

PROPOSED TECHNICAL SPECIFICATION CHANGE - TSP 920003
VIRGIL C. SUMNER NUCLEAR STATION

LIST OF AFFECTED PAGES

<u>Page</u>	<u>Specification</u>	<u>Description of Change</u>
1-2	1.7	Removed reference to Table 3.6-1 from definition for Containment Integrity.
3/4 6-1	3/4.6.1	Removed reference to Table 3.6-1.
3/4 6-17	3/4.6.4	Removed reference to Table 3.6-1 from LCO and Surveillance Requirements. Relocated 3.0.4 statement from Table to Actions. Relocated footnote from table to LCO.
B 3/4 6-5	Bases 3/4 6.4	Added the considerations of administrative control to the bases.

DEFINITIONS

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 3.6-1 of Specification 3.6.4.~~ *EXCEPT FOR VALVES WHICH ARE OPEN UNDER ADMINISTRATIVE CONTROL AS PERMITTED BY*
- 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
- 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

1.9a The CORE OPERATING LIMITS REPORT (COLR) is the unit specific document that provides core operating limits for the current operating reload cycle. The cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.11. Plant operation within these operating limits is addressed in individual specifications.

DOSE EQUIVALENT I-131

1.10 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gr) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites."

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.

SUPVEILLANCE 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 3.6.4.~~ *FOR VALVES THAT ARE OPEN UNDER ADMINISTRATIVE CONTROL AS PERMITTED BY*
- 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 the containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a (47.1 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 $0.60 L_a$.

*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.

CONTAINMENT SYSTEMS

3/4.6.4 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

ADD → EACH

3.6.4 ~~The containment isolation valves specified in Table 3.6-1 shall be OPERABLE with isolation times as shown in Table 3.6-1.~~ *_{ADD}

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) ~~specified in Table 3.6-1~~ inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:

- a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange; or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

ADD → THE PROVISIONS OF SPECIFICATION 3.0.4 DO NOT APPLY.

SURVEILLANCE REQUIREMENTS

ADD → EACH CONTAINMENT

4.6.4.1 ~~The isolation valves specified in Table 3.6-1 shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test, and verification of isolation time.~~

ADD CONTAINMENT

4.6.4.2 Each isolation valve ~~specified in Table 3.6-1~~ shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE at least once per 18 months by:

- a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.
- b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.
- c. Verifying that on a Reactor Building Purge and Exhaust isolation test signal, each Purge and Exhaust valve actuates to its isolation position.

ADD FOOTNOTE
(SEE INSERT 1)

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.6.4.3 The isolation time of each power operated or automatic valve of ^{CONTAINMENT ISOLATION}
~~Table 3.6-1~~ shall be determined to be within its list when tested pursuant to
Specification 4.0.5.

