ATTACHMENT A-1

Revise the Beaver Valley Unit No. 1 Technical Specifications as follows:

Remove Pages	Insert Pages
3/4 3-25	3/4 3-25
3/4 3-26	3/4 3-26
3/4 3-27	3/4 3-27
3/4 3-28	3/4 3-28
3/4 6-19a	3/4 6-19a
3/4 6-19b	3/4 6-19b
3/4 6-19c	3/4 6-19c
3/4 6-19d	3/4 6-19d
3/4 6-19e	3/4 6-19e
3/4 6-19f	3/4 6-19f
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3/4 6-19j	3/4 6-19j
3/4 6-19k	3/4 6-19k
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3/4 6-25	-----
B3/4 6-3	B3/4 6-3

TABLE 3.3-5

ENGINEERED SAFETY FEATURES RESPONSE TIMES

INITIATING SIGNAL AND FUNCTION		RESPONSE TIME IN SECONDS
1.	Manual	
a.	Safety Injection (ECCS)	Not Applicable
	Feedwater Isolation	Not Applicable
	Reactor Trip (SI)	Not Applicable
	Containment Isolation-Phase "A"	Not Applicable
	Containment Vent and Purge Isolation	Not Applicable
	Auxiliary Feedwater Pumps	Not Applicable
	Rx Plant River water System	Not Applicable
b.	Containment Quench Spray Pumps	Not Applicable
	Containment Quench Spray Valves	Not Applicable
	Containment Isolation-Phase "B"	Not Applicable
c.	Containment Isolation-Phase "A"	Not Applicable
d.	Control Room Ventilation Isolation	Not Applicable
2.	Containment Pressure-High	
a.	Safety Injection (ECCS)	≤ 27.0*
b.	Reactor Trip (from SI)	≤ 3.0
c.	Feedwater Isolation	≤ 13.0(1)
d.	Containment Isolation-Phase "A"	≤ 22.0(3)/33.0(2)
e.	Auxiliary Feedwater Pumps	Not Applicable
f.	Rx Plant River Water System	≤ 77.0(3)/110.0(2)

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

INITIATING SIGNAL AND FUNCTION	RESPONSE TIME IN SECONDS
2. Containment Pressure-Low	
a. Safety Injection (ECCS)	≤ 27.0*/27.0#
b. Reactor Trip (from SI)	≤ 3.0
c. Feedwater Isolation	≤ 13.0(1)
d. Containment Isolation-Phase "A"	≤ 22.0(3)
e. Auxiliary Feedwater Pumps	Not Applicable
f. Rx Plant River Water System	≤ 77.0(3)/110.0(2)

TABLE 3.3-5 (Continued)

ENGINEERED SAFETY FEATURES RESPONSE TIMES

INITIATING SIGNAL AND FUNCTION	RESPONSE TIME IN SECONDS
2. Steam Line Pressure-Low	
a. Safety Injection (ECCS)	≤ 27.0#/37.0##
b. Reactor Trip (from SI)	≤ 3.0
c. Feedwater Isolation	≤ 13.0(1) |
d. Containment Isolation-Phase "A"	≤ 22.0(3)/33.0(2)
e. Auxiliary Feedwater Pumps	Not Applicable
f. Rx Plant River Water System	≤ 77.0(3)/110.0(2)
g. Steam Line Isolation	≤ 8.0
5. Containment Pressure--High-High	
a. Containment Quench Spray	≤ 85.0(2)
b. Containment Isolation-Phase (B)	Not Applicable
c. Control Room Ventilation Isolation	≤ 22.0(3)/77.0(2)
6. Steam Generator Water Level--High-High	
a. Turbine Trip-Reactor Trip (Above P-9)	≤ 2.5
b. Feedwater Isolation	≤ 13.0(1) |
7. Containment Pressure--Intermediate High-High	
a. Steam Line Isolation	≤ 8.0
8. Steamline Pressure Rate--High Negative	
a. Steamline Isolation	≤ 8.0
9. Loss of Power	
a. 4.16kv Emergency Bus Undervoltage (Loss of Voltage)	≤ 1.3
b. 4.16kv and 480v Emergency Bus Undervoltage (Degraded Voltage)	≤ 95

TABLE 3.3-5 (Continued)

TABLE NOTATION

* Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps and Low Head Safety Injection pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST valves open, then VCT valves close) is not included.

\# Diesel generator starting and sequence loading delays not included. Offsite power available. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST) (RWST valves open, then VCT valves close) is included.

\## Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST) (RWST valves open, then VCT valves close) is included.

(1) Feedwater system overall response time shall include verification of valve stroke times applicable to the feedwater regulating and bypass valves.

(2) Diesel generator starting and sequence loading delays included.

(3) Diesel generator starting and sequence loading delays not included.

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
1-D	CCR to RHS Hx 1A & RHS Pump 1A Seal Cooler	(1)MOV-1CC-112A2	N/A	(1)1CCR-247	N/A
2-D	CCR from RHS Hx 1B & RHS Pump 1B Seal Cooler	(1)MOV-1CC-112B3	N/A	(1)1CCR-252	N/A
3	Spare				
4-D	CCR to RHS Hx 1A & RHS Pump 1A Seal Cooler	(1)MOV-1CC-112A3	N/A	(1)1CCR-251	N/A
5-D	CCR from RHS Hx 1B & RHS Pump 1B Seal Cooler	(1)MOV-1CC-112B2	N/A	(1)1CCR-248	N/A
6-B	Spare				
7-A	High Head SI to Hot Legs	(3)(2)1SI-83	N/A	(3)(2)MOV-1SI-869A	N/A
8-C	CCR to RCP 1B & 1C Thermal Barriers	(B)TV-1CC-107D1	20	(B)TV-1CC-107D2	20
9-B	CCR from Shroud Coolers	(B)TV-1CC-111D1	20	(B)TV-1CC-111D2	20
10-B	Spare				
11-B	Air Recirc. Cooling Water-Out	(B)TV-1CC-110D	30	(B)TV-1CC-110F2 (B)TV-1CC-110F1	30 30
12-A	Spare				
13-D	Deluge System to CNMT Hose Reels	1FP-827	N/A	(A)TV-1FP-107	N/A
14-D	Air Recirc. Cooling water-In	(B)TV-1CC-110E3	30	(B)TV-1CC-110E2	30
15-A	Coolant System Charging	(3)(2)1CH-31	N/A	(3)(2)MOV-1CH-289	15
16-B	CCR to Shroud Coolers	(B)TV-1CC-111A2	20	(B)TV-1CC-111A1	20

