ATTACHMENT 1

TECHNICAL SPECIFICATION CHANGES

(MARKED-UP)

REVISION 1

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

TSI 64

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 3.6.3.~~ for valves that are open under administrative control as permitted by 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

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 from the reactor coolant pump seals.

CORE ALTERATION

1.9 CORE ALTERATION shall be the movement or manipulation of any component within the reactor 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. The cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.9. Plant operation within these operating limits is addressed in individual specifications.

DOSE EQUIVALENT I-131

1.11 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

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CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

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

ACTION:

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

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

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

c. After each closing of each penetration subject to Type B testing, except the containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at a pressure not less than P_a, 48.1 psig, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2d. 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.

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CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 ~~The~~ Each containment isolation valve~~X specified in Table 3.6-1~~ shall be OPERABLE~~, with isolation times as shown in Table 3.6-2.~~ *

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

ACTION:

With one or more of the containment 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:

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 check valve with flow through the valve secured, or

d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

e. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.3.1 ~~The~~ Each containment isolation valve~~X 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.

* Containment isolation valves may be opened on an intermittent basis under administrative control.

** After satisfying this action statement, the motor operated valves associated with reactor coolant pump seal cooling, EGHV58, 59, 60, 61, 62, 127, 130, 131, 132, 133 may be energized and cycled for up to 12 hours to conduct any actuator diagnostic evaluations which may be required to restore the valve to an OPERABLE condition.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 Each containment 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" Isolation test signal, each Phase "A" isolation valve actuates to its isolation position,

b.# Verifying that on a Phase "B" Isolation test signal, each Phase "B" isolation valve actuates to its isolation position, and

c. Verifying that on a Containment Purge Isolation test signal, each purge supply and exhaust isolation valve actuates to its isolation position.

4.6.3.3 The isolation time of each power operated or automatic valve ~~of Table 3.6-1~~ shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

Containment isolation

#The specified 18 month frequency may be waived for Cycle I provided the surveillance is performed prior to restart following the first refueling outage or June 1, 1986, whichever occurs first. The provisions of Specification 4.0.2 are reset from performance of this surveillance.

3/4.6.2.2 RECIRCULATION FLUID pH CONTROL (RFPC) SYSTEM

The operability of the RFPC System ensures that there exists adequate TSP-C in the containment such that a post-LOCA equilibrium sump pH of greater than or equal to 7.1 is maintained during the recirculation phase. The minimum depth of 30" ensures that 9000 lbm of TSP-C is available for dissolution to yield a minimum equilibrium sump pH of 7.1. This pH level minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components. The upper limit of 36.8" corresponds to the basket design capacity.

3/4.6.2.3 CONTAINMENT COOLING SYSTEM

The OPERABILITY of the Containment Cooling System ensures that: (1) the containment air temperature will be maintained within limits during normal operation, and (2) adequate heat removal capacity is available when operated in conjunction with the Containment Spray System during post-LOCA conditions.

The Containment Cooling System and the Containment Spray System are redundant to each other in providing post-accident cooling of the Containment atmosphere. As a result of this redundancy in cooling capability, the allowable out-of-service time requirements for the Containment Cooling System have been appropriately adjusted. However, the allowable out-of-service time requirements for the Containment Spray System have been maintained consistent with that assigned other inoperable ESF equipment since the Containment Spray System also provides a mechanism for removing iodine from the containment atmosphere.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment 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.

INSERT HERE →

3/4.6.4 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 containment 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. The Hydrogen Purge Subsystem discharges directly to the Emergency Exhaust System. Operation of the Emergency Exhaust System with the heaters operating for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a Loss-of-Coolant Accident," Revision 2, November 1978.

INSERT FOR BASES
SECTION 3/4.6.3

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

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TABLE 3.6-1

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
1. Phase "A" Isolation (active)				
P-62	BB HV-8026**	PRT Nitrogen Iso Valve	C	10
P-62	BB HV-8027**	PRT Nitrogen Iso Valve	C	10
P-24	BG HV-8100	Seal Water Return CTMT Iso Valve	C	10
P-24	BG HV-8112	Seal Water Return CTMT Iso Valve	C	10
P-23	BG HV-8152	Letdown System CTMT Iso Valve	C	10
P-23	BG HV-8160	Letdown System CTMT Iso Valve	C	10
P-25	BL HV-8047	Reactor Makeup Water CTMT Iso Valve	C	10
P-21	EJ HCV-8825**	RHR to SI Test Line Iso Valve	A	10
P-82	EJ HCV-8890A**	RHR A to SI Pumps Test Line Iso Valve	A	13
P-27	EJ HCV-8890B**	RHR B to SI Pumps Test Line Iso Valve	A	13
P-49	EM HV-8823**	SI/Accumulator Injection Test Line Iso Valve	A	10
P-48	EM HV-8824**	Safety Injection Pump B Test Line Iso Valve	A	10

