

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>REACTOR COOLANT SYSTEM (Continued)</u>	
Figure 3.4.1.1-1 Deleted	3/4 4-3
Jet Pumps	3/4 4-4
Recirculation Pumps	3/4 4-5
Idle Recirculation Loop Startup	3/4 4-6
3/4.4.2 SAFETY/RELIEF VALVES	3/4 4-7
3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE	
Leakage Detection Systems	3/4 4-8
Operational Leakage	3/4 4-9
Table 3.4.3.2-1 Deleted	3/4 4-11
3/4.4.4 (Deleted) The information from pages 3/4 4-12 through 3/4 4-14 has been intentionally omitted. Refer to note on page 3/4 4-12	3/4 4-12
3/4.4.5 SPECIFIC ACTIVITY	3/4 4-15
Table 4.4.5-1 Primary Coolant Specific Activity Sample and Analysis Program	3/4 4-17
3/4.4.6 PRESSURE/TEMPERATURE LIMITS	
Reactor Coolant System	3/4 4-18
Figure 3.4.6.1-1 Minimum Reactor Pressure Vessel Metal Temperature Vs. Reactor Vessel Pressure	3/4 4-20
Table 4.4.6.1.3-1 Deleted	3/4 4-21
Reactor Steam Dome	3/4 4-22
3/4.4.7 MAIN STEAM LINE ISOLATION VALVES	3/4 4-23
3/4.4.8 STRUCTURAL INTEGRITY	3/4 4-24

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATION

3.4.3.2 Reactor coolant system leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE.
- b. 5 gpm UNIDENTIFIED LEAKAGE.
- c. 30 gpm total leakage.
- d. 25 gpm total leakage averaged over any 24-hour period.
- e. 1 gpm leakage at a reactor coolant system pressure of 950 ± 10 psig from any reactor coolant system pressure isolation valve.**
- f. 2 gpm increase in UNIDENTIFIED LEAKAGE over a 24-hour period.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. With any reactor coolant system leakage greater than the limits in b, c and/or d above, reduce the leakage rate to within the limits within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With any reactor coolant system pressure isolation valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least one other closed manual, deactivated automatic, or check* valves, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With one or more of the high/low pressure interface valve leakage pressure monitors inoperable, restore the inoperable monitor(s) to OPERABLE status within 7 days or verify the pressure to be less than the alarm setpoint at least once per 12 hours; restore the inoperable monitor(s) to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- e. With any reactor coolant system leakage greater than the limit in f above, identify the source of leakage within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

* Which have been verified not to exceed the allowable leakage limit at the last refueling outage or after the last time the valve was disturbed, whichever is more recent.

** Pressure isolation valve leakage is not included in any other allowable operational leakage specified in Section 3.4.3.2.

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.3.2.1 The reactor coolant system leakage shall be demonstrated to be within each of the above limits by:

- a. Monitoring the primary containment atmospheric gaseous radioactivity at least once per 12 hours (not a means of quantifying leakage),
- b. Monitoring the drywell floor drain sump and drywell equipment drain tank flow rate at least once per eight (8) hours,
- c. Monitoring the drywell unit coolers condensate flow rate at least once per 12 hours,
- d. Monitoring the primary containment pressure at least once per 12 hours (not a means of quantifying leakage),
- e. Monitoring the reactor vessel head flange leak detection system at least once per 24 hours, and
- f. Monitoring the primary containment temperature at least once per 24 hours (not a means of quantifying leakage).

4.4.3.2.2 Each reactor coolant system pressure isolation valve shall be demonstrated OPERABLE by leak testing pursuant to Specification 4.0.5 and verifying the leakage of each valve to be within the specified limit:

- a. At least once per 24 months, and
- b. Prior to returning the valve to service following maintenance, repair or replacement work on the valve which could affect its leakage rate.

The provisions of Specification 4.0.4 are not applicable for entry into OPERATIONAL CONDITION 3.

4.4.3.2.3 The high/low pressure interface valve leakage pressure monitors shall be demonstrated OPERABLE with alarm setpoints set less than the specified allowable values by performance of a:

- a. CHANNEL FUNCTIONAL TEST at least once per 31 days, and
- b. CHANNEL CALIBRATION at least once per 24 months.