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
17-A	CCR to RCP 1B	(B)TV-1CC-103B1	20	(B)TV-1CC-103B	20
18-A	CCR to RCP 1C	(B)TV-1CC-103C1	20	(B)TV-1CC-103C	20
19-A	RCP's Seal Water Return	(A)MOV-1CH-378 1CH-369	15 N/A	(A)MOV-1CH-381	15
20-C	SI Accum. Makeup	1SI-42	N/A	(1)1SI-41	N/A
21-B	Spare				
22-B	Spare				
23-B	Spare				
24-SgD	RHS to RWST	1RH-14 1RH-16	N/A N/A	1RH-15	N/A
25-B	CCR from RCP 1B & 1C Motors	(B)TV-1CC-105D1	20	(B)TV-1CC-105D2	20
26-C	CCR from RCP 1A Thermal Barrier	(B)TV-1CC-107E1	10	(B)TV-1CC-107E2	10
27-C	CCR from RCP 1A Motor	(B)TV-1CC-105E1	14	(B)TV-1CC-105E2	14
28-A	RCS Letdown	(A)TV-1CH-200A (A)TV-1CH-200B (A)TV-1CH-200C (1)MOV-1CH-142 RV-1CH-203	7.5 7.5 7.5 N/A N/A	(A)TV-1CH-204	7.5
29-A	Primary Drain Transfer Pump #1 Discharge	(A)TV-1DG-108A	5	(A)TV-1DG-108B	5
30-B	Spare				
31-D	Deluge System to Cable Penetration Area	1FP-804	N/A	(A)TV-1FP-105	N/A

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
32-C	Deluge System to RHR Area	1FP-800	N/A	(A)TV-1FP-106	N/A
33-C	High Head SI to Hot Legs	(3)(2)1SI-84	N/A	(3)(2)MOV-1SI-869B	N/A
34-A	Spare				
35-A	Seal Injection Water RCP 1A	(10)(2)1CH-181	N/A	(3)(2)MOV-1CH-308A	N/A
36-A	Seal Injection Water RCP 1B	(10)(2)1CH-182	N/A	(3)(2)MOV-1CH-308B	N/A
37-A	Seal Injection Water RCP 1C	(10)(2)1CH-183	N/A	(3)(2)MOV-1CH-308C	N/A
38-A	Containment Sump Pump Discharge	(A)TV-1DA-100A	10	(A)TV-1DA-100B	10
39-C	Steam Generator 1A Blowdown	Closed System	N/A	(3)(2)(A)TV-1BD-100A	20
40-A	Steam Generator 1B Blowdown	Closed System	N/A	(3)(2)(A)TV-1BD-100B	20
41-B	Steam Generator 1C Blowdown	Closed System	N/A	(3)(2)(A)TV-1BD-100C	20
42-C	Compressed Air to Fuel Handling Equipment	1SA-15	N/A	1SA-14	N/A
43-B	Air Activity Monitor-Out	(A)TV-1CV-102-1	5	(A)TV-1CV-102	5
44-B	Air Activity Monitor-In			(A)TV-1CV-101A (A)TV-1CV-101B	5 5
45-B	Primary grade Water to PRT	1RC-72	N/A	(A)TV-1RC-519	12
46-A	Charging Fill Header	(10)(2)1CH-170	N/A	(3)(2)(1)FCV-1CH-160	N/A
47-B	Instrument Air	1IA-91	N/A	1IA-90	N/A

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
48-B	Primary Vent Header	(A)TV-1DG-109A2	5	(A)TV-1DG-109A1	5
49-C	Nitrogen Supply to PRT	1RC-68	N/A	(A)TV-1RC-101	5
50-C	Spare				
51-C	Spare				
52-C	Spare				
53-C	Nitrogen Supply to SI Accumulators	(A)TV-1SI-101-2	5	(A)TV-1SI-101-1	5
54-B	Spare				
55-1-A	SI Accumulator Sample	(A)TV-1SS-109A1	20	(A)TV-1SS-109A2	20
55-2-A	CNMT Leakage Monitoring Open Tape			(A)TV-1IM-100A1 (A)TV-1IM-100A2	5 5
55-3-A	Spare				
55-4-A	PRT Gas Sample	(A)TV-1SS-111A1	20	(A)TV-1SS-111A2	20
56-1-A	Pressurizer Liquid Sample	(A)TV-1SS-100A1	20	(A)TV-1SS-100A2	20
56-2-A	RCS Cold Leg Sample	(A)TV-1SS-102A1	20	(A)TV-1SS-102A2	20
56-3-A	RCS Cold Leg Sample	(A)TV-1SS-105A1	20	(A)TV-1SS-105A2	20
56-4-A	STM GEN 1A Blowdown Sample	Closed System	N/A	(3)(2)(A)TV-1SS-117A	20
57-1-A	CNMT Leakage Monitoring Open Taps			(A)TV-1IM-100A1 (A)TV-1IM-100A2	5 5

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
57-2-A	CNMT Leakage Monitoring Open Taps			(A)TV-1IM-100A1	5
				(A)TV-1IM-100A2	5
57-3-A	Spare				
57-4-A	Spare				
58-B	CCR to RCP 1A	(B)TV-1CC-103A1	20	(B)TV-1CC-103A	20
59-C	Spare				
60-SgD	Low Head SI to Hot Legs	(3)(2)1SI-13	N/A	(3)(2)MOV-1SI-890A	N/A
				(3)(2)1SI-451	N/A
61-SgD	Low Head SI to Cold Legs	(3)(2)1SI-10	N/A	(3)(2)MOV-1SI-890C	N/A
		(3)(2)1SI-11	N/A		
		(3)(2)1SI-12	N/A		
62-SgD	Low Head SI to Hot Legs	(3)(2)1SI-14	N/A	(3)(2)MOV-1SI-890B	N/A
				(3)(2)1SI-452	N/A
63-SgD	QSP Discharge 360° Header	1QS-4	N/A	(B)MOV-1QS-101B	75(4)
64-SgD	QSP Discharge 360° Header	1QS-3	N/A	(B)MOV-1QS-101A	75(4)
65	Fuel Transfer Tube	(7) Flange	N/A	(2)(6)FH-1	N/A
66-SgD	Outside RSP 2A Suction from CNMT			(B)(2)MOV-1RS-155A	75(4)
67-SgD	Outside RSP 2B Suction from CNMT			(B)(2)MOV-1RS-155B	75(4)
68-SgD	Low Head SI Pump 1A Suction from CNMT Sump			(3)(9)(2)MOV-1SI-860A	N/A
69-SgD	Low Head SI Pump 1B Suction from CNMT Sump			(3)(9)(2)MOV-1SI-860B	N/A