DELETED

**The provisions of Specification 3.0.4 are not applicable.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
1. Phase "A" Isolation (active) - (Continued)				
P-88	EM HV-8843**	Boron Injection Upstream Test Line Iso	A	10
P-92	EM HV-8871**	SI Test Line to RWST Iso Valve	C	10
P-87	EM HV-8881**	Safety Injection Pump Test Line Iso Valve	A	10
P-92	EM HV-8964**	SI Test Line System Outside CTMT Iso	C	10
P-99	GS HV-3	Hydrogen Analyzer B Inlet Iso	A,C	5
P-99	GS HV-4	Hydrogen Analyzer B Inlet Iso DELETED	A,C	5
P-99	GS HV-5	Hydrogen Analyzer B Inlet Iso	A,C	5
P-56	GS HV-8	Hydrogen Analyzer B Disch Iso	A,C	5
P-56	GS HV-9	Hydrogen Analyzer B Disch Iso	A,C	5
P-101	GS HV-12	Hydrogen Analyzer A Inlet Iso	A,C	5
P-101	GS HV-13	Hydrogen Analyzer A Inlet Iso	A,C	5
P-101	GS HV-14	Hydrogen Analyzer A Inlet Iso	A,C	5
P-97	GS HV-17	Hydrogen Analyzer A Disch Iso	A,C	5
P-97	GS HV-18	Hydrogen Analyzer A Disch Iso	A,C	5

**The provisions of Specification 3.0.4 are not applicable.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
1. Phase "A" Isolation (active) - (Continued)				
P-101	GS HV-31	Sample Line to CTMT Atmos Monitor	A,C	5
P-101	GS HV-32	Sample Line to CTMT Atmos Monitor	A,C	5
P-97	GS HV-33	Hydrogen Sample Return From PASS	A,C	5
P-97	GS HV-34	Hydrogen Sample Return From PASS	A,C	5
P-99	GS HV-36	Sample Line to CTMT Atmos Monitor	A,C	5
P-99	GS HV-37	Sample Line to CTMT Atmos Monitor	A,C	5
P-56	GS HV-38	Sample Return CTMT Atmos Monitor	A,C	5
P-56	GS HV-39	Sample Return CTMT Atmos Monitor	A,C	5
P-44	HB HV-7126	RCDT Vent Inside CTMT	C	10
P-26	HB HV-7136	RCDT Pumps Disch Hdr Outside CTMT Iso	C	10
P-44	HB HV-7150	RCDT Vent Outside CTMT	C	10
P-26	HB HV-7176	RCDT Pumps Disch Hrd Inside CTMT Iso	C	10
P-30	KA FV-29	Reactor Bldg Instr Air Supply Outside CTMT Iso	C	5
P-32	LF FV-95	CTMT Normal Sumps to Floor Drain Tank Inside CTMT Iso	C	30

DELETED

TABLE 3.6-1 (Continued)

REVISION 2

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
1. Phase "A" Isolation (active) - (Continued)				
P-32	LF FV-96	CTMT Normal Sumps to Floor Drain Tank Outside CTMT Iso	C	4
P-93	SJ HV-5**	PZR/RCS Liquid Sample Inner CTMT Iso	C	5
P-93	SJ HV-6**	PZR/RCS Liquid Sample Outer CTMT Iso	C	5
P-69	SJ HV-12**	PZR Vapor Sample Outer CTMT Iso	C	5
P-69	SJ HV-13**	PZR Vapor Sample Inner CTMT Iso	C	5
P-95	SJ HV-18**	Accumulator Sample Inner CTMT Iso DELETED	C	5
P-95	SJ HV-19**	Accumulator Sample Outer CTMT Iso	C	5
P-93	SJ HV-127**	PZR/RCS Liquid Sample Outer CTMT Iso	C	5
P-64	SJ HV-128**	PZR/RCS Liquid Sample Inner CTMT Iso	A,C	5
P-64	SJ HV-129**	PZR/RCS Liquid Sample Outer CTMT Iso	A,C	5
P-64	SJ HV-130**	PZR/RCS Liquid Sample Outer CTMT Iso Valve	A,C	5
P-57	SJ HV-131**	PASS Discharge to RCDT	A,C	5
P-57	SJ HV-132**	PASS Discharge to RCDT	A,C	5

**The provisions of Specification 3.0.4 are not applicable.

REVISION 2

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISULATION TIME (Seconds)
2. Phase "A" Isolation (passive)*				
P-58	EM HV-8888**	Accumulator Tank Fill Line Iso Valve	C	5
P-16	EN HV-01**	CTMT Recirc Sump to CTMT Spray Pump A Iso	A	30
P-13	EN HV-07**	CTMT Recirc Sump to CTMT Spray Pump B Iso	A	30
P-45	EP HV-8880**	CTMT Nitrogen Supply Iso Valve	C	10
P-65	GS HV-20**	Hydrogen Purge Inner CTMT Iso	C	5
P-65	GS HV-21**	Hydrogen Purge Outer CTMT Iso	C	5
P-67	KC HV-253**	Fire Protection System Hdr Outer CTMT Iso	C	30
3. Phase "B" Isolation (active)				
P-74	EG HV-58	CCW to RCS Iso	C	30
P-75	EG HV-59	CCW Return From RCS Iso	C	30
P-75	EG HV-60	CCW Return From RCS Iso	C	30
P-76	EG HV-61	CCW Return From RCS Iso	C	30
P-76	EG HV-62	CCW Return From RCS Iso	C	30

DELETED

*May be opened on an intermittent basis under administrative control.

