ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 and 50-328

(TVA-SQN-TS-93-02)

LIST OF AFFECTED PAGES

Unit 1

VII
1-2
3/4 6-1
3/4 6-2
3/4 6-3
3/4 6-4
3/4 6-11
3/4 6-12
3/4 6-15
3/4 6-23
B 3/4 6-1

Unit 2

VII
1-2
3/4 6-1
3/4 6-2
3/4 6-3
3/4 6-4
3/4 6-11
3/4 6-12
3/4 6-15
3/4 6-23
B 3/4 6-1

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

CHANNEL FUNCTIONAL TEST

1.6 A CHANNEL FUNCTIONAL TEST shall be:

a. Analog channels - the injection of a simulated signal into the channel as close to the sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

b. Bistable channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and/or trip functions.

c. Digital channels - the injection of a simulated signal into the channel as close to the sensor input to the process racks as practicable to verify OPERABILITY including alarm and/or trip functions. R145

CONTAINMENT INTEGRITY

1.7 CONTAINMENT INTEGRITY shall exist when:

a. All penetrations required to be closed during accident conditions are either:
   1) Capable of being closed by an OPERABLE containment automatic isolation valve system, or
   2) Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-2 of Specification 3.6.3.

b. All equipment hatches are closed and sealed.

c. Each air lock is in compliance with the requirements of Specification 3.6.1.3,

d. The containment leakage rates are within the limits of Specification 3.6.1.2, and (1)

e. The sealing mechansim associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE.

10 CFR 50, Append. x J as referenced in

CONTROLLED LEAKAGE

1.8 CONTROLLED LEAKAGE shall be that seal water flow supplied to the reactor coolant pump seals.

CORE ALTERATION

1.9 CORE ALTERATION shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATION shall not preclude completion of movement of a component to a safe conservative position.

CORE OPERATING LIMIT REPORT

1.10 The CORE OPERATING LIMITS REPORT (COLR) is the unit-specific document that provides core operating limits for the current operating reload cycle. These cycle-specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.14. Unit operation within these operating limits is addressed in individual specifications. R159

Perform required visual examinations and leakage rate testing, except the containment air lock testing, in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions. The maximum allowable leakage rate, L_a, is 0.25 % of containment air weight per day at the calculated peak containment pressure P_a, 12 psig

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 one 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 3.6-2 of Specification 3.6.3. R16

b. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3. R134

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 P_a, 12 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.~~ R16

*Except valves, blind flanges, and deactivated automatic valves which are located inside the annulus or 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.

~~CONTAINMENT~~ SECONDARY CONTAINMENT BYPASS LEAKAGE

LIMITING CONDITION FOR OPERATION

3.6.1.2 Secondary bypass Containment leakage rates shall be limited to:

~~a. An overall integrated leakage rate of less than or equal to L_a, 0.25 percent by weight of the containment air per 24 hours at P_a, 12 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.~~

(a) A combined bypass leakage rate of less than or equal to 0.25 L_a for all penetrations identified in Table 3.6-1 as secondary containment BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING when pressurized to P_a. R75

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

~~With either (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a, 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, or (c)~~ With the combined bypass leakage rate exceeding 0.25 L_a for BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING, restore ~~the overall integrated leakage rate to less than or equal to 0.75 L_a, 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,~~ the combined bypass leakage rate from BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING to less than or equal to 0.25 L_a, ~~prior to increasing the Reactor Coolant System temperature above 200°F.~~ within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R75 R75 R75

4.6.1.2 The secondary containment bypass 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 50 using the methods and provisions of ANSI N45.4-1972; however, the methods of ANSI/ANS 56.8-1987 for mass point data analysis may be used in lieu of the methods specified in ANSI N45.4-1972.~~ R106

a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10 month intervals* during shutdown at P_a (12 psig) during each 10-year service period. R131

b. If any periodic Type A test fails to meet 0.75 L_a, 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 0.75 L_a, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet 0.75 L_a at which time the above test schedule may be resumed.

c. The accuracy of each Type A test shall be verified by a supplemental test which:

   1. Confirms the accuracy of the Type A test by verifying that the difference between supplemental and Type A test data is within 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 the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage at P_a (12 psig).

d. Type B and C tests shall be conducted with gas at P_a (12 psig) at intervals no greater than 24 months except for tests involving:

   1. Air locks,
   2. Penetrations using continuous leakage monitoring systems, and
   3. Valves pressurized with fluid from a seal system.

*A one-time extension of the test interval is allowed for the third Type A test within the first 10-year service period provided unit shutdown occurs no later than May 1, 1990 and performance of Type A testing occurs prior to unit restart following Unit 1 Cycle 4 refueling. R131

SURVEILLANCE REQUIREMENTS (Continued)

a → e. The combined bypass leakage rate to the auxiliary building shall be determined to be less than or equal to 0.25 L_a by applicable Type B and C tests at least once per 24 months except for penetrations which are not individually testable; penetrations not individually testable shall be determined to have no detectable leakage when tested with soap bubbles while the containment is pressurized to P_a (12 psig) during each Type A test. R75

~~f. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.~~ R134

b → g. Leakage from isolation valves that are sealed with fluid from a seal system may be excluded, subject to the provisions of Appendix J, Section III.C.3, when determining the combined leakage rate provided the seal system and valves are pressurized to at least 1.10 P_a (13.2 psig) and the seal system capacity is adequate to maintain system pressure (or fluid head for the containment spray system and RHR spray system valves at penetrations 48A, 48B, 49A and 49B) for at least 30 days. R105

~~h. Type B tests for penetrations employing a continuous leakage monitoring system shall be conducted at P_a (12 psig) at intervals no greater than once per 3 years.~~

~~i. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.~~

c → f. The provisions of Specification 4.0.2 are not applicable.

