Enclosure 5 to SERIAL HNP-99-083

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SHEARON HARRIS NUCLEAR POWER PLANT NRC DOCKET NO. 50-400/LICENSE NO. NPF-63 REQUEST FOR LICENSE AMENDMENT CONTAINMENT INTEGRATED LEAKAGE RATE TESTING

TECHNICAL SPECIFICATION PAGES

· 3/4.6 CONTAINMENT SYSTIS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations^{**} not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-1 of Specification 3.6.3;

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- b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3; and
- c. After each closing of each penetration subject to Type B testing, except the containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at a pressure not less than P_a , $(41/p_s)(g)$, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.20. for all other Type B and C penetrations, the combined leakage rate is less than 0.60 L_a.

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^{*} Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92.days.

[#] Valves CP-B3, CP-B7, and CM-B5 may be verified at least once per 31 days by manual remote keylock switch position.

CONTAINMEN CONTAINMEN	IT SYSTEMS	Within limit Containment Testing Prog	specified in the Leakage Rate rum. Add	
L'IMITING CONDITION FOR OPERATION				
3.6.1.2 C	containment leakage rate	s shall be limited to:)	
a.	An overall integrated 0.10% by weight of the 41 psig.	<u>leakage rate</u> of less t e containment air per 2	han or equal to L _a . 4 hours at P _a . Delete	
b.	A combined leakage rat penetrations and valve pressurized to P _a .	te to less than or equa es subject to Type B an	l to 0.60 L, for all d C tests, when	

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With either the measured overall integrated containment leakage rate exceeding 0.75 L_a, or the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding 0.60 L_a, restore the overall integrated leakage rate to less than 0.75 L_a, and the combined leakage rate for all penetrations subject to Type B and C tests to less than 0.60 L_a prior to increasing the Reactor Coolant System temperature above 200°F.

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SURVEILLANCE_REQUIREMENTS

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4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR Part 50 using the methods and provisions of ANSI N45.4-1972, or a test of less than 24 hours duration may be permitted if performed using the criteria contained in Bechtel Topical Report BN-TOP-1. Rev. 1. November 1, 1972, "Testing Criteria for Integrated Leakage Rate Testing of Primary Containment Structures for Nuclear Power Plants." In addition to the BN-TOP-1 criteria, the Mass Point technique will be used to calculate the leakage rate.

a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 \pm 10 month intervals during shutdown at a pressure not less than P_a during each 10-year service

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The Type A containment leakage rate tests shall be performed in accordance with the Containment Leakage Rate Testing Program described in Technical Specification 6.8.4.k. The Type B and Type C containment leakage rate tests shall be demonstrated at the test schedule and shall be determined in conformance with the criteria specified in 10 CFR 50 Appendix J, Option A.

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CONTAINMENT LEAKAGE

SURVEILLANCE REQUIREMENTS (Continued)



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CONTAINMENT AIR LOCKS

SÜRVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. Within 72 hours following each closing, except when the air lock is being used for multiple entries, then at least once per 72 hours, by verifying seal leakage is less than $0.01 L_a$ as determined by precision flow measurements when measured for at least 30 seconds with the volume between the seals at a constant pressure of $(41 \text{ psig}; P_a; -Add)$
- b. By conducting overall air lock leakage tests at not less than P_a , and verifying the overall air lock leakage rate is within its limit:
 - 1. At least once per 6 months, and
 - 2. Prior to establishing CONTAINMENT INTEGRITY when maintenance has been performed on the air lock that could affect the air lock sealing capability.
- c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

The provisions of Specification 4.0.2 are not applicable.

Add Amendment No

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This represents an exemption to Appendix J, paragraph III.D.2 of 10 CFR Part 50.