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	
70-SgD	Outside RSP 2B Discharge	1RS-101	N/A	(B)(2)MOV-1RS-156B	75(4)	
71-SgD	Outside RSP 2A Discharge	1RS-100	N/A	(B)(2)MOV-1RS-156A	75(4)	
72-SgD	Spare					
73-SgD	Main Steam Loop 1A Bypass	Closed System	N/A	(1)(2)MOV-1MS-101A	N/A	
	Main Steam RHR Valve	Closed System	N/A	(1)(2)(6)HCV-1MS-104	N/A	
	Main Steam Loop 1A	Closed System	N/A	(2)TV-1MS-101A	5	
	Main Steam Line Drain	Closed System	N/A	(2)TV-1MS-111A	8	
	Main Steam to Auxiliary Feed Pump	Closed System	N/A	(2)MOV-1MS-105	N/A	
	Main Steam Atmospheric Dump	Closed System	N/A	(2)(6)PCV-1MS-101A	N/A	
	Main Steam Safety Valves	Closed System	N/A	(2)(6) Safety Valves	N/A	
74-SgD	Main Steam Loop 1B Bypass	Closed System	N/A	(1)(2)MOV-1MS-101B	N/A	
	Main Steam RHR Valve	Closed System	N/A	(1)(2)(6)HCV-1MS-104	N/A	
	Main Steam Loop 1B	Closed System	N/A	(2)TV-1MS-101B	5	
	Main Steam Line Drain	Closed System	N/A	(2)TV-1MS-111B	8	
	Main Steam to Auxiliary Feed Pump	Closed System	N/A	(2)MOV-1MS-105	N/A	
	Main Steam Atmospheric Dump	Closed System	N/A	(2)(6)PCV-1MS-101B	N/A	
	Main Steam Safety Valves	Closed System	N/A	(2)(6)Safety Valves	N/A	
75-SgD	Main Steam Loop 1C Bypass	Closed System	N/A	(1)(2)MOV-1MS-101C	N/A	
	Main Steam RHR Valve	Closed System	N/A	(1)(2)(6)HCV-1MS-104	N/A	
	Main Steam Loop 1C	Closed System	N/A	(2)TV-1MS-101C	5	
	Main Steam Line Drain	Closed System	N/A	(2)TV-1MS-111C	8	
	Main Steam to Auxiliary Feed Pump	Closed System	N/A	(2)MOV-1MS-105	N/A	
	Main Steam Atmospheric Dump	Closed System	N/A	(2)(6)PCV-1MS-101C	N/A	
	Main Steam Safety Valves	Closed System	N/A	(2)(6)Safety Valves	N/A	
76-SgD	FW Loop 1A	Closed System	N/A	(2)MOV-1FW-156A	N/A	
	AFW Loop 1A	Closed System	N/A	(2)1FW-42	N/A	
77-SgD	FW Loop 1B	Closed System	N/A	(2)MOV-1FW-156B	N/A	
	AFW Loop 1B	Closed System	N/A	(2)1FW-43	N/A	

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
78-SgD	FW Loop 1C AFW Loop 1C	Closed System Closed System	N/A N/A	(2)MOV-1FW-156C (2)1FW-44	N/A N/A
79-SgD	RW to 1A RSP Hx	Closed System	N/A	(2)MOV-1RW-104A	N/A
80-SgD	RW to 1C RSP Hx	Closed System	N/A	(2)MOV-1RW-104C	N/A
81-SgD	RW to 1B RSP Hx	Closed System	N/A	(2)MOV-1RW-104B	N/A
82-SgD	RW to 1D RSP Hx	Closed System	N/A	(2)MOV-1RW-104D	N/A
83-SgD	RW from 1A RSP Hx	Closed System	N/A	(2)MOV-1RW-105A	N/A
84-SgD	RW from 1C RSP Hx	Closed System	N/A	(2)MOV-1RW-105C	N/A
85-SgD	RW from 1B RSP Hx	Closed System	N/A	(2)MOV-1RW-105B	N/A
86-SgD	RW from 1D RSP Hx	Closed System	N/A	(2)MOV-1RW-105D	N/A
87-SgD	H2 Discharge to CNMT		N/A	1HY-111 1HY-197	N/A N/A
88-SgD	H2 Discharge to CNMT		N/A	1HY-110 1HY-196	N/A N/A
89-SgD	Main Condenser Ejector Vent	1AS-278	N/A	(B)TV-1SV-100A	20
90-SgD	CNMT Purge Exhaust	VS-D-5-3B	(11)(5)8	VS-D-5-3A	(11)(5)8
91-SgD	CNMT Purge Supply	VS-D-5-5B	(11)(5)11	VS-D-5-5A VS-D-5-6	(11)(5)8 (5) N/A

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
92-A	CNMT Vacuum Pump 1B & H_2 Recomb. Suction			(A)TV-1CV-150C	7.5
				(A)TV-1CV-150D	7.5
				1HY-102	N/A
				1HY-104	N/A
93-B	CNMT Vacuum Pump 1A & H_2 Recomb. Suction			(A)TV-1CV-150A	7.5
				(A)TV-1CV-150B	7.5
				1HY-101	N/A
				1HY-103	N/A
94-C	CNMT Vacuum Ejector Suction	(11)HCV-1CV-151	N/A	(11)HCV-1CV-151-1	N/A
95-C	RVLIS	(2)(12)	N/A	(2)(12)	N/A
95-64	H_2 Analyzer - CNMT Dome	(1)SOV-1HY-102B1	N/A	(1)SOV-1HY-102B2	N/A
95-69	H_2 Analyzer - PRZR Cubicle	(1)SOV-1HY-103B1	N/A	(1)SOV-1HY-103B2	N/A
95-72	H_2 Analyzer - Discharge	(1)SOV-1HY-104B1	N/A	(1)SOV-1HY-104B2	N/A
96-B	High Head SI to Cold Legs	(3)(2)1SI-95	N/A	(3)(2)MOV-1SI-836	N/A
97-1-A	RHR Inlet Sample	(A)TV-1SS-104A1	20	(A)TV-1SS-104A2	20
97-2-A	RHR Outlet Sample	(A)TV-1SS-103A1	20	(A)TV-1SS-103A2	20
97-3-A	CNMT Leakage Monitoring Open Taps			(A)TV-1IM-100A1	5
				(A)TV-1IM-100A2	5
97-4-A	Steam Generator 1C Blowdown Sample	Closed System	N/A	(3)(2)(A)TV-1SS-117C	20
98-1-C	Spare				