R106

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.

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 prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.6 The structural integrity of the containment vessel shall be determined during the shutdown for each Type A containment leakage rate test ~~(Specification 4.6.1.2)~~ by a visual inspection of the exposed accessible interior and exterior surfaces of the vessel. This inspection shall be performed prior to the Type A containment leakage rate test to verify no apparent changes in appearance of the surfaces or other abnormal degradation. Any abnormal degradation of the containment vessel detected during the above required inspections shall be reported to the Commission pursuant to Specification 6.6.1. R40

SHIELD BUILDING STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.7 The structural integrity of the shield building shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.7.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the structural integrity of the shield building not conforming to the above requirements, restore the structural integrity to within the limits prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.7 The structural integrity of the shield building 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 the exposed accessible interior and exterior surfaces of the shield building and verifying no apparent changes in appearance of the concrete surfaces or other abnormal degradation. Any abnormal degradation of the shield building detected during the above required inspections shall be reported to the Commission pursuant to Specification 6.6.1. R40

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.9 One pair (one purge supply line and one purge exhaust line) of containment purge system lines may be open; the containment purge supply and exhaust isolation valves in all other containment purge lines shall be closed. Operation with purge supply or exhaust isolation valves open for either purging or venting shall be limited to less than or equal to 1000 hours per 365 days. The 365 day cumulative time period will begin every January 1. R22

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

ACTION:

a. With a purge supply or exhaust isolation valve open in excess of the above cumulative limit, or with more than one pair of containment purge system lines open, close the isolation valve(s) in the purge line(s) within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R124

b. With a containment purge supply and/or exhaust isolation valve having a measured leakage rate in excess of 0.05 L_a, restore the inoperable valve to OPERABLE status within 24 hours, otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R124

SURVEILLANCE REQUIREMENTS

4.6.1.9.1 The position of the containment purge supply and exhaust isolation valves shall be determined at least once per 31 days.

4.6.1.9.2 The cumulative time that the purge supply and exhaust isolation valves are open over a 365 day period shall be determined at least once per 7 days.

4.6.1.9.3 At least once per 3 months, each containment purge supply and exhaust isolation valve shall be demonstrated OPERABLE by verifying that the measured leakage rate is less than or equal to 0.05 L_a and by verifying that when the measured leakage rate 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. R124

TABLE 3.6-2 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (Seconds)	
C. PHASE "A" CONTAINMENT VENT ISOLATION (Cont.)			
13. FCV-30-50	Upper Compt Purge Air Exh	4*	
14. FCV-30-51	Upper Compt Purge Air Exh	4*	
15. FCV-30-52	Upper Compt Purge Air Exh	4*	
16. FCV-30-53	Upper Compt Purge Air Exh	4*	
17. FCV-30-56	Lower Compt Purge Air Exh	4*	
18. FCV-30-57	Lower Compt Purge Air Exh	4*	
19. FCV-30-58	Inst Room Purge Air Exh	4*	
20. FCV-30-59	Inst Room Purge Air Exh	4*	
21. FCV-90-107	Cntmt Bldg LWR Compt Air Mon	5*	R74
22. FCV-90-108	Cntmt Bldg LWR Compt Air Mon	5*	
23. FCV-90-109	Cntmt Bldg LWR Compt Air Mon	5*	
24. FCV-90-110	Cntmt Bldg LWR Compt Air Mon	5*	
25. FCV-90-111	Cntmt Bldg LWR Compt Air Mon	5*	
26. FCV-90-113	Cntmt Bldg UPR Compt Air Mon	5*	
27. FCV-90-114	Cntmt Bldg UPR Compt Air Mon	5*	
28. FCV-90-115	Cntmt Bldg UPR Compt Air Mon	5*	
29. FCV-90-116	Cntmt Bldg UPR Compt Air Mon	5*	
30. FCV-90-117	Cntmt Bldg UPR Compt Air Mon	5*	
D. OTHER			
1. FCV-30-46	Vacuum Relief Isolation Valve	25	
2. FCV-30-47	Vacuum Relief Isolation Valve	25	
3. FCV-30-48	Vacuum Relief Isolation Valve	25	
4. FCV-62-90	Normal Charging Isolation Valve	12	R105

10 CFR 50, Appendix J

*Provisions of LCO 3.0.4 are not applicable if valve is secured in its isolated position with power removed and leakage limits of ~~Surveillance Requirement 4.6.3.4~~ are satisfied. For purge valves, leakage limits under Surveillance Requirement 4.6.1.9.3 must also be satisfied. R41

#Provisions of LCO 3.0.4 are not applicable if valve is secured in its isolated position with power removed and either FCV-62-73 or FCV-62-74 is maintained operable.