CONTAINMENT VESSEL STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.6 The structural integrity of the containment vessel shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6.1.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With the structural integrity of the containment vessel not conforming to the above requirements, restore the structural integrity to within the limits within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.6.1 <u>Containment Vessel Surfaces</u>. The structural integrity of the exposed accessible interior and exterior surfaces of the containment vessel, including the liner plate, shall be determined, during the shutdown for each Type A containment leakage rate test (reference Specification 4.6.1.2), by a visual inspection of these surfaces. This inspection shall be performed prior to the Type A containment leakage rate test to verify no apparent changes in appearance or other abnormal degradation. (Add Insert 2)

4.6.1.6.2 <u>Reports</u>. Any abnormal degradation of the containment vessel structure detected during the above required inspections shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 15 days. This report shall include a description of the condition of the concrete, the inspection procedure, the tolerances on cracking, and the corrective actions taken.

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Additional inspections shall be conducted during two other refueling outages before the next Type A test if the interval for the Type A test has been extended to 10 years.

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3/4.6 CONTAINMENT SYS

BASES

3/4.6.1 PRIMARY CONTAINMENT

3/4.6.1.1 CONTAINMENT INTEGRITY

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the safety analyses. This restriction, in conjunction with the leakage rate limitation, will limit the SITE BOUNDARY radiation doses to within the dose guideline values of 10 CFR Part 100 during accident conditions.

3/4.6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the safety analyses at the peak accident pressure, Pa. As an added conservatism, the measured overall integrated leakage rate is further limited to less than or equal to 0.75 L_a. during performance of the periodic test, to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates is consistent with the requirements of Appendix J of 10 CFR Part 5003 Add Add Insert3 . Delete

A one time extension of the test interval specified in Surveillance Requirement 4.6.1.2.a is allowed for performance of the third Type A test of the first 10-year service period during Refueling Outage No. 7.

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provides assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that: (1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of -2 psig, and (2) the containment peak pressure does not exceed the design pressure of 45 psig.

Delete The maximum peak pressure expected to be obtained from a postulated main steam, line break event is 41.2 psig using a value of 1.9 psig for initial positive containment pressure. However, since the instrument tolerance for containment pressure is 1.32 psig and the high-one setpoint is 3.0 psig, the pressure limit was reduced from the high-one setpoint by slightly more than the tolerance and was set at 1.6 psig. This value will prevent spurious safety injection signals caused by instrument drift during normal operation. The -1" wg was chosen to be consistent with the initial assumptions of the HNP-96-064 Add accident analyses.

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Option A for Type B and C tests, and the Containment Leakage Rate Testing Program for Type A tests.

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BASES

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the safety analysis for a LOCA or steam line break accident. Measurements shall be made at all listed locations, whether by fixed or portable instruments, prior to determining the average air temperature.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the Structural integrity is required to ensure that the containment facility. will withstand the maximum pressure of a postulated main steam line break accident (41.2 psig). A visual inspection in conjunction with the Type A leakage tests is sufficient to demonstrate this capability. Containment Leakage Rate Testing Program All Delete. Delete

3/4.6.1.7 CONTAINMENT VENTILATION SYSTEM

The 42-inch containment preentry purge makeup and exhaust isolation valves are required to be sealed closed during plant operations in MODES 1, 2, 3 and 4 since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Maintaining these valves sealed closed during these MODES ensures that excessive quantities of radioactive materials will not be released via the Pre-entry Containment Purge System. To provide assurance that these containment valves cannot be inadvertently opened, the valves are sealed closed in accordance with Standard Review Plan 6.2.4 which includes mechanical devices to seal or lock the valve closed, or prevents power from being supplied to the valve operator.

The use of the Normal Containment Purge System is restricted to the 8-inch purge makeup and exhaust isolation valves since, unlike the 42-inch valves, the 8-inch valves are capable of closing during a LOCA or steam line break accident. Therefore, the SITE BOUNDARY dose guideline of 10 CFR Part 100 would not be exceeded in the event of an accident during normal containment PURGING operation. The total time the Normal Containment Purge System isolation valves may be open during MODES 1, 2, 3, and 4 in a calendar year is a function of anticipated need and operating experience. Only safety-related reasons; e.g., containment pressure control or the reduction of airborne radioactivity to facilitate personnel access for surveillance and maintenance activities, may be used to justify the opening of these isolation valves during MODES 1, 2, 3, and 4.