**The provisions of Specification 3.0.4 are not applicable.

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)	
4. Containment Purge Isolation (active)					
V-161	GT HZ-4***	CTMT Mini-Purge Supply Outside CTMT Iso	C	5	I
V-161	GT HZ-5***	CTMT Mini-Purge Supply Inside CTMT Iso	C	5	I
V-160	GT HZ-11***	CTMT Mini-Purge Exh Inside CTMT Iso	C	5	I
V-160	GT HZ-12***	CTMT Mini-Purge Exh Outside CTMT Iso	C	5	I
5. Containment Purge Isolation (passive) DELETED					
V-161	GT HZ-6***	CTMT S/D Purge Supply Outside CTMT Iso	C	10	
V-161	GT HZ-7***	CTMT S/D Purge Supply Inside CTMT Iso	C	10	
V-160	GT HZ-8***	CTMT S/D Purge Exh Inside CTMT Iso	C	10	
V-160	GT HZ-9***	CTMT S/D Purge Exh Outside CTMT Iso	C	10	
6. Remote Manual					
P-41	BB HV-8351A	RCP A Seal Water Supply	C	N.A.	

***The provisions of Specification 3.0.4 are not applicable provided the penetration is isolated by two passive devices.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
6. Remote Manual - (Continued)				
P-22	BB HV-8351B	RCP B Seal Water Supply	C	N.A.
P-39	BB HV-8351C	RCP C Seal Water Supply	C	N.A.
P-40	BB HV-8351D	RCP D Seal Water Supply	C	N.A.
P-79	BB PV-8702A	RCS Hot Leg 1 to RHR Pump A Suction	A	N.A.
P-52	BB PV-8702B	RCS Hot Leg 4 to RHR Pump B Suction	A	N.A.
P-15	EJ HV-23**	PASS Sump Sample CTMT Iso	C	5
P-15	EJ HV-25**	PASS Sump Sample CTMT Iso	C	5
P-14	EJ HV-24**	PASS Sump Sample CTMT Iso	C	5
P-14	EJ HV-26**	PASS Sump Sample CTMT Iso	C	5
P-71	EF HV-31	ESW Supply To Containment Coolers	C	N.A.
P-28	EF HV-32	ESW Supply To Containment Coolers	C	N.A.
P-71	EF HV-33	ESW Supply To Containment Coolers	C	N.A.

DELETED

**The provisions of Specification 3.0.4 are not applicable.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
6. Remote Manual - (Continued)				
P-28	EF HV-34	ESW Supply To Containment Coolers	C	N.A.
P-73	EF HV-45	ESW Return From Containment Coolers	C	N.A.
P-29	EF HV-46	ESW Return From Containment Coolers	C	N.A.
P-73	EF HV-47	ESW Return From Containment Coolers DELETED	C	N.A.
P-29	EF HV-48	ESW Return From Containment Coolers	C	N.A.
P-73	EF HV-49	ESW Return From Containment Coolers	C	N.A.
P-29	EF HV-50	ESW Return From Containment Coolers	C	N.A.
P-74	EG HV-127*	CCW Supply to RCP	C	N.A.
P-75	EG HV-130*	CCW Return from RCP	C	N.A.
P-75	EG HV-131*	CCW Return From RCP	C	N.A.
P-76	EG HV-132*	CCW Return From RCP Thermal Barriers	C	N.A.
P-76	EG HV-133*	CCW from RCP Thermal Barrier	C	N.A.

*These valves were assumed to be closed during the accident analysis, and are normally closed but may be opened on an intermittent basis under adminstrative control.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
6. Remote Manual - (Continued)				
P-79	EJ HV-8701A	RCS Hot Leg 1 to RHR Pump A Suction	A	N.A.
P-52	EJ HV-8701B	RCS Hot Leg 4 to RHR Pump B Suction	A	N.A.
P-82	EJ HV-8809A	RHR Pump A Cold Leg Injection Iso Valve	A	N.A.
P-27	EJ HV-8809B	RHR Pump B Cold Leg Injection Iso Valve	A	N.A.
P-15	EJ HV-8811A	CTMT Recirc Sump to RHR Pump A Suction	A	N.A.
P-14	EJ HV-8811B	CTMT Recirc Sump to RHR Pump B Suction	A	N.A.
P-21	EJ HV-8840	RHR Hot Leg Recirc Iso Valve	A	N.A.
P-87	EM HV-8802A*	SI Pump A Disch Hot Leg Iso Valve	A	N.A.
P-48	EM HV-8802B*	SI Pump B Disch Hot Leg Iso Valve	A	N.A.
P-49	EM HV-8835	SI Pumps Disch to Cold Leg Iso Valve	A	N.A.
P-89	EN HV-6	CTMT Spray Pump A Discharge Iso Valve	A	N.A.
P-66	EN HV-12	CTMT Spray Pump B Discharge Iso Valve	A	N.A.
7. Active for SIS				
P-80	BG HV-8105	CVCS Charging Line	C	10

DELETED

*These valves were assumed to be closed during the accident analysis and are normally closed but may be opened on an intermittent basis under administrative control.

