical Specification change to more clearly define the design requirements. This proposed Technical Specification will address SSW flow to the RBCCW heat exchangers in an accident line-up, and verify that it is within acceptable limits. The procedure developed to support the new surveillance requirement will also address the condition of tube side biofouling (flow blockage from mussels). The previous Bases 3.5.B. only reflects the design RHR system heat load during postulated transient or accident conditions. An additional 1×10^6 BTU/hr should be added to this number for heat load developed by other essential equipment.

2. The removal of the requirement that RBCCW pumps (T.S. 4.5.B.1.c), and each affected loop of SSW cooling loops (T.S. 4.5.B.1.d) be tested after pump maintenance is proposed to make this section consistent with the rest of the core and containment cooling system surveillance Technical Specifications.

The time period for which the existing footnote 3.5.B was applicable has expired, and deletion of the footnote is proposed to reduce confusion.

Safety Conditions

This change does not present an unreviewed safety question as defined in 10 CFR 50.59(c). It has been reviewed and approved by the Operations Review Committee and reviewed by the Nuclear Safety Review and Audit Committee.

Significant Hazards Considerations

The Commission has provided guidance for the application of the standards for determining whether a significant hazard consideration exists by providing examples of amendments that are considered not likely to involve significant hazards considerations (48FR14870). One such amendment involves a change which either may result in some increase in the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan: for example the application of a small refinement to a previously used calculation model or design method. The proposed amendment substitutes the removal of heat in place of flow requirements for the Containment Cooling

Subsystem surveillance, changes Tech. Spec. heat removal requirements to reflect FSAR design requirements for the RBCCW, and modifies a surveillance requirement to make it consistent with other, similar surveillances. Analysis of these changes supports a determination that the amendment request involves no significant hazards consideration because the operation of the Pilgrim Nuclear Power Station in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

Schedule of Change

This change will be put into effect upon receipt of approval by the Commission.

Fee Determination

Pursuant to 10 CFR 170.12(c) this submittal includes a check for $150.00 in payment of the application fee.

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
3.5.B Containment Cooling Subsystem	4.5.B Containment Cooling Subsystem
1. Except as specified in 3.5.B.2, 3.5.B.3, and 3.5.F.3 below, both containment cooling subsystem loops shall be operable whenever irradiated fuel is in the reactor vessel and reactor coolant temperature is greater than 212°F, and prior to reactor startup from a Cold Condition.	1. Containment Cooling Subsystem Testing shall be as follows:

	Item	Frequency
a.	Pump & Valve Operability	Once/3 months and Once/Cycle from the Alternate Shutdown Station
b.	Each RBCCW Pump shall deliver 1700 gpm at 70 ft. TDH.	Once/3 months
c.	Air test on drywell and torus headers and nozzles	Once/5 years
d.	Two operable SSW Pump in each SSW cooling loop shall deliver sufficient flow to demonstrate the capability to remove 65×10^6 BTU/hr at a salt water inlet temperature of 65°F.	Once/month

3.5.B Containment Cooling Subsystem

The containment cooling subsystem for Pilgrim I consists of two independent loops each of which to be an operable loop requires one LPCI pump, two RBCCW pumps, and two SSW pumps to be operable. There are installed spares for margin above the design conditions. Each system has the capability to perform its function; i.e., removing 65 x 10^6 Btu/hr under the conditions per FSAR section 10.5.5.3 (Ref. Amendment 18), even with some system degradation. If one loop is out-of-service, reactor operation is permitted for seven days with daily testing of the operable loop and the appropriate diesel generator.

With components or subsystems out-of-service, overall core and containment cooling reliability is maintained by demonstrating the operability of the remaining cooling equipment. The degree of operability to be demonstrated depends on the nature of the reason for the out-of-service equipment. For routine out-of-service periods caused by preventative maintenance, etc., the pump and valve operability checks will be performed to demonstrate operability of the remaining components. However, if a failure, design deficiency, etc., caused the out-of-service period, then the demonstration of operability should be thorough enough to assure that a similar problem does not exist on the remaining components. For example, if an out-of-service period were caused by failure of a pump to deliver rated capacity, the other pumps of this type might be subjected to a capacity test. In any event, surveillance procedures, as required by Section 6 of these specifications, detail the required extent of testing.

Since some of the SSW and RBCCW pumps are required for normal operation, capacity testing of individual pumps by direct flow measurement is impractical. The pump capacity test is a comparison of measured pump performance parameters to shop performance tests combined with a comparison to the performance of the previously tested pump. These pumps are rotated during operation and performance testing will be integrated with this or performed during refueling when pumps can be flow tested individually. Tests during normal operation will be performed by measuring the shutoff head. Then the pump under test will be placed in service and one of the previously operating pumps secured. Total flow indication for the system will be compared for the two cases. Where there is not feasible due to changing system conditions, the pump discharge pressure will not be measured and its power requirement will be used to establish flow at that pressure.