**This valve is required after completion of the associated modification. R86

3/4.6 CONTAINMENT SYSTEMS

BASES

3/4.6.1 PRIMARY CONTAINMENT

3/4.6.1 PRIMARY CONTAINMENT

INSERT A

~~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 accident analyses. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.~~

SECONDARY CONTAINMENT BYPASS

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 accident analyses at the peak accident pressure, P_a. 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 tests to account for possible degradation of the containment leakage barriers between leakage tests.~~

INSERT B

~~The surveillance testing for measuring leakage rates are consistent with the requirements of Appendix "J" of 10 CFR 50 with the following exemption. The third Type A test of each 10-year service period need not be conducted when the plant is shutdown for the 10-year plant inservice inspection. Due to the increased accuracy of the mass point method for containment integrated leakage testing, the mass point method referenced in ANSI/ANS 56.8-1987 can be used in lieu of the methods described in ANSI N45.4-1972.~~

R131

R106

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 provide 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 annulus atmosphere of 0.5 psig and 2) the

INSERT A

The safety design basis for primary containment is that the containment must withstand the pressures and temperatures of the limiting design basis accident (DBA) without exceeding the design leakage rates.

The DBAs that result in a challenge to containment OPERABILITY from high pressures and temperatures are a loss of coolant accident (LOCA), a steam line break, and a rod ejection accident (REA). In addition, release of significant fission product radioactivity within containment can occur from a LOCA or REA. In the DBA analyses, it is assumed that the containment is OPERABLE such that, for the DBAs involving release of fission product radioactivity, release to the environment is controlled by the rate of containment leakage. This leakage rate limitation will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions. The containment was designed with an allowable leakage rate of 0.25 percent of containment air weight per day. This leakage rate, used in the evaluation of offsite doses resulting from accidents, is defined in 10 CFR 50, Appendix J, as L_a: the maximum allowable containment leakage rate at the calculated peak containment internal pressure (P_a) resulting from the limiting DBA. The allowable leakage rate represented by L_a forms the basis for the acceptance criteria imposed on all containmemt leakage rate testing. L_a is assumed to be 0.25 percent per day in the safety analysis at P_a = 12.0 psig. 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 tests to account for possible degradation of the containment leakage barriers between tests.

Primary containment INTEGRITY or operability is maintained by limiting leakage to within the acceptance criteria of 10 CFR 50, Appendix J.

Individual leakage rates specified for the containment air lock (LCO 3.6.1.3), purge valves (LCO 3.6.1.9) and secondary bypass leakage (LCO 3.6.1.2) are not specifically part of the acceptance criteria of 10 CFR 50, Appendix J. Therefore, leakage rates exceeding these individual limits do not result in the primary containment being inoperable unless the leakage, when combined with other Type B and C test leakages, exceeds the acceptance criteria of Appendix J.

INSERT B

The safety design basis for containment leakage assumes that 75 percent of the leakage from the primary containment enters the shield building annulus for filtration by the emergency gas treatment system. The remaining 25 percent of the primary containment leakage, which is considered to be bypassed to the auxiliary building, is assumed to exhaust directly to the atmosphere without filtration during the first 5 minutes of the accident. After 5 minutes, any bypass leakage to the auxiliary building is filtered by the auxiliary building gas treatment system. A tabulation of potential secondary containment bypass leakage paths to the auxiliary building is provided in Table 3.6-1. Restricting the leakage through the bypass leakage paths in Table 3.6-1 to 0.25 L_a provides assurance that the leakage fraction assumptions used in the evaluation of site boundary radiation doses remain valid.

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

CHANNEL FUNCTIONAL TEST

1.6 A CHANNEL FUNCTIONAL TEST shall be:

a. Analog channels - the injection of a simulated signal into the channel as close to the sensor as practicable to verify OPERABILITY including alarm and/or trip functions.

b. Bistable channels - the injection of a simulated signal into the sensor to verify OPERABILITY including alarm and/or trip functions.

c. Digital channels - the injection of a simulated signal into the channel as close to the sensor input to the process racks as practicable to verify OPERABILITY including alarm and/or trip functions.

CONTAINMENT INTEGRITY

1.7 CONTAINMENT INTEGRITY shall exist when:

a. All penetrations required to be closed during accident conditions are either:

1) Capable of being closed by an OPERABLE containment automatic isolation valve system, or

2) Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except as provided in Table 3.6-2 of Specification 3.6.3.

b. All equipment hatches are closed and sealed,

c. Each air lock is in compliance with the requirements of Specification 3.6.1.3, 10 CFR 50, Appendix J as referenced in

d. The containment leakage rates are within the limits of Specification 3.6.1.2, and (1)

e. The sealing mechanism associated with each penetration (e.g., welds, bellows or O-rings) is OPERABLE.

CONTROLLED LEAKAGE

1.8 CONTROLLED LEAKAGE shall be that seal water flow supplied to the reactor coolant pump seals.

CORE ALTERATION

1.9 CORE ALTERATION shall be the movement or manipulation of any component within the reactor pressure vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATION shall not preclude completion of movement of a component to a safe conservative position.

CORE OPERATING LIMITS REPORT

1.10 The CORE OPERATING LIMITS REPORT (COLR) is the unit-specific document that provides core operating limits for the current operating reload cycle. These cycle-specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.14. Unit operation within these operating limits is addressed in individual specifications.

Perform required visual examination and leakage rate testing, except the containment air lock testing, in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions. The maximum allowable leakage rate, L_a, is 0.25% of containment air weight per day at the calculated peak containment pressure P_a, 12 psig.

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 one 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 3.6-2 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. R117

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 P_a, 12 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 annulus or 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.