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
7. Active for SIS - (Continued)				
P-88	EM HV-8801A	Boron Injection to RCS Cold Legs	A	N.A.
P-88	EM HV-8801B	Boron Injection to RCS Cold Legs	A	N.A.
8. Hand-Operated and Check Valves				
P-41	BB V-118	RCP A Seal Water Supply	C	N.A.
P-22	BB V-148	RCP B Seal Water Supply	C	N.A.
P-39	BB V-178	RCP C Seal Water Supply DELETED	C	N.A.
P-40	BB V-208	RCP D Seal Water Supply	C	N.A.
P-24	BG V-135	RCP Seal Water Return	C	N.A.
P-80	BG 8381	CVCS Charging Line	C	N.A.
P-25	BL 8046	Reactor Makeup Water Supply	C	N.A.
P-78	BM V-045	Steam Generator Drain Line Iso Valve	C	N.A.
P-78	BM V-046	Steam Generator Drain Line Iso Valve	C	N.A.
P-53	EC V-083	Refueling Pool Supply From Fuel Pool Cleanup	C	N.A.
P-53	EC V-084	Refueling Pool Supply From Fuel Pool Cleanup	C	N.A.
P-54	EC V-087	Refueling Pool Return to Fuel Pool Cooling	C	N.A.

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
8. Hand-Operated and Check Valves - (Continued)				
P-54	EC V-088	Refueling Pool Return to Fuel Pool Cooling	C	N.A.
P-55	EC V-095	Refueling Pool Skimmers To Fuel Pool Cooling Loop	C	N.A.
P-55	EC V-096	Refueling Pool Skimmers To Fuel Pool Cooling Loop	C	N.A.
P-74	EG V-204	CCW Supply to RCP	C	N.A.
P-82	EJ 8818A	RHR Pump to Cold Leg 1 Injection	A	N.A.
P-82	EJ 8818B	RHR Pump to Cold Leg 2 Injection	A	N.A.
P-27	EJ 8818C	RHR Pump to Cold Leg 3 Injection	A	N.A.
P-27	EJ 8818D	RHR Pump to Cold Leg 4 Injection	A	N.A.
P-21	EJ 8841A	RHR Pump Disch to RCS Hot Leg 2	A	N.A.
P-21	EJ 8841B	RHR Pump Disch to RCS Hot Leg 3	A	N.A.
P-87	EM V-001	SI Pump Hot Leg 1 Injection	A	N.A.
P-87	EM V-002	SI Pump Hot Leg 2 Injection	A	N.A.
P-48	EM V-003	SI Pump Hot Leg 3 Injection	A	N.A.
P-48	EM V-004	SI Pump Hot Leg 4 Injection	A	N.A.

DELETED

REVISION 1

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
8. Hand-Operated and Check Valves - (Continued)				
P-58	EM V-006	Accumulator Fill Line From SI Pumps	C	N.A.
P-49	EM V-010	SI Pump Disch to Cold Leg 1	A	N.A.
P-49	EM V-020	SI Pump Disch to Cold Leg 2	A	N.A.
P-49	EM V-030	SI Pump Disch to Cold Leg 3	A	N.A.
P-49	EM V-040	SI Pump Disch to Cold Leg 4	A	N.A.
P-88	EM 8815	BIT to RCS Cold Leg Injection	A	N.A.
P-89	EN V-013	CTMT Spray Pump A to CTMT Spray Nozzles	A	N.A.
P-66	EN V-017	CTMT Spray Pump B to CTMT Spray Nozzles	A	N.A.
P-45	EP V-046	Accumulator Nitrogen Supply Line	C	N.A.
P-43	HD V-016	Auxiliary Steam to Decon System	C	N.A.
P-43	HD V-017	Auxiliary Steam to Decon System	C	N.A.
P-63	KA V-039	Rx Bldg Service Air Supply	C	N.A.
P-63	KA V-118	Rx Bldg Service Air Supply	C	N.A.
P-30	KA V-204	Rx Bldg Instrument Air Supply	C	N.A.
P-98	KB V-001	Breathing Air Supply to Rx Bldg.	C	N.A.

DELETED

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS	VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
8. Hand-Operated and Check Valves - (Continued)				
P-98	KB V-002	Breathing Air Supply to Rx Bldg.	C	N.A.
P-67	KC V-478	Fire Protection Supply to RX Bldg	C	N.A.
P-57	SJ V-111	Liquid Sample from PASS to RCDT	A,C	N.A.
9. Other Automatic Valves		DELETED		
P-1	AB-HV-11***	Mn. Stm. Isol.	A	N.A
P-2	AB-HV-14***	Mn. Stm. Isol.	A	N.A
P-3	AB-HV-17***	Mn. Stm. Isol.	A	N.A.
P-4	AB-HV-20***	Mn. Stm. Isol.	A	N.A.
P-5	AE-FV-42***	Mn. FW Isol.	A	N.A.
P-6	AE-FV-39***	Mn. FW Isol.	A	N.A.
P-7	AE-FV-40***	Mn. FW Isol.	A	N.A.
P-8	AE-FV-41***	Mn. FW Isol.	A	N.A.
P-9	BM-HV-4**	SG Blowdn. Isol.	A	10
P-10	BM-HV-1**	SG Blowdn. Isol.	A	10
P-11	BM-HV-2**	SG Blowdn. Isol.	A	10
P-12	BM-HV-3**	SG Blowdn. Isol.	A	10

**The provisions of Specification 3.0.4 are not applicable.

***These valves are included only for table completeness. The requirements of Specification 3.6.3 do not apply; instead, the requirements of Specifications 3.7.1.5 and 3.7.1.6 apply to the Main Steam Isolation Valves and Main Feedwater Isolation Valves, respectively.

