LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont)

A. Primary Containment (Cont)

Primary Containment Integrity

2. a. Primary containment integrity shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel except while performing "open vessel" physics test at power levels not to exceed 5 Mw(t).

Primary containment integrity means that the drywell and pressure suppression chamber are intact and that all of the following conditions are satisfied:

1. All manual containment isolation valves on lines connected to the reactor coolant system or containment which are not required to be open during accident conditions are closed.
2. At least one door in each airlock is closed and sealed.
3. All blind flanges and manways are closed.
4. All automatic primary containment isolation valves and all instrument line flow check valves are operable except as specified in 3.7.A.2.b.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont)

A. Primary Containment (Cont)

Primary Containment Integrity

2. a. The primary containment integrity shall be demonstrated by performing Primary Containment Leak Tests in accordance with 10CFR50 Appendix J, Option B and Regulatory Guide 1.163 dated September 1995*, with exemptions as approved by the NRC and exceptions as follows:

1. The main steam line isolation valves shall be tested at a pressure $\geq$23 psig, and normalized to a value equivalent to P_a.
2. Personnel air lock door seals shall be tested at a pressure $\geq$10 psig. Results shall be normalized to a value equivalent to P_a.
3. Leakage rate acceptance criteria are:
   1. Primary containment overall leakage rate acceptance criterion is $\leq 1.0\ L_a$. During the first unit startup following testing in accordance with the Containment Leakage Rate Testing Program, the leakage rate acceptance criteria are $\leq 0.60\ L_a$ for the Type B and Type C tests and $\leq 0.75\ L_a$ for the Type A tests.
   2. Overall air lock leakage rate is $\leq 0.05\ L_a$ when tested at $\geq P_a$.
   3. Door seals leakage rate is $\leq 0.01\ L_a$ when pressurized to $\geq$ 10 psig.

* The definition of Surveillance Frequency is not applicable to Leak Rate Tests.

LIMITING CONDITIONS FOR OPERATION

3.7 CONTAINMENT SYSTEMS (Cont)

A. Primary Containment (Cont)

5. All containment isolation check valves are operable or at least one containment isolation valve in each line having an inoperable valve is secured in the isolated position.**

Primary Containment Isolation Valves

2. b. In the event any automatic Primary Containment Isolation Valve becomes inoperable, at least one containment isolation valve in each line having an inoperable valve shall be deactivated in the isolated condition. (This requirement may be satisfied by deactivating the inoperable valve in the isolated condition. Deactivation means to electrically or pneumatically disarm, or otherwise secure the valve.)*

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

** Check valve 30-CK-432 will be considered operable until reverse flow testing is performed no later than the 1998 maintenance outage.

SURVEILLANCE REQUIREMENTS

4.7 CONTAINMENT SYSTEMS (Cont)

A. Primary Containment (Cont)

4. Combined main steam lines: 46 scfh @ 23 psig.

where,

P_a = 45 psig
L_a = 1.0% by weight of the contained air @ 45 psig for 24 hrs.

4. NEI 94-01-1995. Section 9.2.3: The first Type A test performed after the May 25, 1995 Type A test shall be performed no later than May 25, 2010.

Primary Containment Isolation Valves

2. b. 1. The primary containment isolation valves surveillance shall be performed as follows:

a. At least once per operating cycle the operable primary containment isolation valves that are power operated and automatically initiated shall be tested for simulated automatic initiation and closure times.

b. Test primary containment isolation valves:

1. Verify power operated primary containment isolation valve operability as specified in 3.13.

2. Verify main steam isolation valve operability as specified in 3.13.

capability of the structure over its service lifetime. Additional margin to maintain the containment in the "as built" condition is achieved by establishing the allowable operational leak rate. The allowable operational leak rate is derived by multiplying the maximum allowable leak rate or the allowable test leak rate by 0.75 thereby providing a 25% margin to allow for leakage deterioration which may occur during the period between leak rate tests.

The primary containment leakage rate testing is based on the guidelines in Regulatory Guide 1.163 dated September 1995, NEI 94-01 Revision 0 dated July 25, 1995, and ANSI/ANS 56.8-1994. Specific acceptance criteria for as-found and as-left leakage rates, as well as methods of defining the leakage rates, are contained in the primary containment leakage rate testing program.

The primary containment leak rate test frequency is based on maintaining adequate assurance that the leak rate remains within the specification. The leak rate test frequency is in accordance with 10CFR50 App. J, Option B and Regulatory Guide 1.163 dated September 1995.

Type A, Type B, and Type C tests will be performed using the technical methods and techniques specified in ANSI/ANS 56.8 - 1994, or other alternative testing methods approved by the NRC.

A note is included in Surveillance 4.7.A.2.a stating that the definition of Surveillance Frequency is not applicable. The 25% allowable extension of surveillance intervals is already included in the primary containment leakage rate testing program; therefore, an additional 25% is not allowed.

The penetration and air purge piping leakage test frequency, along with the containment leak rate tests, is adequate to allow detection of leakage trends. Whenever a bolted double-gasketed penetration is broken and remade, the space between the gaskets is pressurized to determine that the seals are performing properly. It is expected that the majority of the leakage from valves, penetrations and seals would be into the reactor building. However, it is possible that leakage into other parts of the facility could occur. Such leakage paths that may affect significantly the consequences of accidents are to be minimized. The personnel air lock is tested at 10 psig, because the inboard door is not designed to shut in the opposite direction.

Primary Containment Isolation Valves

Double isolation valves are provided on lines penetrating the primary containment and open to the free space of the containment. Closure of one of the valves in each line would be sufficient to maintain the integrity of the pressure suppression system. Automatic initiation is required to minimize the potential leakage paths from the containment in the event of a loss of coolant accident.