~~CONTAINMENT~~ LEAKAGE — SECONDARY CONTAINMENT BYPASS

LIMITING CONDITION FOR OPERATION

3.6.1.2 ~~Containment~~ Secondary leakage bypass rates shall be limited to:

~~a. An overall integrated leakage rate of less than or equal to L_a, 0.25 percent by weight of the containment air per 24 hours at P_a, 12 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.~~

a. A combined bypass leakage rate of less than or equal to 0.25 L_a for all penetrations identified in Table 3.6-1 as secondary containment BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING when pressurized to P_a. R63

APPLICABILITY: MODES 1, 2, 3 and 4

ACTION:

~~With either (a) the measured overall integrated containment leakage rate exceeding 0.75 L_a, 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, or~~

(c) With the combined bypass leakage rate exceeding 0.25 L_a for BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING, restore ~~the overall integrated leakage rate to less than or equal to 0.75 L_a, 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,~~ ~~and~~ the combined bypass leakage rate from BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING to less than or equal to 0.25 L_a, within 4 hours or be in at least ~~prior to increasing the Reactor Coolant System temperature above 200°F.~~ HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R63

SECONDARY CONTAINMENT BYPASS LEAKAGE

SURVEILLANCE REQUIREMENTS

4.6.1.2 The secondary containment bypass 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 50 using the methods and provisions of ANSI N45.4-1972; however, the methods of ANSI/ANS 56.8-1987 for mass point data analysis may be used in lieu of the methods specified in ANSI N45.4-1972.~~ R91

a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at 40 ± 10-month intervals during shutdown at P_a, 12 psig, during each 10-year service period. R13

b. If any periodic Type A test fails to meet 0.75 L_a 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 0.75 L_a, a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet 0.75 L_a at which time the above test schedule may be resumed.* R126

c. The accuracy of each Type A test shall be verified by a supplemental test which:

   1. Confirms the accuracy of the Type A test by verifying that the difference between supplemental and Type A test data is within 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 the quantity of gas injected into the containment or bled from the containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage at P_a, 12 psig.

d. Type B and C tests shall be conducted with gas at P_a, 12 psig, at intervals no greater than 24 months except for tests involving:

   1. Air locks,

   2. Penetrations using continuous leakage monitoring systems, and

   3. Values pressurized with fluid from a seal system.

*An exemption from the 18-month accelerated frequency requirement is allowed for the Type A test failures conducted during the Unit 2 Cycle 2 and Unit 2 Cycle 3 refueling outages. R126

JAN 29 1991

SURVEILLANCE REQUIREMENTS (Continued)

a → ~~f~~. The combined bypass leakage rate to the auxiliary building shall be determined to be less than or equal to 0.25 L_a by applicable Type B and C tests at least once per 24 months except for penetrations which are not individually testable; penetrations not individually testable shall be determined to have no detectable leakage when tested with soap bubbles while the containment is pressurized to P_a, 12 psig, during each Type A test. R63 R104

~~f. By verifying that each containment air lock is in compliance with the requirements of Specification 3.6.1.3.~~ R117

b → ~~g~~. Leakage from isolation valves that are sealed with fluid from a seal system may be excluded, subject to the provisions of Appendix J, Section III.C.3, when determining the combined leakage rate provided the seal system and valves are pressurized to at least 1.10 P_a, 13.2 psig, and the seal system capacity is adequate to maintain system pressure (or fluid head for the containment spray system and RHR spray system valves at penetrations 48A, 48B, 49A and 49B) for at least 30 days.

~~h. Type B tests for penetrations employing a continuous leakage monitoring system shall be conducted at P_a, 12 psig, at intervals no greater than once per 3 years.~~

~~i. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurement system.~~

c → ~~j~~. The provisions of Specification 4.0.2 are not applicable.

R126

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.

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 prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.6 The structural integrity of the containment vessel 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 the exposed accessible interior and exterior surfaces of the vessel. This inspection shall be performed prior to the Type A containment leakage rate test to verify no apparent changes in appearance of the surfaces or other abnormal degradation. Any abnormal degradation of the containment vessel detected during the above required inspections shall be reported to the Commission pursuant to Specification 6.6.1. [R28

CONTAINMENT SYSTEMS

SHIELD BUILDING STRUCTURAL INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.7 The structural integrity of the shield building shall be maintained at a level consistent with the acceptance criteria in Specification 4.6.1.7.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the structural integrity of the shield building not conforming to the above requirements, restore the structural integrity to within the limits prior to increasing the Reactor Coolant System temperature above 200°F.

SURVEILLANCE REQUIREMENTS

4.6.1.7 The structural integrity of the shield building 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 the exposed accessible interior and exterior surfaces of the shield building and verifying no apparent changes in appearance of the concrete surfaces or other abnormal degradation. Any abnormal degradation of the shield building detected during the above required inspections shall be reported to the Commission pursuant to Specification 6.6.1. R28

CONTAINMENT VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.1.9 One pair (one purge supply line and one purge exhaust line) of containment purge system lines may be open; the containment purge supply and exhaust isolation valves in all other containment purge lines shall be closed. Operation with purge supply or exhaust isolation valves open for either purging or venting shall be limited to less than or equal to 1000 hours per 365 days The 365 day cumulative time period will begin every January 1. R9

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

ACTION:

a. With a purge supply or exhaust isolation valve open in excess of the above cumulative limit, or with more than one pair of containment purge system lines open, close the isolation valve(s) in the purge line(s) within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R109

b. With a containment purge supply and/or exhaust isolation valve having a measured leakage rate in excess of 0.05 L_a, restore the inoperable valve to OPERABLE status within 24 hours, otherwise be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. R109

SURVEILLANCE REQUIREMENTS

4 6.1.9.1 The position of the containment purge supply and exhaust isolation valves shall be determined at least once per 31 days.