ATTACHMENT 2

TECHNICAL SPECIFICATION CHANGES

(RE-TYPED)

INDEX

LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

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 3.6.3.

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

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 from the reactor coolant pump seals.

CORE ALTERATION

1.9 CORE ALTERATION shall be the movement or manipulation of any component within the reactor 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. The cycle specific core operating limits shall be determined for each reload cycle in accordance with Specification 6.9.1.9. Plant operation within these operating limits is addressed in individual specifications.

DOSE EQUIVALENT I-131

1.11 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 1, 2, 3 and 4.

ACTION:

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

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

a. At least once per 31 days by verifying that all penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by 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 3.6.3;

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

c. After each closing of each penetration subject to Type B testing, except the containment air locks, if opened following a Type A or B test, by leak rate testing the seal with gas at a pressure not less than P_a, 48.1 psig, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Specification 4.6.1.2d for all other Type B and C penetrations, the combined leakage rate is less than 0.60 L_a.

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

CONTAINMENT SYSTEMS

3/4.6.3 CONTAINMENT ISOLATION VALVES

LIMITING CONDITION FOR OPERATION

3.6.3 Each containment isolation valve shall be OPERABLE *.

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

ACTION:

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

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 check valve with flow through the valve secured, or

d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

e. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.3.1 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.

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* Containment isolation valves may be opened on an intermittent basis under administrative control.

** After satisfying this action statement, the motor operated valves associated with reactor coolant pump seal cooling, EGHV58, 59, 60, 61, 62, 127, 130, 131, 132, 133 may be energized and cycled for up to 12 hours to conduct any actuator diagnostic evaluations which may be required to restore the valve to an OPERABLE condition.

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 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" Isolation test signal, each Phase "A" isolation valve actuates to its isolation position,

b.# Verifying that on a Phase "B" Isolation test signal, each Phase "B" isolation valve actuates to its isolation position, and

c. Verifying that on a Containment Purge Isolation test signal, each purge supply and exhaust isolation valve actuates to its isolation position.

4.6.3.3 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.

The specified 18 month frequency may be waived for Cycle I provided the surveillance is performed prior to restart following the first refueling outage or June 1, 1986, whichever occurs first. The provisions of Specification 4.0.2 are reset from performance of this surveillance.

3/4.6.2.2 RECIRCULATION FLUID pH CONTROL (RFPC) SYSTEM

The operability of the RFPC System ensures that there exists adequate TSP-C in the containment such that a post-LOCA equilibrium sump pH of greater than or equal to 7.1 is maintained during the recirculation phase. The minimum depth of 30" ensures that 9000 lbm of TSP-C is available for dissolution to yield a minimum equilibrium sump pH of 7.1. This pH level minimizes the evolution of iodine and minimizes the effect of chloride and caustic stress corrosion on mechanical systems and components. The upper limit of 36.8" corresponds to the basket design capacity.

3/4.6.2.3 CONTAINMENT COOLING SYSTEM

The OPERABILITY of the Containment Cooling System ensures that: (1) the containment air temperature will be maintained within limits during normal operation, and (2) adequate heat removal capacity is available when operated in conjunction with the Containment Spray System during post-LOCA conditions.

The Containment Cooling System and the Containment Spray System are redundant to each other in providing post-accident cooling of the Containment atmosphere. As a result of this redundancy in cooling capability, the allowable out-of-service time requirements for the Containment Cooling System have been appropriately adjusted. However, the allowable out-of-service time requirements for the Containment Spray System have been maintained consistent with that assigned other inoperable ESF equipment since the Containment Spray System also provides a mechanism for removing iodine from the containment atmosphere.

3/4.6.3 CONTAINMENT ISOLATION VALVES

The OPERABILITY of the containment isolation valves ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment 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.

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

BASES (Continued)

3/4.6.4 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 containment 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. The Hydrogen Purge Subsystem discharges directly to the Emergency Exhaust System. Operation of the Emergency Exhaust System with the heaters operating for at least 10 continuous hours in a 31-day period is sufficient to reduce the buildup of moisture on the adsorbers and HEPA filters. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a Loss-of-Coolant Accident," Revision 2, November 1978.

ATTACHMENT 3

SAFETY EVALUATION

SAFETY EVALUATION

Proposed Change

This amendment request revises Technical Specification (TS) 3/4.6 by 1) removing the list of containment isolation valves, 2) revising the allowed outage time for containment isolation component cooling water (CCW) motor operated valves, and 3) allowing the use of containment penetration check valves as isolation devices.