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
98-2-C	Spare				
98-3-C	Spare				
98-4-C	Spare				
99-C	Spare				
100-B	Spare				
101-B	Spare				
102-B	Spare				
103-A	Refueling Cavity Purification Inlet	1PC-38	N/A	1PC-37	N/A
104-A	Refueling Cavity Purification Outlet	1PC-9	N/A	1PC-10	N/A
105-1-B	Steam Generator 1B Blowdown Sample	Closed System	N/A	(3)(2)(A)TV-1SS-117B	20
105-2-B	PRZR Vapor Sample	(A)TV-1SS-112A1	20	(A)TV-1SS-112A2	20
105-3-B	Spare				
105-4-B	Spare				
106-SgD	SI Accumulator Test Line	(A)MOV-1SI-842	15	(A)TV-1SI-889	7.5
107-C	Spare				
108-B	Spare				

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
109-C	RVLIS	(2)(12)	N/A	(2)(12)	N/A
109-44	Inlet Flow Sample - CNMT Dome	(1)SOV-1HY-102A1	N/A	(1)SOV-1HY-102A2	N/A
109-49	Inlet Flow Sample - PRZR Cubicle	(1)SOV-1HY-103A1	N/A	(1)SOV-1HY-103A2	N/A
109-52	Flow Sample Discharge	(1)SOV-1HY-104A1	N/A	(1)SOV-1HY-104A2	N/A
110-1-C	PRZR Dead Weight Calibrator PT-RC-455A	Closed System	N/A	(1)1RC-277 (1)1RC-278	N/A N/A
110-2-C	Spare				
110-3-C	Spare				
110-4-C	Spare				
111-C	Spare			(7) Flange	N/A
112-C	Spare			(7) Flange	N/A
113-1-A	BIT to Cold Legs	(3)(2)1SI-94	N/A	(3)(2)MOV-1SI-867C (3)(2)MOV-1SI-867D	13(4) 13(4)
Primary Containment Airlock PH-P-1					
	Equalization Valve Equalization Valve	(1)1VS-169 (1)1VS-170	N/A N/A		
	Equalization Valve Equalization Valve			(1)1VS-167 (1)1VS-168	N/A N/A

TABLE 3.6-1
CONTAINMENT PENETRATIONS

PENT NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME*(SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME*(SEC)
Emergency Containment Airlock PH-P-2					
	Equalization Valve	(1)(7)1VS-184	N/A		
	Equalization Valve			(1)(7)1VS-183	N/A

(A) Containment Isolation Phase A
(B) Containment Isolation Phase B

(1) May be opened on an intermittent basis under administrative control.

(2) Not subject to Type C leakage tests.

(3) Valves tested per specification 4.0.5.

(4) Maximum opening time.

(5) Applicability: During CORE ALTERATIONS or movement of irradiated fuel within containment.

(6) Not subject to the requirements of specification 3/4.6.3. Listed in TABLE 3.6-1 for information only.

(7) Tested under Type (B) testing.

(8) Not used.

(9) Auto open on Safety Injection recirculation signal.

(10) Not subject to the surveillance requirements of specification 3/4.6.3. Valves tested per specification 4.0.5.

(11) Valve will be locked shut in modes 1, 2, 3 and 4.

(12) Isolation is provided by bellows operated hydraulic isolators.

SURVEILLANCE REQUIREMENTS, (Con't)

4. Verifying the integrity of all heater electrical circuits by performing a continuity and resistance to ground test immediately following the above required functional test. The resistance to ground for any heater phase shall be $\geq$ 10,000 ohms.

PROPOSED

3/4.6.2.3 CHEMICAL ADDITION SYSTEM

The OPERABILITY of the chemical addition system ensures that sufficient NaOH is added to the containment spray in the event of a LOCA. The limits on NaOH minimum volume and concentration, ensure that 1) the iodine removal efficiency of the spray water is maintained because of the increase in pH value, and 2) corrosion effects on components within containment are minimized. These assumptions are consistent with the iodine removal efficiency assumed in the accident analyses.

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. Containment isolation within the time limits specified ensures that the release of radioactive material to the environment will be consistent with the assumptions used in the analysis for a LOCA.

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 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."

ATTACHMENT A-2

Revise the Beaver Valley Unit No. 2 Technical Specifications as follows:

Remove Pages	Insert Pages
3/4 3-32	3/4 3-32
3/4 6-22	3/4 6-22
3/4 6-23	3/4 6-23
3/4 6-24	3/4 6-24
3/4 6-25	3/4 6-25
3/4 6-26	3/4 6-26
3/4 6-27	3/4 6-27
3/4 6-29	3/4 6-29
3/4 6-30	3/4 6-30
3/4 6-34	-----
B3/4 6-3	B3/4 6-3

TABLE 3.3-5 (Continued)

TABLE NOTATION

* Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps and Low Head Safety Injection pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST) (RWST valves open, then VCT valves close) is not included.

\# Diesel generator starting and sequence loading delays not included. Offsite power available. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST) (RWST valves open, then VCT valves close) is included.

\#\# Diesel generator starting and sequence loading delays included. Response time limit includes opening of valves to establish SI path and attainment of discharge pressure for centrifugal charging pumps. Sequential transfer of charging pump suction from the volume control tank (VCT) to the refueling water storage tank (RWST) (RWST valves open, then VCT valves close) is included.

(1) Feedwater system overall response time shall include verification of valve stroke times applicable to ~~the feedwater valves shown for penetrations 76, 77 and 78 shown in Table 3.6-1.~~

(2) Diesel generator starting and sequence loading delays included. Response time limit includes attainment of discharge pressure for service water pumps.

