

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 REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

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- 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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
- b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
- c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P 49.5 psig and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2¢. for all other Type B and C penetrations, the combined leakage rate/is less than or equal to 0.60 L₂.

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.

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AMENDMENT NO. 17



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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a , 49.5 psig, or
 - 2. Less than or equal to L_t , 0.05% by weight of the containment air per 24 hours at a reduced pressure of P_t , 24.8 psig.
- b. A combined leakage rate of less than or equal to 0.60 L_a for all penetrations and values subject to Type B and C tests, when pressurized to P_a .

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

ACTION:

With either (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with 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 or equal to 0.75 L_a or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

a. -Three-Type A tests-(Overall-Integrated-Containment-Leakage-Rate) -shall-be-conducted-at-40-±-10-month-intervals-during-shutdown-at--either P_a 49.5-psig-or-at-P_t 24.8-psig-during-each-10-year-service -period. The-third-test_of-each-set-shall-be-conducted-during-the--shutdown-for-the-10-year-plant-inservice-inspection.

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued).

- b. If any periodic Type A-test fails to meet either 0.75 L_a or 0.75 L_t, -the test schedule for subsequent Type A tests shall be reviewed and -approved by the Commission. If two consecutive Type A tests fail to meet either 0.75 L_a or 0.75 L_t, a Type A test-shall be performed at least every 18 months until two consecutive Type A tests meet either 0.75 L_a or 0.75 L_t at which time the above test schedule may be resumed.
- -c.---The accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplementaltest-which:
 - 1. Confirms-the-accuracy-of-the-Type-A-test-by-verifying-that-the--supplemental-test-result-L_minus-the-sum-of-the-Type-A-testresult, L_m, and-the-superimposed-leak-rate, L_, is-equal-to--or-less-than-0.25-L_a.
 - -2.----Has-a-duration-sufficient-to-establish-accurately-the-change-in--leakage-rate-between-the-Type-A-test-and-the-supplemental-test:
 - -3.----Requires-that-the-rate-at-which-gas-is-injected-into-the-contain--ment-or-bled-from-the-containment-during-the-supplemental-test--is-between-0.75-L_-and-1.25-L_a.
- b. $\not a$. Type B and C tests shall be conducted with gas at P_a, 49.5 psig, at intervals no greater than 24 months except for tests involving:
 - 1. Air locks,
 - 2. Purge supply and exhaust isolation valves with resilient material seals.
- c. ¢. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- d. f. Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.
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. The provisions of Specification 4.0.2 are not applicable.

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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 REQUIREMENTS

4.6.1.1 Primary.CONTAINMENT INTEGRITY shall be demonstrated:

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- 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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
- b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
- c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a 49.5 psig and.

verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2¢. for all other Type B and C penetrations, the combined leakage rate/is less than or equal to 0.60 L.

*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.

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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a , 49.5 psig, or
 - 2. Less than or equal to L_t , 0.05% by weight of the containment air per 24 hours at a reduced pressure of P₊, 24.8 psig.
- b. A combined leakage rate of 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 (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with the measured combined leakage rate for all penetrations and valves subject to Types 8 and C tests exceeding 0.60 L_a , restore the overall integrated leakage rate to less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type 8 and C tests to less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type 8 and C tests to less than or equal to 0.60 L_a prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

a: -Three-Type-A-tests-(Overall-Integrated-Containment-Leakage-Rate)--shall-be-conducted-at-40-±-10-month-intervals-during-shutdown-at--either-P_a-49.5-psig-or-at-P_t-24.8-psig-during-each-10-year-service -period.--The-third-test-of-each-set-shall-be-conducted-during-theshutdown-for-the-10-year-plant-inservice-inspection.