The list of containment isolation valves, TS Table 3.6-1, is removed in accordance with the guidance of NRC Generic Letter 91-08, "Removal of Component Lists from Technical Specifications". This change is consistent with the provisions of the containment systems section of NUREG-1431, "Standard Technical Specifications for Westinghouse Plants" and consists of:

1. the deletion of references to Table 3.6-1 from TS 1.7, 3/4.6.1 and 3/4.6.3;
2. the addition of wording to Surveillance Requirement 4.6.1.1.a to exempt valves opened under administrative control as permitted by TS 3/4.6.4;
3. the addition of a note to LCO 3.6.3 to indicate that TS 3.0.4 does not apply, and that containment isolation valves may be opened under administrative control, and;
4. the revision of BASES Section 3/4.6.3 in accordance with the GL 91-08 guidance.

TS 3.6.3 is revised by the addition of a footnote to ACTION Statement (b). After satisfying this ACTION Statement the footnote would allow the CCW motor operated valves (MOVs) to be energized and cycled for up to 12 hours to conduct any actuator diagnostic evaluations which may be required to restore the valves to an OPERABLE condition. The current TS ACTION allowed outage time of 4 hours does not provide sufficient time to troubleshoot and perform corrective maintenance and do any required diagnostic evaluations.

TS LCO 3.6.3.c is revised to allow the use of penetration check valves as isolation devices. This change is also consistent with the provisions of the containment systems section of NUREG-1431.

Background

Containment integrity is provided by the containment structure and by isolating the various penetrations that pass through the containment structure walls. Maintaining containment integrity prevents excessive radioactivity from passing from the containment to the atmosphere in the event of a release of radioactive material to the containment. The containment isolation valves are an integral part of the containment isolation design.

The function of containment isolation valves is to be closed or to automatically close to limit the release of radioactive fission products to the environment. TS 3/4.6.3 establishes requirements for containment isolation valves and TS Table 3.6-1 identifies those valves required to be OPERABLE to satisfy TS requirements.

Containment Isolation Valve Table Removal

This proposed change removes TS Table 3.6-1, Containment Isolation Valves, in accordance with GL 91-08. Specifications which refer to Table 3.6-1 are revised to reference the applicable valves by function. The proposed change allows Table 3.6-1 to be removed from the TS without altering existing TS requirements or those components to which they apply.

Generic Letter 91-08 provides guidance in removing component lists from the technical specifications. In accordance with the guidance, component lists removed from the TS must be relocated in plant documents subject to the change control provisions in the Administrative Controls Section of the TS. These changes then would allow the component lists to be updated outside of the license amendment process.

Union Electric will relocate the list of containment isolation valves to FSAR Chapter 16, which contains other relocated TS sections. Changes to the FSAR are subject to the provisions of 10 CFR 50.59. This process provides proper levels of review and approval of changes and for the identification of any unreviewed safety question. Records of the changes are maintained and an annual report submitted to NRC that describes the changes and provides a summary of the safety evaluation of each change. The FSAR is also updated every 18 months with any changes. Therefore, adequate controls exist to ensure that these components satisfy the applicable TS requirements. Relocation of Table 3.6-1 to Chapter 16 of the FSAR does not affect the purpose or information provided in FSAR Figure 6.2.4-1, Listing of Containment Piping Penetrations.

TS Table 3.6-1 identifies valves which may be opened during plant operation under administrative control. These valves are required to be opened for testing, maintenance, or other activities. Administrative control of these valves when opened in Modes 1 through 4 is required since rapid closure would be necessary to isolate the containment during accident conditions. TS 3/4.6.3 is revised to retain the exception of the requirements to those valves under administrative control. This change is provided by appropriate plant procedures, which are maintained under the provisions of 10 CFR 50.59.

Several Table 3.6-1 valves are exempt from the requirements of TS 3.0.4, as currently indicated by a table footnote. This change relocates the TS 3.0.4 exception to LCO 3.6.3, which causes this exception to apply to all containment isolation valves. TS 3.0.4 precludes entry into an operational mode or condition when an LCO would not be met without reliance on the provisions of the action requirements. GL 91-08 states that the action requirements for

containment isolation valves permit continued operation with an inoperable valve when the associated penetration is isolated, therefore an exception to the limitation of TS 3.0.4 on changes in operational modes or conditions is acceptable for this specification. In addition, this increase in the scope of TS 3.0.4 is acceptable because it is also consistent with the guidance provided in Generic Letter 87-09.

The valve closure time requirements listed in Table 3.6-1 are maintained in appropriate plant procedures, the FSAR and the Callaway Pump and Valve Program. These documents are all controlled under the provisions of 10 CFR 50.59. Therefore, removing the Table 3.6-1 valve stroke times will not alter these requirements.

The proposed change does not alter the current TS requirements for containment isolation valve operability. The LCO and surveillance requirements will be retained in the TS. Therefore, the proposed changes will not affect the meaning, application, or function of the TS requirements for the containment isolation valves.