(3) Diesel generator starting and sequence loading delays not included. Response time limit only includes opening of valves to establish the flowpath to the diesel coolers.

(4) Diesel generator starting and sequence loading delays not included. Offsite power available. Response time limit includes operation of valves/dampers.

(5) Diesel generator starting, and sequence loading delays included. Response time limit includes operation of valves/dampers.

(6) Diesel generator starting and sequence loading delays not included. Response time limit includes operation of dampers.

the feedwater containment isolation valves for Train A and the main feedwater regulating valves and bypass valves for Train B.

PROPOSED WORDING

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE		MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE		MAXIMUM STROKE TIME (SEC)
60	Low Head Safety Injection Discharge	(3)(2) (13)	2SIS-132	N/A	(3)(2)	2SIS-MOV8888B	N/A
61	Low Head Safety Injection Discharge	(3)(2) (13)	2SIS-130	N/A	(3)(2)	2SIS-MOV8889	N/A
62	Low Head Safety Injection Discharge	(3)(2) (13)	2SIS-133	N/A	(3)(2)	2SIS-MOV8888A	N/A
63	Quench Pump Discharge		2QSS-4	N/A	(B)	2QSS-MOV101A 2QSS-RV101A	< 60 (4) N/A
64	Quench Pump Discharge		2QSS-3	N/A	(B)	2QSS-MOV101B 2QSS-RV101B	< 60 (4) N/A
65	Fuel Transfer Tube	(7)	Flange	N/A	(2)(6)	2ISC-102	N/A
66	Recirc Spray Pump Suction				(B)(2)	2RSS-MOV155A	< 60 (4)
67	Recirc Spray Pump Suction				(B)(2)	2RSS-MOV155C	< 60 (4)
68	Recirc Spray Pump Suction				(B)(2)	2RSS-MOV155D	< 60 (4)
69	Recirc Spray Pump Suction				(B)(2)	2RSS-MOV155B	< 60 (4)
70	Recirculation Pump Discharge	(2)(13)	2RSS-29	N/A	(B)(2) (6)	2RSS-MOV156A 2RSS-RV156A	< 60 (4) N/A
71	Recirculation Pump Discharge	(2)(13)	2RSS-31	N/A	(10)(B)(2) (6)	2RSS-MOV156C 2RSS-RV156C	< 60 (4) N/A

PROPOSED

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME (SEC)
73	Main Steam System "A"	Closed System	N/A	(2) 2MSS-~~HVV~~GOV101A	5
		Closed System	N/A	(2) 2MSS-AOV102A	N/A
		Closed System	N/A	(2) 2MSS-SOV105A	N/A
		Closed System	N/A	(2)(6) 2MSS-SV101A	N/A
		Closed System	N/A	(2)(6) 2MSS-SV102A	N/A
		Closed System	N/A	(2)(6) 2MSS-SV103A	N/A
		Closed System	N/A	(2)(6) 2MSS-SV104A	N/A
		Closed System	N/A	(2)(6) 2MSS-SV105A	N/A
	Steam Drains System	Closed System	N/A	(2) 2SDS-AOV111A-1	< 60
		Closed System	N/A	(2) 2SDS-AOV129B	< 60
	Steam Vent System	Closed System	N/A	(2)(6) 2SVS-PCV101A	N/A
		Closed System	N/A	(2)(6) 2SVS-HCV104	N/A

PROPOSED

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME (SEC)
74	Main Steam System "B"	Closed System	N/A	(2) 2MSS-~~HVV~~AOV101B	5
		Closed System	N/A	(2) 2MSS-AOV102B	N/A
		Closed System	N/A	(2) 2MSS-SOV105B	N/A
		Closed System	N/A	(2)(6) 2MSS-SV101B	N/A
		Closed System	N/A	(2)(6) 2MSS-SV102B	N/A
		Closed System	N/A	(2)(6) 2MSS-SV103B	N/A
		Closed System	N/A	(2)(6) 2MSS-SV104B	N/A
		Closed System	N/A	(2)(6) 2MSS-SV105B	N/A
	Steam Drains System	Closed System	N/A	(2) 2SDS-AOV111B-1	< 60
		Closed System	N/A	(2) 2SDS-AOV129B	< 60
	Steam Vent System	Closed System	N/A	(2)(6) 2SVS-PCV101B	N/A
		Closed System	N/A	(2)(6) 2SVS-HCV104	N/A

PROPOSED

PROPOSED

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME (SEC)
75	Main Steam System "C"	Closed System	N/A	(2) 2MSS-~~HYV~~AOV101C	5
		Closed System	N/A	(2) 2MSS-AOV102C	N/A
		Closed System	N/A	(2) 2MSS-SOV105C	N/A
		Closed System	N/A	(2) (6) 2MSS-SV101C	N/A
		Closed System	N/A	(2) (6) 2MSS-SV102C	N/A
		Closed System	N/A	(2) (6) 2MSS-SV103C	N/A
		Closed System	N/A	(2) (6) 2MSS-SV104C	N/A
		Closed System	N/A	(2) (6) 2MSS-SV105C	N/A
	Steam Drains System	Closed System	N/A	(2) 2SDS-AOV111C-1	< 60
		Closed System	N/A	(2) 2SDS-AOV129B	< 60
	Steam Vent System	Closed System	N/A	(2) (6) 2SVS-PCV101C	N/A
		Closed System	N/A	(2) (6) 2SVS-HCV104	N/A
76	Feedwater "A"	Closed System	N/A	(2) 2FWS-HYV157A	~~5~~ 7
				~~(2) 2FWS-28~~	~~N/A~~
77	Feedwater "B"	Closed System	N/A	(2) 2FWS-HYV157B	~~5~~ 7
				~~(2) 2FWS-29~~	~~N/A~~
78	Feedwater "C"	Closed System	N/A	(2) 2FWS-HYV157C	~~5~~ 7
				~~(2) 2FWS-30~~	~~N/A~~