*INSERT 1: LOCKED OR SEALED CLOSED VALVES MAY BE OPENED
ON AN INTERMITTENT BASIS UNDER ADMINISTRATIVE CONTROL.*

DELETE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (SEC)
<u>E. REMOTE MANUAL (Continued)</u>		
5. 8107-CS	Charging Line To Regenerative Heat Exchange	N/A
6. 6050B-HR	Hydrogen Analyzer Return Line	N/A
7. 6051A-HR	Hydrogen Analyzer Supply Line	N/A
8. 6051B-HR	Hydrogen Analyzer Supply Line	N/A
9. 6051C-HR	Hydrogen Analyzer Supply Line	N/A
10. 6052A-HR	Hydrogen Analyzer Return Line	N/A
11. 6052B-HR	Hydrogen Analyzer Return Line	N/A
12. 6053A-HR	Hydrogen Analyzer Supply Line	N/A
13. 6053B-HR	Hydrogen Analyzer Supply Line	N/A
14. 8701A-RHP	RHR Pump Suction From Reactor Coolant Loop A	N/A
15. 8701B-RHP	RHR Pump Suction From Reactor Coolant Loop C	N/A
16. 8801A-SI	Boron Injection Tank To Reactor Coolant Loops	N/A
17. 8801B-SI	Boron Injection Tank To Reactor Coolant Loops	N/A
18. 8811A-SI	RHR Pump A Suction From Recirculation Sump	N/A
19. 8811B-SI	RHR Pump B Suction From Recirculation Sump	N/A
20. 8884-SI	High Head Safety Injection To Reactor Coolant Loops	N/A
21. 8885-SI	High Head Safety Injection To Reactor Coolant Loops	N/A
22. 8886-SI	High Head Safety Injection To Reactor Coolant Loops	N/A
23. 8888A-SI	Low Head Safety Injection To Reactor Coolant Loops	N/A
24. 8888B-SI	Low Head Safety Injection To Reactor Coolant Loops	N/A
25. 8889-SI	Low Head Safety Injection To Reactor Coolant Loops	N/A
26. 3003A-SP	Supply To Reactor Building Spray Nozzles	N/A
27. 3003B-SP	Supply To Reactor Building Spray Nozzles	N/A
28. 3004A-SP	Spray Pump A Suction From Recirculation Sump	N/A
29. 3004B-SP	Spray Pump B Suction From Recirculation Sump	N/A
30. 3103A-SW	Service Water From Reactor Building Cooling Unit A	N/A
31. 3103B-SW	Service Water From Reactor Building Cooling Unit B	N/A
32. 3106A-SW	Service Water To Reactor Building Cooling Unit A	N/A
33. 3108B-SW	Service Water To Reactor Building Cooling Unit B	N/A
34. 3110A-SW	Service Water To Reactor Building Cooling Unit A	N/A
35. 3110B-SW	Service Water To Reactor Building Cooling Unit B	N/A

SUMMER - UNIT 1

3/4 6-20b

Amendment No. 4

DELETE

TABLE 3-6-1 (Continued)

CONTAINMENT ISOLATION VALVES

MAXIMUM ISOLATION TIME (SEC)

VALVE NUMBER	ISOLATION (Continued)	FUNCTION	MAXIMUM ISOLATION TIME (SEC)
A. PHASE "A"			
31.	9312A-SS	Sampling Line Supply Return From Radiation Monitor	40
32.	9312B-SS	Sampling Line Return From Radiation Monitor	40
33.	9339-SS	Sample Return Line To Pit	40
34.	9341-SS	Sample Return Line To Pit	40
35.	9356A-SS	Sampling Line From Pressurizer	40
36.	9356B-SS	Sampling Line From Pressurizer	40
37.	9357-SS	Sampling Line From Pressurizer	40
38.	9364B-SS	Sampling Lines From Reactor Coolant Loop B	40
39.	9365B-SS	Sampling Lines From Reactor Coolant Loop B	40
40.	9364C-SS	Sampling Lines From Reactor Coolant Loop C	40
41.	9365C-SS	Sampling Lines From Reactor Coolant Loop C	40
42.	9387-SS	Sampling Line From Accumulators	40
43.	9398A-SS #	Sampling Line From Steam Generator A Blowdown	40
44.	9398B-SS #	Sampling Line From Steam Generator B Blowdown	40
45.	9398C-SS #	Sampling Line From Steam Generator C Blowdown	40
46.	7126-WL	Reactor Coolant Drain Tank Vent Header	40
47.	7150-WL	Reactor Coolant Drain Tank Vent Header	40
48.	1003-WL	Reactor Coolant Drain Tank Discharge To Waste	40
49.	7136-WL	Reactor Coolant Drain Tank Discharge To Waste	40
50.	1678A-1W #	Steam Generator A Reverse Flush	40
51.	1678B-1W #	Steam Generator B Reverse Flush	40
52.	1678C-1W #	Steam Generator C Reverse Flush	40
B. PHASE "B"			
1.	956B-CC	Component Cooling To R. C. Pumps Bearings	60
2.	9600-CC	Component Cooling To R. C. Pumps	60
3.	9605-C	Component Cooling From R. C. Pumps Bearings	60
4.	9606-CC	Component Cooling From R. C. Pumps Bearings	60
5.	1633A-1W #	Chemical feed line to Feedwater Loop A	60
6.	1633B-1W #	Chemical feed line to Feedwater Loop B	60
7.	1633C-1W #	Chemical feed line to Feedwater Loop C	60
C. REACTOR BUILDING PURGE SUPPLY AND EXHAUST ISOLATION			
1.	0001A-AI	Reactor Building Purge Supply	5
2.	001B-AI	Reactor Building Purge Supply	5
3.	102A-AI	Reactor Building Purge Exhaust	5