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- <u>-If-any-periodic-Type-A-test-fails-to-meet-either-0.75-L_ or 0.75-</u> ኯ -the-test-schedule-for-subsequent-Type-A-tests-shall-be-reviewed and- -approved-by-the-Commission. If-two-consecutive-Type A tests fail-tomeet_either_0.75_L_or_0.75_Lt, a-Type_A_test_shall-be-performed_at-least_every_18_months_until_two-consecutive_Type_A_tests_meet_either 0.75 La or 0.75 Lt at which time the above test schedule may be -resumed:
- The-accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplementaltest_which:
 - -<u>Confirms_the_accuracy_of_the_Type_A_test_by_verifying_that_the-</u> -supplemental_test_result, L_, minus_the_sum_of_the_Type_A-test--result, Lam, and the superimposed leak rate, Lo, is equal to or less than 0.25 L-
 - Has a duration-sufficient to establish accurately the change inleakage-rate-between-the-Type-A-test-and-the-supplemental-test:
 - <u>-Requires that the rate at which gas is injected into the contain-</u> -ment-or-bled-from-the-containment-during-the-supplemental-test -is-between-0.75 La and 1.25 La.
- Type B and C tests shall be conducted with gas at P_{a} , 49.5 psig, b. A. at intervals no greater than 24 months except for tests involving:
 - Air locks, 1.
 - Purge supply and exhaust isolation valves with resilient 2. material seals.
- Purge supply and exhaust isolation valves with resilient material c. ¢. seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- Air locks shall be tested and demonstrated OPERABLE per Specification d, 1. 4.6.1.3.
- The provisions of Specification 4.0.2 are not applicable. e. g.

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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.

FOR INFORMATION ON

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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
 - b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
 - c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a 49.5 psig and

verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2*d*. for all other Type B and C penetrations, the combined leakage rate is less than or equal to 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.

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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

- 3.6.1.2 Containment leakage rates shall be limited to:
 - a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a, 49.5 psig, or
 - 2. Less than or equal to L_t , 0.05% by weight of the containment air per 24 hours at a reduced pressure of P_t , 24.8 psig.
 - b. A combined leakage rate of 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 (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with 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 or equal to 0.75 L_a , or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a , restore the overall integrated leakage rate to less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

a. <u>-Three-Type-A-tests-(Overall-Integrated-Containment-Leakage-Rate)</u> <u>-shall-be-conducted-at-40-±-10-month-intervals-during-shutdown-at-</u> <u>-either-P_a-49.5-psig-or-at-P_t-24.8-psig-during-each-10-year-service</u> <u>-period.</u> <u>The third-test-of-each-set shall-be-conducted-during-the-</u> <u>-shutdown-for-the-10-year-plant-inservice-inspection.</u>

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

PALO VERDE - UNIT 3

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- -b. If any periodic Type A test fails to meet either 0.75 La or 0.75 Lt, -the test schedule for subsequent Type A tests shall be reviewed and -approved by the Commission. If two consecutive Type A tests fail to 'meet either 0.75 La or 0.75 Lt, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet either -0.75 La or 0.75 Lt a which time the above test schedule may be -resumed:
- -G.---The-accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplementaltest-which:
 - 1.——Confirms-the-accuracy-of-the-Type-A-test-by-verifying-that-thesupplemental-test-result, L_c, minus-the-sum-of-the-Type-A-test--result, L_{am}, and the superimposed-leak-rate, L_o, is equal to or-less-than-0.25-L_a.
 - 2.----Has-a-duration-sufficient-to-establish-accurately-the-change-in--leakage-rate-between-the-Type-A-test-and-the-supplemental-test-
 - 3.----Requires-that-the-rate-at-which-gas-is-injected-into-the-contain--ment-or-bled-from-the-containment-during-the-supplemental-test----is-between-0.75-L_-and-1.25-L_.
- b. α . Type B and C tests shall be conducted with gas at P_a, 49.5 psig, at intervals no greater than 24 months except for tests involving:
 - 1. Air locks,
 - Purge supply and exhaust isolation valves with resilient material seals.
- c. e. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- d. f. Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.
- e. g'. The provisions of Specification 4.0.2 are not applicable.

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ENCLOSURE

PROPOSED AMENDMENT TO TECHNICAL SPECIFICATION

SECTION 3/4.3.6.1.2

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A. DESCRIPTION OF THE PROPOSED AMENDMENT REQUEST

The proposed amendment to Technical Specification (TS) 3/4.3.6.1.2 makes the following specific changes to the Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2, and 3 TS:

- * Revises Surveillance Requirement 4.6.1.2.a to remove the specific requirement that the Type A tests be performed at 40 \pm 10 month intervals with the third test of each set conducted during the shutdown for the 10-year plant inservice inspection and replace it with the following:
 - "Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions."
- * Deletes Surveillance Requirements 4.6.1.2.b and 4.6.1.2.c. These Type A test requirements are also specified in Appendix J to 10 CFR 50. Therefore, it is not necessary to repeat these requirements in the TS.
- * Renumbers the remaining surveillance requirements for continuity. This is an administrative change. Consistent with the renumbering, the reference in Specification 4.6.1.1.c is revised from "Specification 4.6.1.2.d" to "Specification 4.6.1.2.b."