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME (SEC)
79	Aux Feed "A"	~~(2) 2FWE-99~~	~~N/A~~	(2) 2FWE-HCV100E	N/A
				(2) 2FWE-HCV100F	N/A
				~~(2) 2FWE-42A~~	~~N/A~~
				~~(2) 2FWE-42B~~	~~N/A~~
80	Aux Feed "B"	~~(2) 2FWE-100~~	~~N/A~~	(2) 2FWE-HCV100C	N/A
				(2) 2FWE-HCV100D	N/A
				~~(2) 2FWE-43A~~	~~N/A~~
				~~(2) 2FWE-43B~~	~~N/A~~
83	Aux Feed "C"	~~(2) 2FWE-101~~	~~N/A~~	(2) 2FWE-HCV100A	N/A
				(2) 2FWE-HCV100B	N/A
				~~(2) 2FWE-44A~~	~~N/A~~
				~~(2) 2FWE-44B~~	~~N/A~~
87	Hydrogen Recombiner Discharge		N/A	(1) 2HCS-MOV117	N/A
				(1) 2HCS-111	N/A
88	Hydrogen Recombiner Discharge		N/A	(1) 2HCS-MOV116	N/A
				(1) 2HCS-110	N/A
89	SPARE				
90	Purge Duct Exhaust	(5) 2HVR-MOD23B	10	(14) (5) 2HVR-MOD23A	10
91	Purge Duct Supply	(5) 2HVR-MOD25B	10	(14) (5) 2HVR-MOD25A	10
				(14) (5) 2HVR-DMP206	N/A
92	Hydrogen Recombiner Isolation			(1) 2HCS-SOV114B	N/A
				(1) 2HCS-SOV115B	N/A
	Reactor Cont. Vacuum Pump Suction			(A) 2CVS-SOV151B	< 60
				(A) 2CVS-SOV152B	< 60

PROPOSED

PROPOSED

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE		MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE		MAXIMUM STROKE TIME (SEC)
93	Hydrogen Recombiner Isolation				(1)	2HCS-SOV114A	N/A
					(1)	2HCS-SOV115A	N/A
	Reactor Cont. Vacuum Isolation				(A)	2CVS-SOV151A	< 60
					(A)	2CVS-SOV152A	< 60
94	Ejector Suction	(14)	2CVS-151	N/A	(14)	2CVS-151-1	N/A
96	SPARE						
97	Leakage Detection				(2)	2LMS-SOV952	< 60 (4)
	Blowdown Sample		Closed System	N/A	(2)	2SSR-AOV117C	< 60
	Liquid Sample - Cont. Sump & RHS	(1)(A)	2SSR-SOV129A-1	< 60	(1)(A)	2SSR-SOV129A-2	< 60
						2SSR-RV122	N/A
	Hydrogen Analyzer	(1)	2HCS-SOV133B	N/A	(1)	2HCS-SOV134B	N/A
98	SPARE						
99	Hose Rack Supply		2FPW-761	N/A	(A)	2FPW-AOV206	< 60
100	SPARE						
101	Reactor Cont. Deluge - Cable Pent. Area & RHS Pump		2FPW-753	N/A	(A)	2FPW-AOV205	< 60
103	Reactor Cavity Purif Inlet		2FNC-121	N/A		2FNC-38	N/A
104	Reactor Cavity Purif Outlet		2FNC-122	N/A		2FNC-9	N/A

TABLE 3.6-1 (Cont)

CONTAINMENT PENETRATIONS

PENT. NO.-AREA	IDENTIFICATION/DESCRIPTION	INSIDE VALVE	MAXIMUM STROKE TIME (SEC)	OUTSIDE VALVE	MAXIMUM STROKE TIME (SEC)
118	Quench Spray System	2QSS-267	N/A	(11)(B)(1) 2QSS-SOV100A	N/A
				(11)(B)(1) 2QSS-SOV100B	N/A
119	RVLIS	~~Note~~ (2) (12)	N/A	~~Note~~ (2) (12)	N/A
Primary Containment Personnel Air Lock 2 PHS-PAL 1					
	Equalizing Valve	(1) (7) 2PHS-112	N/A		
	Equalizing Valve	(1) (7) 2PHS-113	N/A		
	Equalizing Valve	(1) (7) 2PHS-101	N/A		
	Equalizing Valve			(1) (7) 2PHS-110	N/A
	Equalizing Valve			(1) (7) 2PHS-111	N/A
	Equalizing Valve			(1) (7) 2PHS-100	N/A
Emergency Containment Air Lock 2PHS-EAL 1					
	Equalizing Valve	(1) (7) 2PHS-202	N/A		
	Equalizing Valve			(1) (7) 2PHS-201	N/A

PROPOSED

NOTES:

(A) Containment Isolation Phase A.

(B) Containment Isolation Phase B.

(1) May be opened on an intermittent basis under administrative control.

(2) Not subject to Type C leakage tests.

(3) ~~May be leakage tested with water as the test fluid.~~ Valves tested per specification 4.0.5.

(4) Maximum opening time.

(5) Applicability: During CORE ALTERATIONS or movement of irradiated fuel within containment. ~~The provisions of Specification 3.0.4 are not applicable. The containment Purge Exhaust and Supply valves will be locked shut during operation in modes 1, 2, 3, and 4.~~

(6) Not subject to the requirements of Specification 3/4.6.3. Listed in Table 3.6-1 for information only.

(7) Tested under Type "B" testing.

(8) ~~Temporarily removed and penetration plugged.~~ Not used

(9) Auto open on Safety Injection recirculation signal.

(10) Auto close on Safety Injection recirculation signal.

(11) Auto open on QSS switchover signal.

(12) Isolation is provided by bellows operated hydraulic isolators.

(13) Not subject to the surveillance requirements of specification 3/4.6.3. Valves tested per specification 4.0.5.

(14) Valve will be locked shut in Modes 1, 2, 3 and 4.

3/4.6.5 SUBATMOSPHERIC PRESSURE CONTROL SYSTEM

STEAM JET AIR EJECTOR

LIMITING CONDITION FOR OPERATION

3.6.5.1 The inside and outside manual isolation valves in the steam jet air ejector suction line shall be closed.

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

ACTION:

With the inside or outside manual isolation valve in the steam jet air ejector suction line not closed, restore the valve to the closed position within 1 hour or be in at least HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.1.1 The steam jet air ejector suction line outside manual isolation valve shall be determined to be in the closed position by a visual inspection prior to increasing the Reactor Coolant System temperature above 350°F and at least once per 31 days thereafter.

4.6.5.1.2 The steam jet air ejector suction line inside manual isolation valve shall be determined to be sealed or locked in the closed position by a visual inspection prior to increasing the Reactor Coolant System temperature above 350°F.

DELETE

BASES

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. These hydrogen control systems are consistent with the recommendations of Regulatory Guide 1.7, "Control of Combustible Gas Concentrations in Containment Following a LOCA."