DELETE

TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

VALVE NUMBER	PHASE "A" ISOLATION	FUNCTION	MAXIMUM ISOLATION TIME (SEC)
1.	7501-AC	CRDM Coolant Water Inlet Line	40
2.	7502-AC	CPDM Coolant Water Inlet Line	40
3.	7503-AC	CRDM Coolant Water Outlet Line	40
4.	7504-AC	CRDM Coolant Water Outlet Line	40
5.	503A-BD #	Steam Generator A Blowdown Line	40
6.	503B-BD #	Steam Generator B Blowdown Line	40
7.	503C-BD #	Steam Generator C Blowdown Line	40
8.	8100-CS	Reactor Coolant Pump Seal Water Return	40
9.	8112-CS	Reactor Coolant Pump Seal Water Return	40
10.	8149A-CS	Reactor Coolant To Letdown Heat Exchanger	40
11.	8149B-CS	Reactor Coolant To Letdown Heat Exchanger	40
12.	8149C-CS	Reactor Coolant To Letdown Heat Exchanger	40
13.	8152-CS	Reactor Coolant To Letdown Heat Exchanger	40
14.	6797-FS	Fire Service Deluge To Charcoal Filters	40
15.	6050A-HR	Normal Reactor Building Pressure Line	40
16.	6054-HR	Normal Reactor Building Pressure Line	40
17.	2660-IA	Reactor Building Instrument Air Inlet Line	40
18.	2662A-IA	Reactor Building Instrument Air Suction Line	40
19.	2662B-IA	Reactor Building Instrument Air Suction Line	40
20.	6242A-ND	Reactor Building Sump Drain	40
21.	6242B-HU	Reactor Building Sump Drain	40
22.	8028-RC	Pressurizer Relief Tank Makeup Water Line	40
23.	8033-RC	Pressurizer Relief Tank N ₂ Supply-Return Line	40
24.	8047-RC	Pressurizer Relief Tank N ₂ Supply-Return Line	40
25.	8860-SI	Full Line To Accumulators	40
26.	8880-SI	Accumulator Nitrogen Supply	40
27.	8871-SI	Accumulator Test Line	40
28.	8961-SI	Accumulator Test Line	40
29.	9311A-SS	Sampling Line Supply To Radiation Monitor	40
30.	9311B-SS	Sampling Line Supply To Radiation Monitor	40

DELETE

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

VALVE NUMBER	FUNCTION	MAXIMUM ISOLATION TIME (SEC)
<u>C. REACTOR BUILDING PURGE SUPPLY AND EXHAUST ISOLATION</u>		
1. 0001A-AH	Reactor Building Purge Supply	5
2. 0001B-AH	Reactor Building Purge Supply	5
3. 0002A-AH	Reactor Building Purge Exhaust	5
4. 0002B-AH	Reactor Building Purge Exhaust	5
5. 6056-HR	Alternate Reactor Building Purge Supply Line	5
6. 6057-HR	Alternate Reactor Building Purge Supply Line	5
7. 6066-HR	Alternate Reactor Building Purge Exhaust Line	5
8. 6067-HR	Alternate Reactor Building Purge Exhaust Line	5
<u>D. MANUAL (1)</u>		
1. 8767-DM	Demineralized Water Line	N/A
2. 8768-DM	Demineralized Water Line	N/A
3. 6772-FS	Fire Service Hose Reel Supply	N/A
4. 6773-FS	Fire Service Hose Reel Supply	N/A
5. 2679-IA	Breathing Air Supply Line	N/A
6. 2680-IA	Breathing Air Supply Line	N/A
7. 6587-NG	Nitrogen Supply To Steam Generators	N/A
8. 2912-SA	Reactor Building Service Air	N/A
9. 6671-SF	Refueling Cavity Drain Line	N/A
10. 6672-SF	Refueling Cavity Drain Line	N/A
11. 6697-SF	Refueling Cavity Fill Line	N/A
12. 6696-SF	Refueling Cavity Fill Line	N/A
13. 7135-WL	Reactor Coolant Drain Tank Discharge To Waste	N/A
<u>E. REMOTE MANUAL (2)</u>		
1. 9602-CC	Component Cooling To R. C. Pumps	N/A
2. 8102A-CS#	Seal Injection To Reactor Coolant Pump A	N/A
3. 8102B-CS#	Seal Injection To Reactor Coolant Pump B	N/A
4. 8102C-CS#	Seal Injection To Reactor Coolant Pump C	N/A