TABLE 3.4.3.2-1 (Deleted)

THE INFORMATION FROM THIS TECHNICAL SPECIFICATION SECTION HAS
BEEN RELOCATED TO THE TECHNICAL REQUIREMENTS MANUAL (TRM)

REACTOR COOLANT SYSTEM

BASES

3/4.4.3.2 OPERATIONAL LEAKAGE (Continued)

The function of Reactor Coolant System Pressure Isolation Valves (PIVs) is to separate the high pressure Reactor Coolant System from an attached low pressure system. The ACTION requirements for pressure isolation valves are used in conjunction with the system specifications for which PIVs are listed in the Technical Requirements Manual and with primary containment isolation valve requirements to ensure that plant operation is appropriately limited.

The Surveillance Requirements for the RCS pressure isolation valves provide added assurance of valve integrity thereby reducing the probability of gross valve failure and consequent intersystem LOCA. Leakage from the RCS pressure isolation valves is not included in any other allowable operational leakage specified in Section 3.4.3.2.

3/4.4.4 (Deleted) INFORMATION FROM THIS SECTION RELOCATED TO THE TRM

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

<u>SECTION</u>	<u>PAGE</u>
<u>REACTOR COOLANT SYSTEM (Continued)</u>	
Figure 3.4.1.1-1 Deleted	3/4 4-3
Jet Pumps	3/4 4-4
Recirculation Pumps	3/4 4-5
Idle Recirculation Loop Startup	3/4 4-6
3/4.4.2 SAFETY/RELIEF VALVES	3/4 4-7
3/4.4.3 REACTOR COOLANT SYSTEM LEAKAGE	
Leakage Detection Systems	3/4 4-8
Operational Leakage	3/4 4-9
Table 3.4.3.2-1 Deleted	3/4 4-11
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3/4.4.8 STRUCTURAL INTEGRITY	3/4 4-24

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATION

3.4.3.2 Reactor coolant system leakage shall be limited to:

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- b. 5 gpm UNIDENTIFIED LEAKAGE.
- c. 30 gpm total leakage.
- d. 25 gpm total leakage averaged over any 24-hour period.
- e. 1 gpm leakage at a reactor coolant system pressure of 950 ± 10 psig from any reactor coolant system pressure isolation valve.**
- f. 2 gpm increase in UNIDENTIFIED LEAKAGE over a 24-hour period.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.
- b. With any reactor coolant system leakage greater than the limits in b, c and/or d above, reduce the leakage rate to within the limits within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- c. With any reactor coolant system pressure isolation valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least one other closed manual, deactivated automatic, or check* valves, or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- d. With one or more of the high/low pressure interface valve leakage pressure monitors inoperable, restore the inoperable monitor(s) to OPERABLE status within 7 days or verify the pressure to be less than the alarm setpoint at least once per 12 hours; restore the inoperable monitor(s) to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- e. With any reactor coolant system leakage greater than the limit in f above, identify the source of leakage within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

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REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

4.4.3.2.1 The reactor coolant system leakage shall be demonstrated to be within each of the above limits by:

- a. Monitoring the primary containment atmospheric gaseous radioactivity at least once per 12 hours (not a means of quantifying leakage),
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- c. Monitoring the drywell unit coolers condensate flow rate at least once per 12 hours,
- d. Monitoring the primary containment pressure at least once per 12 hours (not a means of quantifying leakage),
- e. Monitoring the reactor vessel head flange leak detection system at least once per 24 hours, and
- f. Monitoring the primary containment temperature at least once per 24 hours (not a means of quantifying leakage).

4.4.3.2.2 Each reactor coolant system pressure isolation valve shall be demonstrated OPERABLE by leak testing pursuant to Specification 4.0.5 and verifying the leakage of each valve to be within the specified limit:

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REACTOR COOLANT SYSTEM

BASES

3/4.4.3.2 OPERATIONAL LEAKAGE (Continued)

The function of Reactor Coolant System Pressure Isolation Valves (PIVs) is to separate the high pressure Reactor Coolant System from an attached low pressure system. The ACTION requirements for pressure isolation valves are used in conjunction with the system specifications for which PIVs are listed in The Technical Requirements Manual and with primary containment isolation valve requirements to ensure that plant operation is appropriately limited.

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