~~3/4.6.5 SUBATMOSPHERIC PRESSURE CONTROL SYSTEM~~

~~3/4.6.5.1 STEAM JET AIR EJECTOR~~

~~The closure of the manual isolation valves in the suction of the steam jet air ejector ensures that 1) the containment internal pressure may be maintained within its operation limits by the mechanical vacuum pumps and 2) the containment atmosphere is isolated from the outside environment in the event of a LOCA. These valves are required to be closed for containment isolation.~~

PROPOSED WORDING

ATTACHMENT B

Safety Analysis
Beaver Valley Power Station
Proposed Technical Specification Change
Unit No. 1 Change No. 160
Unit No. 2 Change No. 20

Description of amendment request: The proposed amendment would correct the containment isolation valve listing in Table 3.6-1 and clarify the applicable notation.

The following corrections have been incorporated:

A. BV-1 TS Table 3.3-5 items 2.C, 3.C and 4.C have been revised to change the feedwater isolation time to $\leq$ 13.0 seconds to be consistent with the most limiting time listed for feedwater isolation in item 6.b. UFSAR pages 7.3-3, 7.3-13 and 14.2-16 take licensing credit for the safety function of the feedwater regulating valves (FCV-FW-478, 488, 498) as the primary means for feedwater isolation. This was implemented into the TS in Amendment No. 120 only for feedwater isolation on steam generator water level--high-high. However, since this is currently the most limiting criteria, this isolation time will be implemented throughout the rest of Table 3.3-5 for consistency and to avoid confusion. When Amendment No. 120 incorporated the 13 second response time, a note (2) was applied. Note (2) was then inadvertently replaced by Amendment No. 138. Since all feedwater isolation times will now be the same, note (1) has been revised to reference the feedwater regulating and bypass valves and is applied to items 2.C, 3.C, 4.C and 6.b. Similar to the BV-1 change, BV-2 Table 3.3-5 page 3/4 3-32 has been revised to reference the feedwater regulating and bypass valves in lieu of Table 3.6-1.

B. The requirements of specification 3.6.5.1 concerning the steam jet air ejector isolation valves are satisfied by the note (valve will be locked shut in Modes 1, 2, 3 and 4) applied to both units listing for the steam jet air ejector penetration. Therefore, specification 3.6.5.1 and associated bases are being deleted.

C. BV-1 Technical Specification (TS) Table 3.6-1 has been modified by incorporating the following changes:

1. Note (1) (May be opened on an intermittent basis under administrative control.) has been applied to the following valves in addition to the valves currently specified in TS Table 3.6-1:

Penetration	Valve	Reason
95-64	SOV-HY-102B1, SOV-HY-102B2	Note (1) has been added to these valves to be consistent with the testing required to demonstrate operability of the hydrogen analyzers in accordance with surveillance requirement 4.6.4.1.
95-69	SOV-HY-103B1, SOV-HY-103B2	
95-72	SOV-HY-104B1, SOV-HY-104B2	
109-44	SOV-HY-102A1, SOV-HY-102A2	
109-49	SOV-HY-103A1, SOV-HY-103A2	
109-52	SOV-HY-104A1, SOV-HY-104A2	

3. Note (3) has been replaced with "Valves tested per specification 4.0.5" and is applied to the following valves to incorporate the results of the NRC evaluation contained in Technical Specification Amendment No. 65:

Penetration	Valves
7-A	SI-83, MOV-SI-869A
15-A	CH-31, MOV-CH-289
33-C	SI-84, MOV-SI-869B
35-A	MOV-CH-308A
36-A	MOV-CH-308B
37-A	MOV-CH-308C
39-C	TV-BD-100A
40-A	TV-BD-100B
41-B	TV-BD-100C
46-A	FCV-CH-160
56-4-A	TV-SS-117A
60-SGD	SI-13, MOV-SI-890A, SI-451
61-SGD	SI-10, SI-11, SI-12, MOV-SI-890C
62-SGD	SI-14, MOV-SI-890B, SI-452
68-SGD	MOV-SI-860A
69-SGD	MOV-SI-860B
96-B	SI-95, MOV-SI-836
97-4-A	TV-SS-117C
105-1-B	TV-SS-117B
113-1-A	SI-94, MOV-SI-867C, MOV-SI-867D

4. Note (4) applies to the following valves to identify valve opening time instead of valve closure time (this note was not previously applied to MOV-SI-867C, D). This is consistent with UFSAR Table 5.3-1.

Penetration	Valves
63-SGD	MOV-QS-101B
64-SGD	MOV-QS-101A
66-SGD	MOV-RS-155A
67-SGD	MOV-RS-155B
70-SGD	MOV-RS-156B
71-SGD	MOV-RS-156A
113-1-A	MOV-SI-867C, MOV-SI-867D

5. Note (5) (Applicability: During core alterations or movement of irradiated fuel within containment) and note (11) (Valve will be locked shut in modes 1, 2, 3 and 4) have been added to the purge supply and exhaust isolation valves for penetrations 90 and 91. Note (5) provides the applicability requirements and note (11) provides the control requirements. These notes replace note (5) currently applied to those valves in TS Table 3.6-1.

6. Note (11) has been added to the steam jet air ejector suction isolation valves for penetration 94. Note (11) provides the control requirements (Valve will be locked shut in Modes 1, 2, 3 and 4). This is consistent with note (11) applied to the containment isolation valves listed for penetrations 90 and 91 and satisfies the requirements of specification 3.6.5.1.

7. The term RVLIS has been added to penetrations 95C and 109-C and note (12) applied to indicate isolation is provided by bellows operated hydraulic isolators.

8. The main steam trip valve bypass valves MOV-MS-101A, B and C have been added to penetrations 73-SGD, 74-SGD and 75-SGD to reflect the main steam trip valve TV-MS-101A, B and C bypass valves identified in UFSAR Figure 10.3-1. Note (1) (May be opened on an intermittent basis under administrative control) has been applied to these 2 inch bypass valves to allow pressure equalization across the trip valve disc and warming of the main steam lines when the trip valve is closed. The valve closure time for the main steamline drain valves TV-MS-111A, B, C has been changed from 10 seconds to 8 seconds consistent with Table 3.3-5 for steamline isolation.