SUPPWER - UNIT 1

3/4 6-20A

Attachment No. 47

DELETE

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

VALVE NUMBER F. CHECK	FUNCTION	MAXIMUM ISOLATION TIME (SEC)
1. 7541-AC	CRDM Coolant Water Inlet Line	N/A
2. 7544-AC	CRDM Coolant Water Outlet Line	N/A
3. 9570-CC	Component Cooling To R. C. Pump Bearings	N/A
4. 9689-CC	Component Cooling From R. C. Pump Bearings	N/A
5. 8103-CS	Reactor Coolant Pump Seal Water Return	N/A
6. 8368A-CS#	Seal Injection To R. C. Pump A	N/A
7. 8368B-CS#	Seal Injection To R. C. Pump B	N/A
8. 8368C-CS#	Seal Injection To R. C. Pump C	N/A
9. 8381-CS	Charging Line To Regenerative Heat Exchanger	N/A
10. 6799-FS	Fire Service Deluge To Charcoal Filters	N/A
11. 2661-IA	Instrument Air Supply To Reactor Building	N/A
12. 6588-NG	Nitrogen Supply To Steam Generators	N/A
13. 8046-RC	Pressurizer Relief Tank Makeup Water Line	N/A
14. 2913-SA	Service Air Supply To Reactor Building	N/A
15. 3009A-SP	Supply To Reactor Building Spray Nozzles	N/A
16. 3009B-SP	Supply To Reactor Building Spray Nozzles	N/A
17. 8947-SI	Accumulator Nitrogen Supply	N/A
18. 8861-SI	Fill Line To Accumulators	N/A

Valve not subject to type "C" leakage test.

- (1) Manual valves may be opened on an intermittent basis under administrative control.
- (2) Remote manual valve positions are maintained by administrative control.
- (3) The provisions of Specification 3.0.4 are not applicable from December 28, 1982, until July 1, 1983.

CONTAINMENT SYSTEMS

BASES

REQUIRED BY THE SAFETY ANALYSIS

3/4.6.4 CONTAINMENT ISOLATION VALVES

ADD

The OPERABILITY of the containment isolation valves ensures that the reactor building atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the reactor building atmosphere or pressurization of the reactor building and, is consistent with the requirements of GDC 54 thru 57 of Appendix A to 10 CFR Part 50. Containment isolation within the time limits specified for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

3/4.6.5 COMBUSTIBLE GAS CONTROL

ADD

The OPERABILITY of the equipment and systems required for the detection and control of hydrogen gas ensures that this equipment will be available to maintain the hydrogen concentration within the reactor building below its flammable limit during post-LOCA conditions. Either recombiner unit (or the purge system) is capable of controlling the expected hydrogen generation associated with 1) zirconium-water reactions, 2) radiolytic decomposition of water and 3) corrosion of metals within containment. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA," March 1971.

The hydrogen mixing systems are provided to ensure adequate mixing of the containment atmosphere following a LOCA. This mixing action will prevent localized accumulations of hydrogen from exceeding the flammable limit.

The opening of locked or sealed closed containment isolation valves on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with control room, at the valve controls, (2) instructing this operator to close these valves in an accident situation, and (3) assuring that environmental conditions will not preclude access to close the valves

DEFINITIONS

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 for valves that are open under administrative control as permitted by Specification 3.6.4,
- 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
- 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

1.9a The CORE OPERATING LIMITS REPORT (COLR) is the unit specific document that provides core operating limits for the current operating reload cycle. The cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.11. Plant operation within the operating limits is addressed in individual specifications.

DOSE EQUIVALENT I-131

1.10 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microcurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites."

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 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 for valves that are open under administrative control as permitted by Specification 3.6.4.
- 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 the containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at P_a (47.1 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 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.

CONTAINMENT SYSTEMS

3/4.6.4 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.4 Each containment isolation valve shall be OPERABLE.*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With one or more of the isolation valve(s) inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:

- a. Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange, or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN¹ within the following 72 hours.

The provisions of Specification 3.0.4 do not apply.

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each containment isolation valve shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair, or replacement work is performed on the valve or its associated actuator, control, or power circuit by performance of a cycling test and verification of isolation time.