B. PURPOSE OF THE TECHNICAL SPECIFICATION

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The TS required schedule provides only a 20-month window for scheduling of Type A tests. This requirement is not appropriate for a facility like PVNGS which uses an 18-month fuel cycle. An 18-month fuel cycle does not provide sufficient flexibility for three tests within a 10-year service period when limited by the stipulation that the tests be performed at 40 \pm 10 month schedules.

Experience at other units has demonstrated that the current TS test interval is too prescriptive. At the North Anna Power Station (which uses 18-month cycles) both units had to submit TS change requests to deviate from the TS specified Type A test schedule to allow the third test to coincide with the 10-year inservice inspection period. Virginia Electric and Power Company also submitted a similar amendment request on July 2, 1993. This was also recognized as part of the TS Improvement Program and as a result, NUREG-1432, "Standard TS Combustion Engineering Plants" only references Appendix J to 10 CFR 50 requirements for Type A tests.

To meet the current TS requirements of Type A testing every 30 to 50 months, a plant operating on an 18-month fuel cycle must perform a Type A test every other outage.



Following the first and second tests, at approximately 3 and 6 years, an extension must be requested to allow the third test to coincide with the 10-year inservice inspection outage. This request for extension has normally been granted since there is no safety significance and the requirements of Appendix J to 10 CFR 50 are satisfied, which was the original intention of the TS. Therefore, Arizona Public Service Company (APS) proposes to revise the TS for PVNGS Units 1, 2, and 3 to refer to Appendix J to 10 CFR 50, which requires that tests be conducted at approximately equal intervals during the 10-year service period with the third test being conducted during the 10-year inservice inspection outage. This would typically result in tests being conducted at intervals of approximately 4.5 years, 3 years, and 3 years during the 10-year period.

C. NEED FOR THE TECHNICAL SPECIFICATION AMENDMENT

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The PVNGS TS currently requires a set of three Type A tests be performed specifically at 40 \pm 10 month intervals during each 10-year service period, with the third test of each set performed during the shutdown for the 10-year plant inservice inspection. Appendix J to 10 CFR 50 requires that a Type A test of the containment be performed periodically. These tests are required to be scheduled as a set of three tests, to be performed at approximately equal intervals, during each 10-year service period, with the third set to coincide with the shutdown for the 10-year plant inservice inspection. While the PVNGS TS essentially duplicate the requirements of Appendix J to 10 CFR 50, the TS contain the additional requirement that Type A testing be performed at 40 \pm 10 month intervals. This additional requirement is too restrictive for units with 18-month fuel cycles. Therefore, APS proposes to revise the TS for PVNGS Units 1, 2, and 3 to delete the prescriptive schedular requirement for Type A testing and instead reference that Type A testing will be performed in accordance with Appendix J to 10 CFR 50.

D. SAFETY ANALYSIS OF THE PROPOSED TECHNICAL SPECIFICATION AMENDMENT

Completion of acceptable Type A testing is a requirement for containment operability. The proposed change would not change the general frequency nor the required number of Type A tests. The proposed change does not affect the acceptance criteria nor the method in which the testing is performed. Only the prescriptive schedular requirements are being changed to conform with the requirements of the regulation and provide more flexibility in the scheduling of the tests.

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Based upon the following justification and the proposed TS changes, operation of PVNGS in accordance with Appendix J to 10 CFR 50, and without the specific test schedular requirements, would not involve an unreviewed safety question.