Leakage integrity tests with a maximum allowable leakage rate for containment purge makeup and exhaust supply valves will provide early indication of resilient material seal degradation and will allow opportunity for repair before

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PROCEDURES AND PROGRAMS (Continued)

- h. <u>Radioactive Effluent Controls Program (Cont.)</u>
 - 8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
 - 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50, and
 - 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.
 - i. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.
- j. Gas Storage Tank Radioactivity Monitoring Program

A program shall be provided for the control of the quantity of radioactivity contained in gas storage tanks. The gaseous radioactivity quantities shall be determined following the methodology in Branch Technical Position (BTP) ETSB 11-5. "Postulated Radioactive Release due to Waste Gas System Leak or Failure."

The program shall include surveillance provisions to ensure that the quantity of radioactivity contained in each gas storage tank is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

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PROCEDURES AND PROGRAMS (Continued)

k. Containment Leakage Rate Testing Program

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54 (o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in conformance with the NRC Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, with the following exception noted:

1. The above Containment Leakage Rate Testing Program is only applicable to Type A testing. Type B and C testing shall continue to be conducted in accordance with the original commitment to 10 CFR 50 Appendix J, Option A.

The calculated peak containment internal pressure related to the design basis loss-ofcoolant accident is 38.4 psig. The calculated peak containment internal pressure related to the design basis main steam line break is 41.2 psig. P_a will conservatively be assumed to be 41.2 psig for the purpose of containment testing in accordance with this Technical Specification.

The maximum allowable containment leakage rate, L_a at P_a , shall be 0.1 % of containment air weight per day.

The containment overall leakage rate acceptance criterion is $\leq 1.0 L_a$. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are $\leq 0.60 L_a$ for the combined Type B and Type C tests, and $\leq 0.75 L_a$ for Type A tests.

The provisions of Surveillance Requirement 4.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program. However, test frequencies specified in this Program may be extended consistent with the guidance provided in Nuclear Energy Institute (NEI) 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50 Appendix J," as endorsed by Regulatory Guide 1.163. Specifically, NEI 94-01 has this provision for test frequency extension:

1. Consistent with standard scheduling practices for Technical Specifications Required Surveillances, intervals for recommended Type A testing may be extended by up to 15 months. This option should be used only in cases where refueling schedules have been changed to accommodate other factors.

The provisions of Surveillance Requirement 4.0.3 are applicable to the Containment Leakage Rate Testing Program.

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within 1 hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REOUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

- At least once per 31 days by verifying that all penetrations*# not a. capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-1 of Specification 3.6.3:
- By verifying that each containment air lock is in compliance with b. the requirements of Specification 3.6.1.3; and
- After each closing of each penetration subject to Type B testing, except the containment air locks, if opened following a Type A or С. B test, by leak rate testing the seal with gas at a pressure not less than P_a , and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2a. for all other Type B and C penetrations, the combined leakage rate is less than 0.60 L_a .

Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that such verification need not be performed more often than once per 92 days. Valves CP-B3, CP-B7, and CM-B5 may be verified at least once per 31 days by

manual remote keylock switch position.

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate within limits specified in the Containment Leakage Rate Testing Program.
- b. A combined leakage rate to less than or equal to $0.60 L_a$ for all penetrations and valves subject to Type B and C tests, when pressurized to P_a .

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

With either the measured overall integrated containment leakage rate exceeding 0.75 L_a, or the measured combined leakage rate for all penetrations and valves subject to Types B and C tests exceeding 0.60 L_a, restore the overall integrated leakage rate to less than 0.75 L_a, and the combined leakage rate . for all penetrations subject to Type B and C tests to less than 0.60 L_a prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.2 The Type A containment leakage rate tests shall be performed in accordance with the Containment Leakage Rate Testing Program described in Technical Specification 6.8.4.k. The Type B and Type C containment leakage rate tests shall be demonstrated at the test schedule and shall be determined in conformance with the criteria specified in 10 CFR 50 Appendix J, Option A.