4.6.1.9.2 The cumulative time that the purge supply and exhaust isolation valves are open over a 365 day period shall be determined at least once per 7 days. R9

4.6.1.9.3 At least once per 3 months, each containment purge supply and exhaust isolation valve shall be demonstrated OPERABLE by verifying that the measured leakage rate is less than or equal to 0.05 L_a and by verifying that when the measured leakage rate 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. R109

TABLE 3.6-2 (Continued)
CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (Seconds)
C. PHASE "A" CONTAINMENT VENT ISOLATION (Cont.)		
13. FCV-30-50	Upper Compt Purge Air Exh	4*
14. FCV-30-51	Upper Compt Purge Air Exh	4*
15. FCV-30-52	Upper Compt Purge Air Exh	4*
16. FCV-30-53	Upper Compt Purge Air Exh	4*
17. FCV-30-56	Lower Compt Purge Air Exh	4*
18. FCV-30-57	Lower Compt Purge Air Exh	4*
19. FCV-30-58	Inst Room Purge Air Exh	4*
20. FCV-30-59	Inst Room Purge Air Exh	4*
21. FCV-90-107	Cntmt Bldg LWR Compt Air Mon	5*
22. FCV-90-108	Cntmt Bldg LWR Compt Air Mon	5*
23. FCV-90-109	Cntmt Bldg LWR Compt Air Mon	5*
24. FCV-90-110	Cntmt Bldg LWR Compt Air Mon	5*
25. FCV-90-111	Cntmt Bldg LWR Compt Air Mon	5*
26. FCV-90-113	Cntmt Bldg UPR Compt Air Mon	5*
27. FCV-90-114	Cntmt Bldg UPR Compt Air Mon	5*
28. FCV-90-115	Cntmt Bldg UPR Compt Air Mon	5*
29. FCV-90-116	Cntmt Bldg UPR Compt Air Mon	5*
30. FCV-90-117	Cntmt Bldg UPR Compt Air Mon	5*
D. OTHER		
1. FCV-30-46	Vacuum Relief Isolation Valve	25
2. FCV-30-47	Vacuum Relief Isolation Valve	25
3. FCV-30-48	Vacuum Relief Isolation Valve	25
4. FCV-62-90	Normal Charging Isolation Valve	12

R62

R90

10 CFR 50, Appendix J

*Provisions of LCO 3.0.4 are not applicable if valve is secured in its isolated position with power removed and leakage limits of ~~Surveillance Requirement 4.6.3.4~~ are satisfied. For purge valves, leakage limits under surveillance Requirement 4.6.1.9.3 must also be satisfied.

#Provisions of LCO 3.0.4 are not applicable if valve is secured in its isolated position with power removed and either FCV-62-73 or FCV-62-74 is maintained operable.

R29

**The valve is required after completion of the associated modification.

R73

3/4.6.1 PRIMARY CONTAINMENT

3/4.6.1 PRIMARY CONTAINMENT

INSERT A

~~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 accident analyses. This restriction, in conjunction with the leakage rate limitation, will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions.

3/4.6.1.2 ~~CONTAINMENT~~ SECONDARY CONTAINMENT BYPASS LEAKAGE

INSERT B

The limitations on containment leakage rates ensure that the total containment leakage volume will not exceed the value assumed in the accident analyses at the peak accident pressure, P_a. 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 tests to account for possible degradation of the containment leakage barriers between leakage tests.

The surveillance testing for measuring leakage rates are consistent with the requirements of Appendix "J" of 10 CFR 50 with the following exemption: the third Type A test of each 10-year inservice interval need not be conducted when the plant is shut down for the 10-year plant inservice inspection. Due to the increased accuracy of the mass point method for containment integrated leakage testing, the mass point method referenced in ANSI/ANS 56.8-1987 can be used in lieu of the methods described in ANSI N45.4-1972. R139 R91

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 provide 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 annulus atmosphere of 0.5 psig and 2) the

JAN 29 1991

INSERT A

The safety design basis for primary containment is that the containment must withstand the pressures and temperatures of the limiting design basis accident (DBA) without exceeding the design leakage rates.

The DBAs that result in a challenge to containment OPERABILITY from high pressures and temperatures are a loss of coolant accident (LOCA), a steam line break, and a rod ejection accident (REA). In addition, release of significant fission product radioactivity within containment can occur from a LOCA or REA. In the DBA analyses, it is assumed that the containment is OPERABLE such that, for the DBAs involving release of fission product radioactivity, release to the environment is controlled by the rate of containment leakage. This leakage rate limitation will limit the site boundary radiation doses to within the limits of 10 CFR 100 during accident conditions. The containment was designed with an allowable leakage rate of 0.25 percent of containment air weight per day. This leakage rate, used in the evaluation of offsite doses resulting from accidents, is defined in 10 CFR 50, Appendix J, as L_a: the maximum allowable containment leakage rate at the calculated peak containment internal pressure (P_a) resulting from the limiting DBA. The allowable leakage rate represented by L_a forms the basis for the acceptance criteria imposed on all containmemt leakage rate testing. L_a is assumed to be 0.25 percent per day in the safety analysis at P_a = 12.0 psig. 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 tests to account for possible degradation of the containment leakage barriers between tests.