4.6.4.2 Each containment isolation valve shall be demonstrated OPERABLE during the COLD SHUTDOWN or REFUELING MODE AT LEAST ONCE PER 18 MONTHS BY:

- a. Verifying that on a Phase A containment isolation test signal, each Phase A isolation valve actuates to its isolation position.
- b. Verifying that on a Phase B containment isolation test signal, each Phase B isolation valve actuates to its isolation position.
- c. Verifying that on a Reactor Building Purge and Exhaust isolation test signal, each Purge and Exhaust valve actuates to its isolation position.

*Locked or sealed closed valves may be opened on an intermittent basis under administrative control.

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (continued)

4.6.4.3 The isolation time of each power operated or automatic containment isolation valve shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

TABLE 3.6-1
CONTAINMENT ISOLATION VALVES

Deleted

Pages 3/4 6-19, 3/4 6-20, 3/4 6-20a, 3/4 6-20b, and 3/4 6-20c deleted

CONTAINMENT SYSTEMS

BASES

3/4.6.4 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the reactor building atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the reactor building atmosphere or pressurization of the reactor building and is consistent with the requirements of GDC 54 through 57 of Appendix A to 10 CFR Part 50. Containment isolation within the time limits required by the safety analysis for those isolation valves designed to close automatically ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

The opening of locked or sealed closed containment isolation valves on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with control room, at the valve controls, (2) instructing this operator to close these valves in an accident situation, and (3) assuring that environmental conditions will not preclude access to close the valves.

3/4.6.5 COMBUSTIBLE GAS CONTROL

The OPERABILITY of the equipment and systems required for the detection and control of hydrogen gas ensures that this equipment will be available to maintain the hydrogen concentration within the reactor building below its flammable limit during post-LOCA conditions. Either recombiner unit (or the purge system) is capable of controlling the expected hydrogen generation associated with 1) zirconium-water reactions, 2) radiolytic decomposition of water, and 3) corrosion of metals within containment. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA," March 1971.

The hydrogen mixing systems are provided to ensure adequate mixing of the containment atmosphere following a LOCA. This mixing action will prevent localized accumulations of hydrogen from exceeding the flammable limit.

PROPOSED TECHNICAL SPECIFICATION CHANGE - TSP 920003
VIRGIL C. SUMMER NUCLEAR STATION

DESCRIPTION AND SAFETY EVALUATION

DESCRIPTION OF AMENDMENT REQUEST

Technical Specification (TS) 3/4.6.4, Containment Isolation Valves, currently applies to only those valves listed in Table 3.6-1. Table 3.6-1 is comprised of valves classified as containment isolation valves (CIVs) by the plant licensing basis. However, a change to the plant licensing basis could cause a change to the list of CIVs and, therefore, would require a change to TS. Generic Letter (GL) 91-08, Removal of Component Lists from Technical Specifications, provides NRC approved guidance for the removal of Table 3.6-1 from TS. This amendment request follows the example and guidance of GL 91-08 regarding removal of Table 3.6-1 from the VCSNS TS. The result of removing Table 3.6-1 is that the Limiting Condition for Operation, Action Statements, and Surveillance Requirements of TS 3/4.6.4 will apply to all valves classified as CIVs by the plant licensing basis. The list of applicable valves will be identified and maintained via the control of plant procedures. A list may also be contained in the FSAR, but the FSAR list cannot be used as the controlling list to apply TS requirements.

SAFETY EVALUATION

This evaluation is based on following the guidance given in GL 91-08. Demonstrating that this amendment request models the NRC approved requirements of the GL will assure that there are no safety implications associated with the amendment.

Applicability

This amendment request does not affect the technical requirements of the specification, but rather allows the list of applicable valves to be controlled by plant procedures in lieu of being listed in TS. Therefore, the intended scope of applicability related to the specification requirements does not change.

TS 3.0.4

Table 3.6-1 does not include a footnote which excludes certain valves from the provision of TS 3.0.4. However, this exclusion has been incorporated into the amendment request in order to model the guidance presented in GL 91-08. Also, as stated in GL 91-08, this exception is acceptable and consistent with the guidance provided in GL 87-09.