- (1) The proposed changes would not involve an increase in the probability or the consequences of an accident previously evaluated. The proposed change only allows flexibility in the scheduling of the three required Type A tests in the 10-year service period. The additional flexibility is needed for plants using 18-month fuel cycles to allow refueling outages and testing intervals to coincide. There is no change to the number of tests required, test methodology, or acceptance criteria.
- (2) The proposed changes would not create the possibility of a new or different type of accident from any accident previously evaluated. The proposed change to the test schedule only provides flexibility in meeting the same requirement for three tests in a 10-year period. The testing type and bases have not changed. Therefore, operation of the units with this more flexible test schedule will not result in an accident previously not analyzed in the Updated Final Safety Analysis Report (UFSAR). The proposed changes do not impact the design bases of the containment and do not modify the response of the containment during a design basis accident.
- (3) The proposed changes would not involve a reduction in the margin of safety. The proposed changes to the schedule only provides flexibility in meeting the same requirement for three tests in a 10-year period. These proposed changes do not affect or change any limiting conditions for operation (LCO), or any other surveillance requirements in the TS, and the basis for the surveillance requirement remains unchanged. The testing method, acceptance criteria, and bases are not changed. The TS continue to require testing that is consistent with the requirements of Appendix J to 10 CFR 50.

Based on the preceding evaluation, removing the specific schedule for Type A tests and making the other administrative changes to the TS will not adversely affect the safe operation of the units. Therefore, this proposed amendment for PVNGS Units 1, 2, and 3 does not result in an unreviewed safety question as defined by the criteria in 10 CFR 50.59

E. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

PVNGS TS 3/4.6.1.2 currently requires a set of three Type A tests be performed specifically at 40 \pm 10 month intervals during each 10-year service period, with the third test of each set performed during shutdown for the 10-year plant inservice inspection. Appendix J to 10 CFR 50 requires that a Type A test of the containment be performed periodically. These tests are required to be scheduled as a set of three

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tests, to be performed at approximately equal intervals, during each 10-year service period, with the third test of each set to coincide with the shutdown for the 10-year inservice inspection. While the PVNGS TS leakage rate testing requirements essentially duplicate the requirements in Appendix J to 10 CFR 50, the TS additionally require the Type A test be performed at 40 \pm 10 month intervals. The TS requirement to conduct Type A tests at 40 \pm 10 month intervals is too restrictive and inconsistent with 18-month fuel cycles. Therefore, APS proposes to delete the detailed surveillance requirement for Type A tests, and instead, reference performance of Type A testing in accordance with Appendix J to 10 CFR 50, which is the basis for the surveillance requirement.

The proposed changes to the TS do not involve modifications to any of the existing equipment or affect the operation of existing systems. The reactor containment system reliability and operation are unchanged, therefore, they remain in accordance with the descriptions found in the UFSAR.

The proposed TS changes do not affect or change any other limiting condition for operation or surveillance requirements in the TS and the basis for the specifications remains unchanged. Periodic Type A tests will continue to be performed during the service life of each unit as required by Appendix J to 10 CFR 50. These proposed changes do not change the number of tests to be performed, test methodology, or test acceptance criteria. In essence, the specific requirement for 40 \pm 10 month test intervals is deleted.

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves a no significant hazards consideration if operation of the facility, in accordance with a proposed amendment, would not: (1) Involve a significant increase in the probability or consequences of an accident previously evaluated or; (2) create the possibility of a new or different kind of accident from any accident previously evaluated or; (3) involve a significant reduction in a margin of safety. A discussion of these standards, as they relate to this amendment request, follows:

<u>Standard 1</u> -- Involve a significant increase in the probability or consequences of an accident previously evaluated.

This amendment request does not involve a significant increase in the probability or consequences of an accident previously evaluated based on the safety analysis, because the proposed changes to the TS do not affect the assumptions, design parameters, or results of any UFSAR accident analysis. The proposed amendment does not add or modify any existing equipment. The proposed Type A testing schedule will still be consistent with Appendix J to 10 CFR 50. Therefore, the

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proposed TS changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

<u>Standard 2</u> -- Create the possibility of a new or different kind of accident from any accident previously analyzed.

This amendment request does not create the possibility of a new or different kind of accident from any accident previously analyzed since the proposed TS changes do not involve modifications to any of the existing equipment or affect the operation or design basis of the containment. The proposed changes do not modify the response of the containment during a design basis accident. The proposed changes only remove the restrictive schedular requirements for conducting Type A testing from the TS and substitute the schedule specified in Appendix J to 10 CFR 50. Therefore, the proposed TS changes would not create the possibility of a new or different kind of accident from any previously evaluated.