Primary containment INTEGRITY or operability is maintained by limiting leakage to within the acceptance criteria of 10 CFR 50, Appendix J.

Individual leakage rates specified for the containment air lock (LCO 3.6.1.3), purge valves (LCO 3.6.1.9) and secondary bypass leakage (LCO 3.6.1.2) are not specifically part of the acceptance criteria of 10 CFR 50, Appendix J. Therefore, leakage rates exceeding these individual limits do not result in the primary containment being inoperable unless the leakage, when combined with other Type B and C test leakages, exceeds the acceptance criteria of Appendix J.

INSERT B

The safety design basis for containment leakage assumes that 75 percent of the leakage from the primary containment enters the shield building annulus for filtration by the emergency gas treatment system. The remaining 25 percent of the primary containment leakage, which is considered to be bypassed to the auxiliary building, is assumed to exhaust directly to the atmosphere without filtration during the first 5 minutes of the accident. After 5 minutes, any bypass leakage to the auxiliary building is filtered by the auxiliary building gas treatment system. A tabulation of potential secondary containment bypass leakage paths to the auxiliary building is provided in Table 3.6-1. Restricting the leakage through the bypass leakage paths in Table 3.6-1 to 0.25 L_a provides assurance that the leakage fraction assumptions used in the evaluation of site boundary radiation doses remain valid.

ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION (TS) CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 and 50-328

(TVA-SQN-TS-93-02)

DESCRIPTION AND JUSTIFICATION FOR

REMOVING DETAILED CONTAINMENT TEST REQUIREMENTS FROM TSs

Description of Change

TVA proposes to modify the Sequoyah Nuclear Plant (SQN) Units 1 and 2 technical specifications (TSs) to delete detail containment test requirements that are governed by 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors." SQN's primary containment TS 3.6.1.1 and containment leakage TS 3.6.1.2 currently contain detailed containment leakage rate requirements, test requirements, test schedules, and test accuracies that are also required by 10 CFR 50, Appendix J. TVA's proposed change will remove the duplicate 10 CFR 50, Appendix J, requirements from TSs. In addition to the specific changes to TSs 3.6.1.1 and 3.6.1.2, three other related TSs are being revised to remove references that will no longer be applicable. An unrelated change to a footnote in TS Table 3.6-2 provides a needed clarification to correct an oversight from a previous TS change. The proposed changes are as follows:

1. Revise definition for containment integrity (Definition 1.7, Item d)	Item d references the current TS 3.6.1.2 that governs containment leakage rate criteria. Proposed changes to TS 3.6.1.2 required Item d to be revised to reference the 10 CFR 50, Appendix J, containment leakage rate criteria that are provided by reference in TS 3.6.1.1.
2. Revise Surveillance Requirement (SR) 4.6.1.1.c	This SR currently contains containment leak rate criteria for Types B and C penetrations following closure. The Types B and C penetration leak rates are governed by 10 CFR 50, Appendix J. This SR is being revised to be consistent with standard requirements from NUREG-1431.
3. Revise Limiting Condition for Operation (LCO) 3.6.1.2	The LCO currently limits containment leakage rates in three categories: (a) overall integrity leakage rate, (b) combined leakage for Types B and C tests, and (c) combined leakage for secondary containment bypass leakage rates to the auxiliary building. The LCO is being revised to limit applicability to secondary containment bypass leakage rates (Category c only).

4. Delete LCO 3.6.1.2.a	The LCO currently limits SQN's overall integrated containment leakage rate to less than or equal to a maximum allowable leakage rate (L_a). The 10 CFR 50, Appendix J, test requirement referenced in SR 4.6.1.1.c maintains and governs the L_a limit.
5. Delete LCO 3.6.1.2.b	The LCO currently limits the containment combined leakage rate to less than or equal to 0.60 L_a for all penetrations and valves subject to Types B and C testing. The 10 CFR 50, Appendix J, test requirements referenced in SR 4.6.1.1.c maintain this 0.60 L_a limit.
6. Revise LCO 3.6.1.2.c	The LCO currently limits the containment bypass leakage rate to less than or equal to 0.25 L_a for all penetrations identified in TS Table 3.6-1 (secondary containment bypass leakage paths to the auxiliary building). The secondary containment bypass leakage paths to the auxiliary building are specific to SQN and are not addressed by 10 CFR 50, Appendix J; therefore, this LCO is being retained under LCO 3.6.1.2.
7. Revise action to LCO 3.6.1.2	The action for LCO 3.6.1.2 currently contains actions associated with containment leakage rates in three categories: (a) overall integrated leakage rate, (b) combined leakage rate for Types B and C penetrations, and (c) combined leakage for secondary containment bypass leakage paths to the auxiliary building. The action has been reformatted to reflect applicability to Category c only. Action requirements for leak rate Categories a and b are maintained and governed by 10 CFR 50, Appendix J (refer to SR 4.6.1.1.c).