Allowed Outage time of 12 hours

TS 3.6.3 is revised by the addition of a footnote to ACTION Statement (b) allowing up to 12 hours to energize and cycle component cooling water MOVs in order to perform diagnostic testing.

Table 1 provides a listing of the penetrations and their associated MOVs that would be applicable to the proposed footnote to ACTION Statement (b). These penetrations are associated with the component cooling water supply and return lines supplying the reactor coolant pump motors and thermal barrier heat exchangers. A situation could exist which requires these MOVs to have maintenance performed on-line. If the allowed outage time of 4 hours is exceeded, the MOV must be closed to satisfy TS 3.6.3 ACTION (b). The addition of the footnote to this TS would allow sufficient time for the completion of diagnostic testing so the MOV could be returned to OPERABLE status.

The MOV predictive performance program describes the MOV diagnostic test program at Callaway Plant. Callaway is presently using the MOVATS 3000 series developed by ITI-MOVATS, Inc. for diagnostic testing. This program satisfies requirements of Generic Letter 89-10, "Safety Related Motor Operated Valve Testing and Surveillance" and commitments to Bulletin 85-03, "Motor Operated Valve Common Mode Failures During Plant Transients Due to Improper Switch Settings" as well as predictive performance. Some forms of MOV maintenance require diagnostic testing be performed prior to declaring the MOV OPERABLE. This testing can routinely take up to 12 hours to complete. The current Action Statement to TS 3.6.3 does not account for the time required to perform diagnostic testing.

The MOVs listed in Table 1 meet acceptable alternatives to the explicit requirements of GDC 56 since they utilize automatic

isolation valves that fail "as is" versus failing closed upon loss of power to the valve operators. These penetrations are in service during normal operation and are required to be open following an accident. A check valve is provided inside containment for the supply line and independently powered automatic isolation valves are provided inside containment for the return lines. These valves serve as the second barrier between the containment atmosphere and the outside atmosphere so that the failure of the other barrier, i.e. the automatic isolation valve outside containment, does not prevent isolation of the penetrations. This arrangement is provided so a single active or passive failure will not result in the loss of both containment isolation barriers.

The proposed change to use check valves as isolation devices is not applicable to the RCP seal water penetrations because the outside containment supply line consists of two parallel automatic isolation valves. This design ensures that there is a supply of water to the reactor coolant pump seals, but results in a situation whereby two valves must be closed to satisfy the TS action statement. Allowing 12 hours to restore the inoperable valves is acceptable because the system is closed (isolated from the RCS with flow through the penetration) and the penetration can still be isolated by the in containment isolation device.

Based on this, the administrative controls in place while performing valve maintenance and and the fact that the Callway PRA in unaffected by this change, the additional allowance of up to 12 hours to energize and cycle the inoperable valve to conduct any required diagnostic testing to restore the valve to OPERABLE status will not result in containment leakage that would exceed limits assumed in the safety analyses for a LOCA.

Use of Check Valves as Isolation Device

TS LCO 3.6.3.c is revised to allow the use of penetration check valves to satisfy the requirements for penetration isolation.

The use of containment isolation check valves as isolation devices is acceptable because the Callaway containment design assumes that check valves will act as isolation devices. This is discussed in the NRC Safety Evaluation Report for Union Electric (NUREG-0830, dated October 1981) in section 6.2.3, Containment Isolation System.

The penetration check valves are subjected to Type C integrated leak rate and full flow testing, which makes these valves highly reliable devices. These testing requirements are contained in the Callaway Inservice Testing Program. In addition, NUREG-1431 allows the use of check valves as isolation devices.

Miscellaneous Change

Table 3.6-1 includes the main steam and main feedwater isolation valves for table completeness only. These eight automatic valves will not be relocated to the FSAR since the requirements of

Specification 3.6.3 are not applicable to them and these valves are contained in Specifications 3.7.1.5 and 3.7.1.6.

Evaluation

The proposed revision to TS 3/4.6 to remove the listing of containment isolation valves, revise the ACTION Statement for the CCW MOVs, and credit penetration check valves as isolation devices does not involve an unreviewed safety question because operation of Callaway Plant with this change would not:

a) Increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the Safety Analysis Report.

The proposed changes simplify the TS, meet the regulatory requirements for control of containment isolation and are consistent with the guidelines of GL 91-08. The information contained in Table 3.6-1 has not been changed, but only relocated to a different controlling document. This is an administrative change which should result in improved plant practices and have no impact on plant operations. Addition of the footnote to allow up to 12 hours for valve testing does not affect the severity of any accident previously evaluated. The proposed revision to the TS will not adversely impact plant safety since the second barrier of the two required is still available to provide isolation between the containment atmosphere or the reactor coolant system and the outside atmosphere.

b) Create the possibility for an accident or malfunction of equipment of a different type than any previously evaluated in the Safety Analysis Report.

There are no design changes being made that would create the possibility for an accident or malfunction of equipment. These changes do not result in any physical change to the plant or to the manner of plant operation. Addition of the footnote to allow up to 12 hours for valve testing does not affect the severity of any accident previously evaluated. The additional time provides assurance that the inoperable valve is in proper working order prior to returning it to OPERABLE condition.

c) Reduce the margin of safety as defined in the basis for any technical specification.