<u>Standard 3</u> -- Involve a significant reduction in a margin of safety.

The margin of safety presently provided is not reduced by the proposed change in the schedular requirements for Type A tests. Although the changes allow more flexibility in scheduling Type A tests, the proposed amendment continues to ensure reactor containment system reliability by periodic testing. Since equipment reliability will be maintained, the proposed TS changes will not involve a significant reduction in margin of safety.

F. ENVIRONMENTAL IMPACT CONSIDERATION DETERMINATION

APS has determined that the proposed amendment involves no change in the amount or type of effluent that may be released offsite, and that there is no increase in individual or cumulative occupational radiation exposure. As such, operation of PVNGS Units 1, 2, and 3 in accordance with the proposed amendments, does not involve an unreviewed environmental safety question.

G. MARKED-UP TECHNICAL SPECIFICATION PAGES

Units 1, 2, and 3; pages 3/4 6-1, 3/4 6-2 and 3/4 6-3

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FOR INFORMATIC ONLY

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 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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
- b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
- c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P 49.5 psig and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2¢. for all other Type B and C penetrations, the combined leakage rate[is less than or equal to 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.

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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

- 3.6.1.2 Containment leakage rates shall be limited to:
 - a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a , 49.5 psig, or
 - Less than or equal to L_t, 0.05% by weight of the containment air per 24 hours at a reduced pressure of P_t, 24.8 psig.
 - b. A combined leakage rate of 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 (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with 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 or equal to 0.75 L_a or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

a. Three Type A tests (Overall-Integrated Containment Leakage Rate) -shall be conducted at 40-± 10 month intervals during shutdown at -either P_a 49.5-psig or at P_t 24.8-psig-during each 10-year service

-period. --The-third-test-of-each-set-shall-be-conducted-during-the---shutdown-for-the-10-year-plant-inservice-inspection.

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

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SURVEILLANCE REQUIREMENTS (Continued).

-b. --- If any periodic Type A test fails to meet either 0.75-L_ or 0.75-L_,

-the-test-schedule for subsequent Type-A-tests-shall-be-reviewed-and -approved by the Commission. If two consecutive Type A-tests-fail-to meet-either 0.75 La or 0.75 Lt, a-Type A-test-shall be performed atleast-every 18-months-until-two consecutive Type A-tests meet-either 0.75 La or 0.75 Lt at which time the above test-schedule-may-be resumed:

- -C:---The-accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplementaltest-which:
 - -1.---Gonfirms the accuracy of the Type A test by verifying that the supplemental test result L minus the sum of the Type A test result, L m, and the superimposed leak rate; L o, is equal to or less than 0.25 L.
 - -2. Has a duration sufficient to establish accurately the change in leakage rate botween the Type A test and the supplemental test.
 - -3.----Requires-that-the-rate-at-which-gas-is-injected-into-the-containment or bled_from-the-containment_during_the-supplemental_test-_is_between-0.75-L_-and-1.25-L_.
- b. $\not a$. Type B and C tests shall be conducted with gas at P_a, 49.5 psig, at intervals no greater than 24 months except for tests involving:
 - 1. Air locks,
 - Purge supply and exhaust isolation valves with resilient material seals.
- c. ¢. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- d. . Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.
- e. g. The provisions of Specification 4.0.2 are not applicable.

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FOR INFORMATIONLY

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:

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- 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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
- b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
- c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a 49.5 psig and

verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2¢. for all other Type B and C penetrations, the combined leakage rate is less than or equal to 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.



