

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 3.6.3 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 sealing mechanism associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE, and
- e. The containment leakage rates determined by Specification 4.6.1.1.c are within limits.

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. These 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.

WOLF CREEK - UNIT 1

1-2

Amendment No. 64, 89, 97

3/4.6 CONTAINMENT SYSTEMS

3/4.6.1 PRIMARY CONTAINMENT

CONTAINMENT INTEGRITY

LIMITING CONDITION FOR OPERATION

3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

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

ACTION:

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

SURVEILLANCE REQUIREMENTS

4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

- a. At least once per 31 days by verifying that all penetrations* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except as provided in Table 3.6-1 of Specification 3.6.3; 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;
- c. By performing containment leakage rate testing in accordance with the Containment Leakage Rate Testing Program of Specification 6.8.4.i; and
- d. By verifying containment structural integrity in accordance with the Containment Tendon Surveillance Program of Specification 6.8.5.c.

*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~~ The containment isolation valves specified in Table 3.6-1 shall be OPERABLE*, with isolation times as shown in Table 3.6-1.

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
- 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 do not apply.

SURVEILLANCE REQUIREMENTS

4.6.3.1 Each ~~The~~ power-operated or automatic containment 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.

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

CONTAINMENT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

4.6.3.2 Each power-operated or automatic 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 **containment isolation** valve of ~~Table 3.6-1~~ shall be determined to be within its limit when tested pursuant to Specification 4.0.5.

DELETE TABLE

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

**The provisions of Specification 3.0.4 are not applicable.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS VALVE NUMBER		FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
1. Phase "A" Isolation (a) - (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	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.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>	<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
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-25	HB HV-7136 RCDT Pumps Disch Hdr Outside CTMT Iso	C	10
P-44	HB HV-7150 RCOT Vent Outside CTMT	C	10
P-26	HB HV-7173 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

DELETE TABLE

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-32	LF FV-36	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 Inner CTMT Iso	C	5
P-69	SJ HV-13**	PZR Vapor Sample Outer CTMT Iso	C	5
P-95	SJ HV-18**	Accumulator Sample Inner CTMT Iso	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
2. Phase "A" Isolation (passive)*				
P-58	EM HV-8888**	Accumulator Tank Fill Line Iso Valve	C	5

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

**The provisions of Specification 3.0.4 are not applicable.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

PENETRATIONS VALVE NUMBER	FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
2. Phase "A" Isolation (passive)* - (Continued)			
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
4. Containment Purge Isolation (active)			
V-161	GT HZ-4***	CTMT Mini-Purge Supply Outside CTMT Iso	C 3
V-161	GT HZ-5***	CTMT Mini-Purge Supply Inside CTMT Iso	C 3

*May be opened on an intermittent basis under administrative control

**The provisions of Specification 3.0.4 are not applicable.

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

DELETE TABLE

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) - (Continued)			
V-160 GT HZ-11***	CTMT Mini-Purge Exh Inside CTMT Iso	C	3
V-150 GT HZ-12***	CTMT Mini-Purge Exh Outside CTMT Iso	C	3
5. Containment Purge Isolation (passive)			
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.
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.

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

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>		<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
6. Remote Manual - (Continued)				
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.
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.

*The provisions of Specification 3.0.4 are not applicable.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>		<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
6. Remote Manual - (Continued)				
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 Return from RCP Thermal Barrier	C	N.A.
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.

*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.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>		<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
6. Remote Manual - (Continued)				
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	EVCS Charging Line	C	10
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	C	N.A.
P-40	3B V-208	RCP D Seal Water Supply	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 administrative control.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>		<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
8. Hand-Operated and Check Valves - (Continued)				
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.
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	EP 8818A	RHR Pump to Cold Leg 1 Injection	A	N.A.
P-82	EP 8818B	RHR Pump to Cold Leg 2 Injection	A	N.A.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAMINANT ISOLATION VALVES

PENETRATIONS VALVE NUMBER		FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
8. Hand-Operated and Check Valves - (Continued)				
P-27	EP 8818C	RHR Pump to Cold Leg 3 Injection	A	N.A.
P-27	EP 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.
P-58	EM V-006	Accumulator Fill Line From SI Pumps	C	N.A.
P-49	EP V-010	SI Pump Disch to Cold Leg 1	A	N.A.
P-49	EP V-020	SI Pump Disch to Cold Leg 2	A	N.A.
P-49	EP V-030	SI Pump Disch to Cold Leg 3	A	N.A.
P-49	EP V-040	SI Pump Disch to Cold Leg 4	A	N.A.
P-88	EN V-881E	B/T to RCS Cold Leg Injection	A	N.A.
P-89	EN V-013	CTMT Spray Pump A to CTMT Spray Nozzles	A	N.A.

DELETE TABLE

TABLE 3.6-1 (Continued)

CONTAINMENT ISOLATION VALVES

<u>PENETRATIONS VALVE NUMBER</u>		<u>FUNCTION</u>	<u>TYPE LEAK TEST REQUIRED</u>	<u>MAXIMUM ISOLATION TIME (Seconds)</u>
8. Hand-Operated and Check Valves - (Continued)				
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	HC 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-38	KB V-001	Breathing Air Supply to RX Bldg	C	N.A.
P-98	KB V-002	Breathing Air Supply to RX Bldg	C	N.A.
P-30	KA V-204	Rx Bldg Instrument Air Supply	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.

DELETE TABLE

TABLE 3.6-1 (Continued)
CONTAINMENT ISOLATION VALVES

PENETRATIONS VALVE NUMBER		FUNCTION	TYPE LEAK TEST REQUIRED	MAXIMUM ISOLATION TIME (Seconds)
9. Other Automatic Valves				
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 for table completeness. The requirements of Specification 3.6.2 do not apply; instead, the requirements of Specification 3.7.1.5, 3.7.1.7 and Specification 3.3.2 apply to the Main Steam Isolation Valves and Main Feedwater Isolation Valves.

BASES

CONTAINMENT COOLING SYSTEM (Continued)

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 GDC54 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.

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 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. 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.

Adequate mixing of the containment atmosphere following a LOCA is ensured by natural circulation without reliance on a hydrogen mixing systems. This mixing action will prevent localized accumulations of hydrogen from exceeding the flammable limit.