The proposed revision to the TS does not reduce the margin of safety assumed in any accident analysis. Containment isolation will still be maintained as provided by the second isolation valve to ensure that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA.

Conclusion

Given the above discussions as well as those presented in the Significant Hazards Consideration, the proposed change does not adversely affect or endanger the health or safety of the general public or involve a significant safety hazard.

TABLE 1

Penetration #	Valve(s)	Type Leak Test	GDC
P-74	EGHV0058. -0127	C	56
P-75	EGHV0059, -0060,-0130,-0131	C	56
P-76	EGHV0061, -0062,-0132,-0133	C	56

ATTACHMENT 4

SIGNIFICANT HAZARDS EVALUATION

SIGNIFICANT HAZARDS CONSIDERATION

Proposed Change

This amendment request revises Technical Specification (TS) 3/4.6 by 1) removing the list of containment isolation valves, 2) revising the allowed outage time for containment isolation component cooling water (CCW) motor operated valves, and 3) allowing the use of containment penetration check valves as isolation devices.

The list of containment isolation valves, TS Table 3.6-1, is removed in accordance with the guidance of NRC Generic Letter 91-08, "Removal of Component Lists from Technical Specifications". This change is consistent with the provisions of the containment systems section of NUREG-1431, "Standard Technical Specifications for Westinghouse Plants". This portion of the proposed change:

1. deletes references to Table 3.6-1 from TS 1.7, 3/4.6.1 and 3/4.6.3,
2. adds wording to Surveillance Requirement 4.6.1.1.a to exempt valves opened under administrative control as permitted by TS 3/4.6.4,
3. adds a note to LCO 3.6.3 to indicate that TS 3.0.4 does not apply, and that containment isolation valves may be opened under administrative control, and
4. revises BASES Section 3/4.6.3 in accordance with the GL 91-08 guidance.

TS 3.6.3 is revised by the addition of a footnote to ACTION Statement (b). After satisfying this ACTION Statement the footnote would allow the CCW motor operated valves to be energized and cycled for up to 12 hours to conduct any actuator diagnostic evaluations which may be required to restore the valve to an OPERABLE condition. The current TS ACTION allowed outage time of 4 hours does not provide sufficient time to troubleshoot and perform corrective maintenance and do any required diagnostic evaluations.

TS LCO 3.6.3.c is revised to allow the use of penetration check valves as isolation devices. This change is also consistent with the provisions of the containment systems section of NUREG-1431.

Evaluation

The proposed revision to TS 3/4.6 to remove the listing of containment isolation valves, revise the ACTION Statement for the CCW MOVs, and credit penetration check valves as isolation devices does not involve a significant hazards consideration because operation of Callaway Plant with this change would not:

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

The proposed changes simplify the TS, meet the regulatory requirements for control of containment isolation and are consistent with the guidelines of GL 91-08. The information contained in Table 3.6-1 has not been changed, but only relocated to a different controlling document. This is an administrative change which should result in improved plant practices and have no impact on plant operations. Addition of the footnote to allow up to 12 hours for valve testing does not affect the severity of any accident previously evaluated. The proposed revision to the TS will not adversely impact plant safety since the second barrier of the two required is still available to provide isolation between the containment atmosphere or the reactor coolant system and the outside atmosphere.

b) Create the possibility of a new or different kind of accident from any previously evaluated.

There are no design changes being made that would create a new type of accident or malfunction and the method and manner of plant operation remain unchanged. Addition of the footnote to allow up to 12 hours for valve testing does not affect the severity of any accident previously evaluated. The additional time provides assurance that the inoperable valve is in proper working order prior to returning it to OPERABLE condition.

c) Involve a significant reduction in a margin of safety.

There are no changes being made to the safety limits or safety system settings that would adversely impact plant safety. Containment isolation will still be maintained as provided by the second isolation valve to ensure that the release of radioactive material to the environment will be consistent with the assumptions used in the analyses for a LOCA. This will assure that containment integrity is maintained.

Based on the above discussions, it has been determined that the requested Technical Specification change does not involve a significant increase in the probability or consequences of an accident or create the possibility of a new or different kind of accident or condition over previous evaluations; or involve a significant reduction in a margin of safety. Therefore, the requested license amendment does not involve a significant hazards consideration.

ATTACHMENT 5

ENVIRONMENTAL CONSIDERATION

ENVIRONMENTAL CONSIDERATION

This amendment request revises Technical Specification 3/4.6 by 1) removing the list of containment isolation valves, 2) revising the allowed outage time for containment isolation component cooling water motor operated valves, and 3) allowing the use of containment penetration check valves as isolation devices.

The proposed amendment involves changes with respect to the use of facility components located within the restricted area, as defined in 10 CFR 20, and changes surveillance requirements. Union Electric has determined that the proposed amendment does not involve:

(1) A significant hazard consideration, as discussed in Attachment 4 of this amendment application;

(2) A significant change in the types or significant increase in the amounts of any effluents that may be released offsite;

(3) A significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or enviromental assessment need be prepared in connection with the issuance of this amendment.