8.	Delete SR 4.6.1.2 (Items a, b, c, d, f, h, and i)	The SR items are associated with containment leakage rate criteria, test schedules, and accuracy requirements that are maintained and governed by 10 CFR 50, Appendix J. Items (e), (g), and (j) are associated with combined bypass leakage rates to SQN's auxiliary building and are being retained in TSs.
9.	Revise SR 4.6.1.6	SR 4.6.1.6 currently references SR 4.6.1.2 for Type A containment leakage rate testing. This reference will no longer be applicable following the proposed changes to SR 4.6.1.2.
10.	Revise SR 4.6.1.7	SR 4.6.1.7 currently references SR 4.6.1.2 for Type A containment leakage rate testing. This reference will no longer be applicable following the proposed changes to SR 4.6.1.2.
11.	Revise SR 4.6.1.9.3	SR 4.6.1.9.3 currently references SR 4.6.1.2.d that ensures the combined leakage rates for purge valves and all other Types B and C penetrations remain less than or equal to 0.60 L_a. This reference will no longer be applicable following the proposed deletion of TS 4.6.1.2.d.
12.	Revise footnote (*) to Table 3.6-2	A footnoted reference to SR 4.6.3.4 in Table 3.6-2 is no longer applicable for defining the leakage limit on purge valves. Leakage limits for valves in Table 3.6-2 are governed by 10 CFR 50, Appendix J. The leakage limits for SQN's purge valves are also governed by SR 4.6.1.9.3.

13. Revise Bases 3/4.6.1	The current bases for primary containment integrity are being replaced to reference the containment leakage limits governed by 10 CFR 50, Appendix J. The proposed bases change incorporates the NUREG-1431 wording to reflect 10 CFR 50, Appendix J, leakage limits and acceptance criteria.
14. Revise Bases 3/4.6.1.2	The current bases for overall containment leakage are being revised to incorporate secondary containment bypass leakage limitations.

Reason for Change

The purpose of 10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," is to establish containment leakage test requirements for ensuring that leakage rates do not exceed those assumed in the evaluation of offsite dose limits following an accident. The maximum allowable containment leakage rate limit (L_a) forms the basis for the acceptance criteria for containment leak rate testing. The 10 CFR 50, Appendix J, requirements establish a 0.75 L_a leakage limit for the overall containment integrated leakage rate during performance of periodic Type A tests (i.e., containment integrated leak rate test [CILRT]). This 0.75 L_a limit is consistent with the philosophy of having a 25 percent margin for deterioration of containment integrity during the interval between periodic Type A tests. A combined leakage rate limit (0.60 L_a) for containment penetration and containment isolation valves subject to Types B and C tests is also governed by 10 CFR 50, Appendix J. Other associated details for maintaining primary containment integrity (i.e., testing requirements, test schedules, and test accuracies) are contained in 10 CFR 50, Appendix J. Since these leak rate limits and detail requirements are governed under Appendix J, TVA proposes to remove duplicate requirements from SQN TSs.

Previous TS amendments associated with SQN's Appendix J, Type A test schedules and test methodology have resulted in TS changes being processed in accordance with 10 CFR 50.90 along with Appendix J exemptions being processed in accordance with 10 CFR 50.12. Deleting duplicative requirements between 10 CFR 50, Appendix J, and TSs will reduce the administrative burden for processing TS changes in conjunction with 10 CFR 50, Appendix J, exemptions should this become necessary.

Consistent with this described situation, TVA recently submitted an Appendix J exemption request on January 7, 1993, to address the reported failure of a containment integrated leakage rate test (Type A test) performed on SQN Unit 2 during the Unit 2 Cycle 5 refueling outage. A

companion TS change would be necessary under the current TSs to reflect the same provisions of the exemption request. TVA is utilizing this opportunity to permanently revise the related SQN TSs to eliminate the need for this and any future exemption-related TS changes.

One additional unrelated change to a footnote in TS Table 3.6-2 provides a needed correction to delete a reference to SR 4.6.3.4. SR 4.6.3.4 was deleted by a previous TS change (TS Change 88-06) and is no longer applicable. Since the footnoted reference to SR 4.6.3.4 was inadvertently retained in TSs, the proposed change is needed to correct the oversight.

Justification for Change

SQN's primary containment design includes the provisions and features required to satisfy the testing requirements of 10 CFR 50, Appendix J. The design of SQN's containment penetrations and isolation valves permits periodic leakage rate testing at the pressure (P_a) specified in 10 CFR 50, Appendix J. The specific test requirements for leak testing SQN's primary containment (Type A testing), containment penetrations (Type B testing), and containment isolation valves (Type C testing) are provided in Section III of 10 CFR 50, Appendix J. SQN's measured leakage rate acceptance criterion for Type A tests is defined in Section III.A.5.b.2 and is 0.75 L_a. The leakage rate acceptance criterion for SQN's Types B and C tests is provided in Sections III.B.3.a and III.C.3, respectively, and is 0.60 L_a. The 0.60 L_a limit serves as a combined leakage rate limit for all containment leakage paths subject to Types B and C testing. These Appendix J containment leakage rate limits (0.75 L_a and 0.60 L_a) are also contained in SQN TS 3.6.1.2. The subject TS change proposes to remove the containment leakage rate criteria from the SQN TSs. Justification for this change is based on the fact that the same containment leakage rate criteria are prescribed and governed by 10 CFR 50, Appendix J. Accordingly, the removal of this criteria from TSs does not alter or affect the containment leakage rate criteria for SQN. In addition, the proposed change is consistent with guidance provided in the recently approved standard TSs for Westinghouse Electric Corporation plants (NUREG-1431).

Individual leakage rate limits specified for the containment air locks, purge valves, and secondary containment bypass leakage are not specifically part of the acceptance criteria of 10 CFR 50, Appendix J. Therefore, these individual leakage rate limits are being retained in SQN TSs. The TS operability requirements for SQN's containment air lock and containment purge valves are contained in LCO 3.6.1.3 and 3.6.1.9, respectively. SQN's secondary containment bypass leakage limits are being retained under the current LCO 3.6.1.2.