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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a , 49.5 psig, or
 - 2. Less than or equal to L_t , 0.05% by weight of the containment air per 24 hours at a reduced pressure of P_+ , 24.8 psig.
- b. A combined leakage rate of 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 (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with 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 or equal to 0.75 L_a , or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a , or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. If any periodic Type A test fails to meet either 0.75 La or 0.75 Lt, the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet either 0.75 La or 0.75 Lt, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet either 0.75 La or 0.75 Lt at which time the above test schedule may be resumed.
- -c.---The-accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplementaltest-which:
 - 1. Confirms the accuracy of the Type A test by verifying that the supplemental test result, L_c, minus the sum of the Type A test result, L_m, and the superimposed leak rate, L_o, is equal to or less than 0.25 L_a.
 - -2.---Has-a-duration-sufficient-to-establish-accurately-the-change-inleakage-rate-between-the-Type A test-and-the-supplemental-test-
 - -3.---Requires that-the-rate at-which-gas is injected into the contain--ment-or bled from the containment during the supplemental-tes; -is-between-0.75 Ly and 1.25 Ly.
- b. \mathcal{A} . Type B and C tests shall be conducted with gas at P_a, 49.5 psig, at intervals no greater than 24 months except for tests involving:
 - 1. Air locks,
 - 2. Purge supply and exhaust isolation valves with resilient material seals.
- c. ¢. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- d. 1. Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.
- e. g. The provisions of Specification 4:0.2 are not applicable.

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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.

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

ACTION:

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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 positions except as provided in Table 3.6-1 of Specification 3.6.3.
 - b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.
 - c. After each closing of each penetration subject to Type B testing, except containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a 49.5 psig and

verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2¢. for all other Type B and C penetrations, the combined leakage rate is less than or equal to 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.

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CONTAINMENT SYSTEMS

CONTAINMENT LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated leakage rate of:
 - 1. Less than or equal to L_a , 0.10% by weight of the containment air per 24 hours at P_a, 49.5 psig, or
 - 2. Less than or equal to L_t , 0.05% by weight of the containment air per 24 hours at a reduced pressure of P_+ , 24.8 psig.
- b. A combined leakage rate of 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 (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a or 0.75 L_t , as applicable, or (b) with 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 or equal to 0.75 L_a , or less than or equal to 0.75 L_t , as applicable, and the combined leakage rate for all penetrations and valves subject to Type B and C tests to less than or equal to 0.60 L_a , prior to increasing the Reactor Coolant System temperature above 210°F.

SURVEILLANCE REQUIREMENTS

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:

a. -Three-Type-A-tests-(Overall-Integrated-Containment-Leakage-Rate)---shall-be-conducted-at 40-±-10-month-intervals-during-shutdown-at---either-P_49.5-psig-or-at-P_t-24.8-psig-during-each-10-year-service --period. --The-third-test-of-each-set-shall-be-conducted-during-the---shutdown-for-the-10-year-plant-inservice-inspection.-

Type A (Overall Integrated Containment Leakage Rate) testing shall be conducted in accordance with the requirements specified in Appendix J to 10 CFR 50, as modified by approved exemptions.

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CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

-b----If-any-periodic-Type-A-test-fails-to-meet-either-0.75-L-or-0.75-L-t,

-the-test-schedule-for-subsequent-Type-A-tests-shall-be-reviewed-and--approved-by-the-Commission.--If-two-consecutive-Type-A-tests-fail-tomeet-either-0.75-La-or-0.75-Ltr-a-Type-A-test-shall-be-performed-at--least-every-18-months-until-two-consecutive-Type-A-tests-meet-either--0.75-La-or-0.75-Lt-at-which-time-the-above-test-schedule-may-be-

-resumed:

- G-----The-accuracy-of-each-Type-A-test-shall-be-verified-by-a-supplemental--test-which:

 - 2:----Has-a-duration-sufficient-to-establish-accurately-the-change-in--leakage-rate-between-the-Type-A-test-and-the-supplemental-test.
 - -3.----Requires-that-the-rate-at-which-gas-is-injected-into-the-containa--ment-or-bled-from-the-containment-during-the-supplemental-test----is-between-0.75-L_-and-1.25-L_a.
- b. d. Type B and C tests shall be conducted with gas at P_a, 49.5 psig, at intervals no greater than 24 months except for tests involving:
 - 1. Air locks,
 - Purge supply and exhaust isolation valves with resilient material seals.
- c. e. Purge supply and exhaust isolation valves with resilient material seals shall be tested and demonstrated OPERABLE per Specifications 4.6.1.7.2 and 4.6.1.7.3.
- d. 1. Air locks shall be tested and demonstrated OPERABLE per Specification 4.6.1.3.
- e. g. The provisions of Specification 4.0.2 are not applicable.



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