Locked or Sealed Valves

Table 3.6-1 includes a footnote which allows locked or sealed valves to be opened under administrative control. The amendment request addresses this footnote by 1) relocating the footnote to apply to the Limiting Condition for Operation, 2) modifying the Containment Integrity definition by removing the reference to Table 3.6-1 and adding a reference to the locked or sealed valves that are permitted to be opened under administrative controls per Specification 3.6.4, and 3) including the NRC guidance for administrative control in the bases for this specification. A portion of the last sentence of this guidance was omitted to prevent any misunderstanding as to what the administrative controls are to accomplish. These modifications meet the direction given in GL 91-08 which endorses them as an acceptable alternative.

Remote-Manual Valves

Table 3.6-1 also includes a note regarding administrative control of remote manual valves. A remote manual valve is always under administrative control and meets GDC 57, Closed System Isolation Valves, requirements of these valves. Opening these valves does not contradict their operability requirements. Therefore, per the instruction of GL 91-08, which states that this footnote may be eliminated, the amendment request has omitted the footnote.

Type C Leak Test

Some of the valves in Table 3.6-1 are denoted as being exempt from Type C leak testing requirements of Appendix J to 10CFR50. This denotation serves to clarify which valves have been granted exemptions from the NRC or which valves are non-applicable to Appendix J. These denotations are not requirements associated with this specification, but rather they serve as an aid to provide information related to Appendix J requirements. Therefore, in accordance with GL 91-08, this amendment request deletes these denotations.

Valve Stroke Times

The final point to be addressed regarding Table 3.6-1 is the maximum isolation time listed for automatic valves. These times are included and verified by the inservice testing (IST) requirements of Specification 4.0.5. Therefore, per GL 91-08, these isolation times are not necessary and have not been included in the amendment request.

In summary, this amendment request only reformats TS 3/4.6.4 in that the technical intent of the specification has not been altered, the requirements contained in the specification still apply to the same components, and the criteria which define the list of applicable components have not been affected. Therefore, the amendment request only differs from the current specification in that the list of components will be controlled in plant procedures.

Based on the above discussion and on the guidance of GL 91-08, SCE&G considers this amendment request to have no adverse impact or potential related to the plant or public's safety or health.

PROPOSED TECHNICAL SPECIFICATION CHANGE - TSP 920003
VIRGIL C. SUMMER NUCLEAR STATION

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

DESCRIPTION OF AMENDMENT REQUEST

Technical Specification (TS) 3/4.6.4, Containment Isolation Valves, currently applies to only those valves listed in Table 3.6-1. Table 3.6-1 is comprised of valves classified as containment isolation valves (CIVs) by the plant licensing basis. However, a change to the plant licensing basis could cause a change to the list of CIVs and, therefore, would require a change to TS. Generic Letter (GL) 91-08, Removal of Component Lists from Technical Specifications, provides NRC approved guidance for the removal of Table 3.6-1 from TS. This amendment request follows the example and guidance of GL 91-08 regarding removal of Table 3.6-1 from the VCSNS TS. The result of removing Table 3.6-1 is that the Limiting Condition for Operation, Action Statements, and Surveillance Requirements of TS 3/4.6.4 will apply to all valves classified as CIVs by the plant licensing basis. The list of applicable valves will be identified and maintained via the control of plant procedures. A list may also be contained in the FSAR, but the FSAR list cannot be used as the controlling list to apply TS requirements.

BASIS FOR PROPOSED NO SIGNIFICANT HAZARDS CONSIDERATION

- 1) This amendment request does not involve a significant increase in the probability or consequences of a previously evaluated accident. This request removes the list of valves (Table 3.6-1) from Technical Specifications, but it does not alter the application of the technical requirements which are contained in the specification. This amendment does not require any modifications to plant hardware or operating practices. Therefore, the amendment request has no effect on any previously analyzed accidents.
- 2) This amendment request does not create the possibility of a new or different kind of accident from any accident previously evaluated. The amendment request does not affect any operating, maintenance, or surveillance practices or methods; also, there are no design or hardware modifications associated with the proposed change. Therefore, the possibility of a malfunction or failure or the possibility of a work practice resulting in a new or different kind of accident remains unchanged.
- 3) This amendment request does not involve a significant reduction in a margin of safety. The removal of Table 3.6-1 has no impact on the performance of the plant nor does it reduce the scope or the requirement of TS 3/4.6.4. Therefore, there is not a reduction to any safety margins due to this amendment request.