

ATTACHMENT 1

Consumers Power Company  
Palisades Plant  
Docket 50-255

CORRECTION FOR AMENDMENT 163  
Corrected Pages 3-30 and 3-31

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3.3. EMERGENCY CORE COOLING SYSTEM (Continued)

- 3.3.3 Prior to returning to the Power Operation Condition after every time the plant has been placed in the Refueling Shutdown Condition, or the Cold Shutdown Condition for more than 72 hours and testing of Specification 4.3.h has not been accomplished in the previous 9 months, or prior to returning the check valves in Table 4.3.1 to service after maintenance, repair or replacement, the following conditions shall be met:
- a. All pressure isolation valves listed in Table 4.3.1 shall be functional as a pressure isolation device, except as specified in b. Valve leakage shall not exceed the amounts indicated.
  - b. In the event that integrity of any pressure isolation valve specified in Table 4.3.1 cannot be demonstrated, at least two valves in each high pressure line having a non-functional valve must be in and remain in, the mode corresponding to the isolated condition.<sup>(1)</sup>
  - c. If Specification a. and b. cannot be met, an orderly shutdown shall be initiated and the reactor shall be in hot shutdown condition within 12 hours, and cold shutdown within the next 24 hours.

<sup>1</sup> Motor-operated valves shall be placed in the closed position and power supplies deenergized.

- 3.3.4 Two HPSI pumps shall be operable when the PCS temperature is  $>325^{\circ}\text{F}$ .
- a) One HPSI pump may be inoperable provided the requirements of Section 3.3.2.c are met.
- 3.3.5 Two HPSI pumps shall be rendered incapable of injection into the PCS when PCS temperature is  $<300^{\circ}\text{F}$ , if the reactor vessel head is installed.
- Note: Specification 3.3.5 does not prohibit use of the HPSI pumps for emergency addition of makeup to the PCS.

### 3.3. EMERGENCY CORE COOLING SYSTEM (Continued)

#### Basis

The normal procedure for starting the reactor is, first, to heat the primary coolant to near operating temperature by running the primary coolant pumps. The reactor is then made critical by withdrawing control rods and diluting boron in the primary coolant.<sup>(1)</sup> With this mode of start-up, the energy stored in the primary coolant during the approach to criticality is substantially equal to that during power operation and, therefore, all engineered safety features and auxiliary cooling systems are required to be fully operable. During low-temperature physics tests, there is a negligible amount of stored energy in the primary coolant; therefore, an accident comparable in severity to the design basis accident is not possible and the engineered safeguards' systems are not required.

The SIRW tank contains a minimum of 250,000 gallons of water containing a minimum of 1720 ppm boron and a maximum of 2500 ppm. This is sufficient boron concentration to provide a 5% shutdown margin with all control rods withdrawn and a new core at a temperature of 60°F.

Heating steam is provided to maintain the tank above 40°F to prevent freezing. The 1.43% boron (2500 ppm) solution will not precipitate out above 32°F. The source of steam during normal plant operation is extraction steam line in the turbine cycle.

The limits for the safety injection tank pressure and volume assure the required amount of water injection during an accident and are based on values used for the accident analyses. The minimum 174-inch level corresponds to a volume of 1040 ft<sup>3</sup> and the maximum 200-inch level corresponds to a volume of 1176 ft<sup>3</sup>.

Prior to the time the reactor is brought critical, the valving of the safety injection system must be checked for correct alignment and appropriate valves locked. Since the system is used for shutdown cooling, the valving will be changed and must be properly aligned prior to start-up of the reactor.

The operable status of the various systems and components is to be demonstrated by periodic tests. A large fraction of these tests will be performed while the reactor is operating in the power range. If a component is found to be inoperable, it will be possible in most cases to effect repairs and restore the system to full operability within a relatively short time. For a single component to be inoperable does not negate the ability of the system to perform its function, but it reduces the redundancy provided in the reactor design and thereby limits the

ATTACHMENT 2

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CORRECTION FOR AMENDMENT 163

Pages 3-30 and 3-31 Marked to Show Correction

3.3.3

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