LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS
C.3. Two Pumps Inoperable If two RHR service water pumps are inoperable, the reactor may remain in operation for a period not to exceed seven (7) days provided all redundant active components in both of the RHR service water subsystems are operable.	4.5.C.3. Two Pumps Inoperable When two RHR service water pumps are inoperable, the remaining operable RHR service water subsystems and their associated diesel generators shall be demonstrated to be operable immediately and daily thereafter for seven (7) days or until the inoperable components are returned to normal operation.
4. Shutdown Requirements If Specifications 3.5.C cannot be met, the reactor shall be placed in the Cold Shutdown Condition within 24 hours.	
D. High Pressure Coolant Injection (HPCI) System	D. High Pressure Coolant Injection (HPCI) System
1. Normal System Availability	1. Normal Operational Tests HPCI System testing shall be performed as follows:

Item	Frequency
a. Simulated Automatic Actuation Test	Once/Operating Cycle
b. Flow rate at normal reactor vessel operating pressure and Flow rate at 150 psig reactor pressure	Once/3 months Once/Operating Cycle

a. The HPCI System shall be operable:

(1) Prior to reactor startup from a cold condition, or

(2) When irradiated fuel is in the reactor vessel and the reactor pressure is greater than 150 psig, except as stated in Specification 3.5.D.2.

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

4.5.D.1. Normal Operational Tests (Continued)

The HPCI pumps shall deliver at least 4250 gpm during each flow rate test.

c. Pump Operability	Once/month
d. Motor Operated valve operability	Once/month

3.5.D.2. Operation with Inoperable Components

If the HPCI system is inoperable, the reactor may remain in operation for a period not to exceed fourteen (14) days provided the ADS, CS system, RHR system LPCI mode, and RCIC system are operable.

With the surveillance requirements of Specification 4.5.D.1 not performed at the required frequencies due to low reactor steam pressure, reactor startup is permitted and the appropriate surveillance will be performed within 12 hours after reactor steam pressure is adequate to perform the tests.

2. Surveillance with Inoperable Components

When the HPCI system is inoperable, the ADS actuation logic, the RCIC system, the RHR system LPCI mode, and the CS system shall be demonstrated to be operable immediately. The RCIC system and ADS logic shall be demonstrated to be operable daily thereafter until the HPCI system is returned to normal operation.

3. Shutdown Requirements

If Specification 3.5.D.1 or 3.5.D.2 cannot be met, an orderly shutdown shall be initiated and the reactor vessel pressure shall be reduced to 150 psig or less within 24 hours.

E. Reactor Core Isolation Cooling (RCIC) System

1. Normal System Availability

a. The RCIC System shall be operable:

(1) Prior to reactor startup from a cold condition, or

E. Reactor Core Isolation Cooling (RCIC) System

1. Normal Operational Tests

RCIC system testing shall be performed as follows:

Item	Frequency
a. Simulated Automated Actuation Test	Once/Operating Cycle

LIMITING CONDITIONS FOR OPERATION	SURVEILLANCE REQUIREMENTS

3.5.E.1. Normal System Availability (Continued)

a.(2) when there is irradiated fuel in the reactor vessel and the reactor pressure is above 150 psig, except as stated in Specification 3.5.E.2.

4.5.E.1. Normal Operational Tests (Continued)

Item	Frequency
b. Flow rate at normal reactor vessel operating pressure and Flow rate at 150 psig reactor pressure	Once/3 months Once/Operating cycle
The RCIC pump shall deliver at least 400 gpm during each flow test.	
c. Pump Operability	Once/month
d. Motor Operated valve operability	Once/month

2. Operation with Inoperable Components

If the RCIC system is inoperable, the reactor may remain in operation for a period not to exceed seven (7) days if the HPCI system is operable during such time.

2. Surveillance with Inoperable Components

When the RCIC system is inoperable, the HPCI system shall be demonstrated to be operable immediately and daily thereafter until the RCIC system is returned to normal operation

3. Shutdown Requirements

If Specification 3.5.E.1 or 3.5.E.2 is not met, an orderly shutdown shall be initiated and the reactor shall be depressurized to less than 150 psig within 24 hours.

3.5.C. RHR Service Water System

1. Normal System Availability

Since the RHR service water system supplies cooling water for decay heat removal from the RHR system under post accident conditions, it is required whenever irradiated fuel is in the reactor.

2. Operation With Inoperable Components

Two RHR pumps are provided in each RHR subsystem. Two pumps are required for long term heat removal. Therefore, the 30 and 7 day repair times are justified for 1 and 2 pump inoperability respectively.

D. High Pressure Coolant Injection (HPCI) System

1. Normal System Availability

The HPCI system is provided to assure that the reactor core is adequately cooled to limit fuel clad temperature in the event of a small break in the nuclear system and loss of coolant which does not result in rapid depressurization of the reactor vessel. The HPCI system permits the reactor to be shut down while maintaining sufficient reactor vessel water level inventory until the vessel is depressurized. The HPCI system continues to operate until reactor vessel pressure is below the pressure at which LPCI operation or core spray system operation maintains core cooling.

The capacity of the system is selected to provide this required core cooling. The HPCI pump is designed to pump 4250 gpm at reactor pressures between 1120 and 150 psig. Two sources of water are available. Initially, water from the condensate storage tank is used instead of injecting water from the suppression pool into the reactor.

When the HPCI system begins operation, the reactor depressurizes more rapidly than would occur if HPCI was not initiated due to the condensation of steam by the cold fluid pumped into the reactor vessel by the HPCI system. As the reactor vessel pressure continues to decrease, the HPCI flow momentarily reaches equilibrium with the flow through the break. Continued depressurization causes the break flow to decrease below the HPCI flow and the liquid inventory begins to rise. This type of response is typical of the small breaks. The core never uncovers and is continuously cooled throughout the transient so that no core damage of any kind occurs for breaks that lie within the capacity range of the HPCI.

3.5.D.2. Operation With Inoperable Components

The HPCI system serves as a backup to the RCIC system as a source of feedwater makeup during primary system isolation conditions. The ADS serves as a backup to the HPCI system for reactor depressurization for postulated transients and accidents. Both these systems are checked for operability if the HPCI system is determined to be inoperable. Considering the redundant systems, an allowable repair time of seven (7) days was selected.

E. Reactor Core Isolation Cooling (RCIC) System

1. Normal System Availability

The various conditions under which the RCIC system plays an essential role in providing makeup water to the reactor vessel have been identified by evaluating the various plant events over the full range of planned operations. The specifications ensure that the function for which the RCIC system was designed will be available when needed.

Because the low-pressure cooling systems (LPCI and Core Spray) are capable of providing all the cooling required for any plant event when nuclear system pressure is below 150 psig, the RCIC system is not required below this pressure. RCIC system design flow (400 gpm) is sufficient to maintain water level above the top of the active fuel for a complete loss of feedwater flow at the design power.

2. Operation With Inoperable Components

Consideration of the availability of the RCIC system reveals that the average risk associated with failure of the RCIC system to cool the core when required is not increased if the RCIC system is inoperable for no longer than seven (7) days, provided that the HPCI system is operable during this period.

F. Automatic Depressurization System (ADS)

1. Normal System Availability

This specification ensures the operability of the ADS under all conditions for which the depressurization of the nuclear system is an essential response to unit abnormalities.

The nuclear system pressure relief system provides automatic nuclear system depressurization for small breaks in the nuclear system so that the low-pressure coolant injection (LPCI) and the core spray system can operate to protect the fission product barrier. Note that this Specification applies to the automatic feature of the pressure relief system.