In addition to the proposed changes associated with containment leakage limits, TVA is proposing to remove Types A, B, and C test schedules and accuracy requirements from SQN TSs. These test schedules and accuracy requirements are identical to the requirements contained in 10 CFR 50, Appendix J. This proposed change thereby reduces duplicate requirements between TSs and Appendix J and is consistent with the guidance provided in NUREG-1431.

One other area involving proposed changes involves a footnote found in Table 3.6-2, "Containment Isolation Valves Function," that provides an exemption to LCO 3.0.4. The exemption to LCO 3.0.4 is applicable to designated containment isolation valves shown with an asterisk (*) in Table 3.6-2. The exemption allows entry into an operational mode when the valve(s) is: (1) secured in its isolation position with power removed, and (2) containment leakage limits are satisfied. The footnote currently contains a reference to the leakage limits of SR 4.6.3.4 that was specific only to purge valves. However, the footnote to Table 3.6-2 may be applicable to either a purge valve or a containment isolation valve having isolation capability. TVA's proposed change clarifies the footnote to ensure that the leakage limits are properly defined for either application.

It should be noted that the current footnote reference to SR 4.6.3.4 is no longer applicable. SR 4.6.3.4, which provided purge valve test and leakage limit requirements, was superseded by SR 4.6.1.9.3 (reference TS Change 88-06, NRC letter to TVA dated July 5, 1989, TAC R00518/R00519). The footnoted reference to SR 4.6.3.4 in Table 3.6-2 should have been revised under TS Change 88-06, but was inadvertently retained. TVA's proposed TS change corrects this oversight.

Environmental Impact Evaluation

The proposed change request does not involve an unreviewed environmental question because operation of SQN Units 1 and 2 in accordance with this change would not:

1. Result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by NRC's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or decisions of the Atomic Safety and Licensing Board.

2. Result in a significant change in effluents or power levels.

3. Result in matters not previously reviewed in the licensing basis for SQN that may have a significant environmental impact.

Enclosure 3

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 and 50-328

(TVA-SQN-TS-93-02)

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

ENCLOSURE 3

Significant Hazards Evaluation

TVA has evaluated the proposed technical specification (TS) change and has determined that it does not represent a significant hazards consideration based on criteria established in 10 CFR 50.92(c). Operation of Sequoyah Nuclear Plant (SQN) in accordance with the proposed amendment will not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

   SQN's primary containment design includes the provisions and features required to satisfy the testing requirements of 10 CFR 50, Appendix J. TVA's proposed TS change continues to require that SQN containment integrity be maintained in accordance with 10 CFR 50, Appendix J. The evaluation for determining containment leakage rate limits and offsite dose limits following an accident is not affected. SQN's current acceptance criteria governing containment leakrate test limits (0.75 L_a for periodic Type A testing and 0.60 L_a for Types B and C testing) remain unchanged. Detailed test requirements, test schedules, and test accuracies that are being deleted from SQN TSs will be governed by reference under 10 CFR 50, Appendix J. TVA's proposed amendment does not affect the individual TS leakage rates associated with SQN's containment air lock, purge valves, or secondary bypass leakage to the auxiliary building since these leakage rate limits are not specifically part of the acceptance criteria of 10 CFR 50, Appendix J. These individual leakage limits remain unchanged and are retained in SQN TSs. All other proposed changes are clarifications, including the revised wording for the footnote to TS Table 3.6-2. These clarifications do not impact the intent of the affected specifications.

   In conclusion, TVA's proposed TS change will not affect containment test criteria, system conditions, or plant configurations, and will not affect SQN's accident analysis. The proposed change is considered by TVA to be a TS improvement that is consistent with the guidance contained in the recently approved NUREG-1431. Consequently, this change will not increase the probability or consequences of an accident previously evaluated.

2. Create the possibility of a new or different kind of accident from any previously analyzed.

   No physical modification is being made to any plant hardware, plant operating setpoints, limits, or operating procedures as a result of this change. TVA's proposed TS amendment is designed to remove detailed containment test requirements from TSs and maintain these containment test requirements under 10 CFR 50, Appendix J. The proposed change does not alter any accident analysis or any

assumptions used to support the accident analysis. Consequently, the containment leakage assumptions used to determine offsite dose limits for compliance with 10 CFR 100 are not affected. All other proposed changes are clarifications, including the revised wording for the footnote to TS Table 3.6-2. These clarifications do not impact the intent of the affected specifications. Accordingly, this change will not create the possibility of a new or different kind of accident from any previously analyzed.

3. Involve a significant reduction in a margin of safety.

The margin of safety provided by SQN's allowable containment leakage rate test limits (0.75 L_a for periodic Type A testing and 0.60 L_a for Types B and C testing) remains unchanged. TVA's proposed change removes detailed requirements such as containment test requirements, test schedules, and test accuracies from TSs. These detailed requirements are governed by 10 CFR 50, Appendix J, and have not been affected by TVA's proposed change. Individual leakage limits associated with SQN's containment air locks, purge valves, or secondary bypass leakage to the auxiliary building are site specific (not specifically part of the acceptance criteria of 10 CFR 50 Appendix J) and are retained in SQN TSs. All other proposed changes are clarifications and do not affect the intent of the affected specifications. Consequently, TVA's proposed change will not affect the margin of safety.