CONTAINMENT LEAKAGE

SURVEILLANCE REQUIREMENTS (Continued)

- Type B and C tests shall be conducted with gas at a pressure not less than P_a , at intervals no greater than 24 months except for a. tests involving:
 - Air locks, 1.
 - Containment purge makeup and exhaust isolation valves with resilient material seals; 2.
- Air locks shall be tested and demonstrated OPERABLE by the b. requirements of Specification 4.6.1.3:
- Purge makeup and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE by the с. requirements of Specification 4.6.1.7.2;
- The provisions of Specification 4.0.2 are not applicable. d.

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CONTAINMENT AIR LOCKS

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

- a. Within 72 hours following each closing, except when the air lock is being used for multiple entries, then at least once per 72 hours, by verifying seal leakage is less than $0.01 L_a$ as determined by precision flow measurements when measured for at least 30 seconds with the volume between the seals at a constant pressure of P_a ;
- b. By conducting overall air lock leakage tests at not less than P_a , and verifying the overall air lock leakage rate is within its limit:
 - 1. At least once per 6 months, and
 - 2. Prior to establishing CONTAINMENT INTEGRITY when maintenance has been performed on the air lock that could affect the air lock sealing capability.
- c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

[•] The provisions of Specification 4.0.2 are not applicable.

This represents an exemption to Appendix J, paragraph III.D.2 of 10 CFR Part 50.

CONTAINMENT VESSEL STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.6 The structural integrity of the containment vessel shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.6.1.

<u>APPLICABILITY</u>: MODES 1, 2, 3, and 4.

ACTION:

With the structural integrity of the containment vessel not conforming to the above requirements, restore the structural integrity to within the limits within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.6.1 <u>Containment Vessel Surfaces</u>. The structural integrity of the exposed accessible interior and exterior surfaces of the containment vessel, including the liner plate, shall be determined, during the shutdown for each Type A containment leakage rate test (reference Specification 4.6.1.2), by a visual inspection of these surfaces. This inspection shall be performed prior to the Type A containment leakage rate test to verify no apparent changes in appearance or other abnormal degradation. Additional inspections shall be conducted during two other refueling outages before the next Type A test if the interval for the Type A test has been extended to 10 years.

4.6.1.6.2 <u>Reports</u>. Any abnormal degradation of the containment vessel structure detected during the above required inspections shall be reported to the Commission in a Special Report pursuant to Specification 6.9.2 within 15 days. This report shall include a description of the condition of the concrete, the inspection procedure, the tolerances on cracking, and the corrective actions taken.

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· 3/4.6 CONTAINMENT SYSTEMS

BASES

3/4.6.1 PRIMARY CONTAINMENT

3/4.6.1.1 CONTAINMENT INTEGRITY

Primary CONTAINMENT INTEGRITY ensures that the release of radioactive materials from the containment atmosphere will be restricted to those leakage paths and associated leak rates assumed in the safety analyses. This restriction, in conjunction with the leakage rate limitation, will limit the SITE BOUNDARY radiation doses to within the dose guideline values of 10 CFR Part 100 during accident conditions.

3/4.6.1.2 CONTAINMENT LEAKAGE

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the safety analyses at the peak accident pressure. P_a . As an added conservätism, the measured overall integrated leakage rate is further limited to less than or equal to 0.75 L_a , during performance of the periodic test, to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates is consistent with the requirements of Appendix J of 10 CFR Part 50. Option A for Type B and C tests. and the Containment Leakage Rate Testing Program for Type A tests.

3/4.6.1.3 CONTAINMENT AIR LOCKS

The limitations on closure and leak rate for the containment air locks are required to meet the restrictions on CONTAINMENT INTEGRITY and containment leak rate. Surveillance testing of the air lock seals provides assurance that the overall air lock leakage will not become excessive due to seal damage during the intervals between air lock leakage tests.

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that: (1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of -2 psig, and (2) the containment peak pressure does not exceed the design pressure of 45 psig.

The maximum peak pressure expected to be obtained from a postulated main steam line break event is 41.2 psig using a value of 1.9 psig for initial positive containment pressure. However, since the instrument tolerance for containment pressure is 1.32 psig and the high-one setpoint is 3.0 psig, the pressure limit was reduced from the high-one setpoint by slightly more than the tolerance and was set at 1.6 psig. This value will prevent spurious safety injection signals caused by instrument drift during normal operation. The -1" wg was chosen to be consistent with the initial assumptions of the accident analyses.

