

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.D Primary Containment
Isolation Valves4.7.D Primary Containment
Isolation Valves

1. During reactor power operating conditions, all isolation valves listed in Table 3.7.1 and all instrument line flow check valves shall be operable except as specified in 3.7.D.2.
2. In the event any isolation valve specified in Table 3.7.1 becomes inoperable for isolation, maintain at least one isolation valve operable in the affected penetration that is open and either:
 - a. Restore the inoperable valve to operable status within 4 hours or
 - b. Isolate the affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position*, or
 - c. Isolate the affected penetration within 4 hours by use of at least one closed manual valve* or blind flange; or
 - d. Be in at least Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours.

1. The primary containment isolation valves surveillance shall be performed as follows:
 - a. At least once per operating cycle the operable isolation valves that are power operated and automatically initiated shall be tested for simulated automatic initiation and closure times.
 - b. At least once per quarter:
 - (1) All normally open power operated isolation valves (except for the main steam line power-operated isolation valves) shall be fully closed and reopened.
 - (2) With the reactor power less than 75% trip main steam isolation valves individually and verify closure time.
 - c. At least once per week the main steam line power-operated isolation valves shall be exercised by partial closure and subsequent reopening.
 - d. At least once per operating cycle the operability of the reactor coolant system instrument line flow check valves shall be verified.

2. Whenever an isolation valve listed in Table 3.7.1 is inoperable, the position of at least one other valve in each line having an inoperable valve shall be recorded daily.

* Isolation valves closed to satisfy these requirements may be reopened on an intermittent basis under administrative control.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS3.7.2 Large Containment Ventilation Isolation Valves

1. The 18 inch containment ventilation isolation valves shall be operated in accordance with specification 3.7.D and with specifications 3.7.E.2 and 3.7.E.3 below.
2. When the reactor pressure is greater than 100 psig, the reactor critical, and the reactor mode switch in the "Startup" or "Run" mode, primary containment purging shall be subject to the following restrictions:
 - a. The time a flow path exists shall be limited to a combined total of 180 hours per calendar year for both units (Peach Bottom Units 2 and 3) except that unused time (difference between 180 hours and actual annual purging time) may be carried over to following years, provided that the total purging time for both units in any one year does not exceed 270 hours.
 - b. The flow paths subject to this specification are listed below:

3. The isolation valves specified in Table 3.7.1 shall be demonstrated to be operable prior to returning to service after maintenance on or replacement of the valve, actuator, control or power circuit by performance of a cycling test, and verification of isolation time.

4.7.E Large Containment Ventilation Isolation Valves

1. The inflatable seals for the large containment ventilation isolation valves shall be replaced at least once every third refueling outage.
2. The LLRT leak rate for the large containment ventilation isolation valves shall be compared to the rate to detect excessive valve degradation.

LIMITING CONDITIONS FOR OPERATIONSURVEILLANCE REQUIREMENTS

<u>Penetration</u>	<u>Flow Path Valves</u>
N25	AO-2505 - AO-2520 AO-2519 - AO-2520
N26	AO-2506 - AO-2507
N205B	AO-2521A - AO-2521B AO-2519 - AO-2521B
N219	AO-2511 - AO-2512

- c. Only one of two SGTS trains shall be used for containment purging at a time.
 - d. Both SGTS trains shall be operable when purging containment under the above conditions.
3. At least one large containment ventilation isolation valve shall remain closed, except when needed to purge as permitted by specification 3.7.A.5.b, or for any other safety-related reason.

3.7.E & 4.7.E BASES

Large Containment Ventilation Valves

The containment ventilation isolation valves are subject to the restrictions of Specification 3.7.E.2 to limit the total time that a flow path exists through certain containment penetrations. The limit ensures that the average annual purging time per unit remains below 90 hours (1% of a calendar year). Consequently, the impact on plant risks resulting from a LOCA while purging and the potential for failure of the Standby Gas Treatment System contribute little to the likelihood of an uncontrolled radioactive release.

Additionally, containment purging is permitted only for safety-related reasons. The NRC guidance considers safety-related reasons to include inerting, de-inerting, and pressure control of the containment environment. The guidance excludes purging for humidity and temperature control.

The T-ring inflatable seal in the valves assures very low rates of leakage. Following valve closure, the seal chamber is automatically pressurized, establishing a tight seal against the periphery of the closed butterfly disc. The seal is subject to some compression set over a period of time due to radiation and temperature effects. This phenomena will not be a problem for the Peach Bottom valves because the inflatable T-ring seal maintains a constant and uniform sealing compression. However, as a preventive maintenance measure, the seals will be replaced every third refueling outage, which approximates the manufacturer's recommendations of every four years.