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3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the safety analysis for a LOCA or steam line break accident. Measurements shall be made at all listed locations, whether by fixed or portable instruments, prior to determining the average air temperature.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the maximum pressure of a postulated main steam line break accident (41.2 psig). A visual inspection in conjunction with the Containment Leakage Rate Testing Program is sufficient to demonstrate this capability.

3/4.6.1.7 CONTAINMENT VENTILATION_SYSTEM

The 42-inch containment preentry purge makeup and exhaust isolation valves are required to be sealed closed during plant operations in MODES 1. 2. 3 and 4 since these valves have not been demonstrated capable of closing during a LOCA or steam line break accident. Maintaining these valves sealed closed during these MODES ensures that excessive quantities of radioactive materials will not be released via the Pre-entry Containment Purge System. To provide assurance that these containment valves cannot be inadvertently opened, the valves are sealed closed in accordance with Standard Review Plan 6.2.4 which includes mechanical devices to seal or lock the valve closed, or prevents power from being supplied to the valve operator.

The use of the Normal Containment Purge System is restricted to the 8-inch purge makeup and exhaust isolation valves since. unlike the 42-inch valves, the 8-inch valves are capable of closing during a LOCA or steam line break accident. Therefore, the SITE BOUNDARY dose guideline of 10 CFR Part 100 would not be exceeded in the event of an accident during normal containment PURGING operation. The total time the Normal Containment Purge System isolation valves may be open during MODES 1, 2, 3, and 4 in a calendar year is a function of anticipated need and operating experience. Only safety-related reasons; e.g., containment pressure control or the reduction of airborne radioactivity to facilitate personnel access for surveillance and maintenance activities, may be used to justify the opening of these isolation valves during MODES 1, 2, 3, and 4.

Leakage integrity tests with a maximum allowable leakage rate for containment purge makeup and exhaust supply valves will provide early indication of resilient material seal degradation and will allow opportunity for repair before

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PROCEDURES AND PROGRAMS (Continued)

k. <u>Containment Leakage Rate Testing Program</u>

A program shall be established to implement the leakage rate testing of the containment as required by 10 CFR 50.54 (o) and 10 CFR 50 Appendix J, Option B, as modified by approved exemptions. This program shall be in conformance with the NRC Regulatory Guide 1.163, "Performance-Based Containment Leak-Test Program," dated September 1995, with the following exception noted:

1) The above Containment Leakage Rate Testing Program is only applicable to Type A testing. Type B and C testing shall continue to be conducted in accordance with the original commitment to 10 CFR 50 Appendix J. Option A.

The calculated peak containment internal pressure related to the design basis loss-of-coolant accident is 38.4 psig. The calculated peak containment internal pressure related to the design basis main steam line break is 41.2 psig. P_a will conservatively be assumed to be 41.2 psig for the purpose of containment testing in accordance with this Technical Specification.

The maximum allowable containment leakage rate, L_a at P_a , shall be 0.1 % of containment air weight per day.

The containment overall leakage rate acceptance criterion is ≤ 1.0 L_a. During the first unit startup following testing in accordance with this program, the leakage rate acceptance criteria are ≤ 0.60 L_a for the combined Type B and Type C tests, and ≤ 0.75 L_a for Type A tests.

The provisions of Surveillance Requirement 4.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program. However, test frequencies specified in this Program may be extended consistent with the guidance provided in Nuclear Energy Institute (NEI) 94-01, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50 Appendix J," as endorsed by Regulatory Guide 1.163. Specifically, NEI 94-01 has this provision for test frequency extension:

 Consistent with standard scheduling practices for Technical Specifications Required Surveillances, intervals for recommended Type A testing may be extended by up to 15 months. This option should be used only in cases where refueling schedules have been changed to accommodate other factors.

The provisons of Surveillance Requirement 4.0.3 are applicable to the Containment Leakage Rate Testing Program.