   The main steam residual heat release valve HCV-MS-104 has been added to penetrations 73-SGD, 74-SGD, 75-SGD in accordance with the current UFSAR Table 5.3-1A. Note (1) (May be opened on an intermittent basis under administrative control) has been applied to this valve since this valve may be opened to release the sensible and core residual heat as described in UFSAR Section 10.3.1.2. Note (6) has also been added to this valve to document that this valve is listed for information only.

9. FH-1 has been added to penetration 65 to identify the manual valve outside containment. This valve is not required to be Type C leak tested due to the double barrier seal arrangement on the fuel transfer tube inside containment isolation flange. Therefore, note (6) has been added to document that this valve is listed for information only. See the attached change to UFSAR Section 5.3.

10. The valve actuation time for penetration 113-1-A isolation valves MOV-SI-867C and MOV-SI-867D has been changed from 15 to 13 seconds. This corrects an inconsistency with the SI minimum response time provided in TS Table 3.3-5.

11. The equalization valves listed in TS Table 3.6-1 for the personnel and emergency airlocks identified with note (8) (Temporarily removed and penetration plugged) will remain plugged, therefore, those valves have been removed from the table. Note (8) no longer applies to any penetration listed on this table and has been deleted and identified as (Not used). The equalization valves added to the table for the emergency airlock are mechanically operated by the door opening and closing mechanism. Notes (1) (May be opened on an intermittent basis under administrative control) and (7) (Tested under Type B testing) have been applied to the emergency airlock equalization valves since for note (1) these valves must be opened to use the airlock and for note (7) these valves are tested when the airlock is pressurized for Type B testing as described in UFSAR Section 5.2.4.8. Note (1) has also been applied to the personnel airlock since the equalization valves must be opened to use the airlock. The equalization valves for the personnel airlock are Type C tested and are also subjected to the airlock pressure during Type B testing.

12. The main feedwater isolation valves listed in TS Table 3.6-1 for penetrations 76-SGD, 77-SGD and 78-SGD have been changed to reflect the appropriate penetration class and valve configuration. These are Class B penetrations as stated in UFSAR Table 5.3-1 and in accordance with UFSAR Section 5.3.2, satisfy the arrangement described in UFSAR Section 5.3.1.2(e) which specifies a sealed system inside containment and one isolation valve outside containment that is either automatic or normally shut and administratively controlled, or capable of remote manual operation. These penetrations are shown in UFSAR Figure 10.3-5 and show that FCV-FW-478, 488 and 498 are upstream of MOV-FW-156A, B and C. All of these valves are currently listed in TS Table 3.6-1, however, MOV-FW-156A, B and C are closest to containment and are installed Class Q2 in accordance with UFSAR Section 6.2.2.1 which requires Class Q2 piping on those portions of systems used for containment isolation. FCV-FW-478, 488 and 498 are not installed in Class Q2 piping and therefore do not satisfy the criteria for a containment isolation valve and have been removed from the table.

The auxiliary feedwater piping connects to the main feedwater piping down stream of the main feedwater isolation valve before the main feedwater piping enters containment as shown in UFSAR Figure 10.3-5. The auxiliary feedwater piping is Class Q2 from the main feedwater piping to and including the check valve shown in the figure and in accordance with our request for exception to GDC-57 (provided by letter dated July 8, 1989) these check valves (FW-42, 43 and 44) will be listed as the auxiliary feedwater containment isolation valves. In accordance with GDC-57, only the following valves are required to be listed for these penetrations:

Penetration	Valves
76-SGD	MOV-FW-156A, FW-42
77-SGD	MOV-FW-156B, FW-43
78-SGD	MOV-FW-156C, FW-44

The valve closure time for the main feedwater containment isolation valves (penetration 76-SGD, MOV-FW-156A; 77-SGD, MOV-FW-156B; 78-SGD, MOV-FW-156C) has been changed from 75 seconds to N/A.

UFSAR pages 7.3-3 and 14.2-16 state that feedwater isolation is accomplished by closing all main feedwater control valves, feedwater pump trip and closure of the main feedwater pump discharge valves (MOV-1FW-150 A,B). The UFSAR takes no licensing credit for the feedwater containment isolation valves (MOV-1FW-156A, B, C) receiving a feedwater isolation signal and thus needs no response time for that function.

The UFSAR does take credit for the feedwater containment isolation valves for containment isolation. However, any flow stoppage out of containment is accomplished by the check valve nature of its design. The MOV only provides remote manual operation as required by General Design Criteria (GDC) 57 as a backup feature since a check valve can not be used by itself in this application. These valves need to maintain (and be tested for) their MOV operability but need no time response limitations due to safety analyses considerations. Thus these valves function similar to other MOVs in Technical Specification Table 3.6-1 with a "N/A" maximum stroke response (e.g., MOV-1CC-112A2 or MOV-1SI-869A.)

13. Note (2) was added to the following valves since they are not Type C tested (See items 7, 8, 9, and 12 also):

Penetration	Valves
65	FH-1
73	MOV-MS-101A, HCV-MS-104, PCV-MS-101A, Safety Valves
74	MOV-MS-101B, HCV-MS-104, PCV-MS-101B, Safety Valves
75	MOV-MS-101C, HCV-MS-104, PCV-MS-101C, Safety Valves
76	FW-42
77	FW-43
78	FW-44
95	RVLIS
109	RVLIS

FH-1 is not required to be Type C leak tested due to the double barrier seal arrangement on the fuel transfer tube inside containment isolation flange. The main steam and RVLIS are also not required to be Type C leak tested because they are located on sealed systems that do not communicate with the RCS or containment atmosphere.

14. The following changes have been incorporated to reflect UFSAR Table 5.3-1:

Penetration	Change
13-D	add note (A) to TV-FP-107
31-D	add note (A) to TV-FP-105
32-C	add note (A) to TV-FP-106
95-C & 109-C	add RVLIS and identify with note (12) similar to BV-2 (Isolation is provided by bellows operated hydraulic isolators)

D. BV-2 Table 3.6-1 has been modified by incorporating the following changes:

1. Note (5) (Applicability: During core alterations or movement of irradiated fuel within containment) and note (14) (Valve will be locked shut in Modes 1,2,3 and 4) have been added to the purge supply and exhaust isolation valves for penetrations 90 and 91. Note (5) provides the applicability requirements and note (14) provides the control requirements. These notes replace note (5) currently applied to these valves in TS Table 3.6-1.

2. Note (14) has been added to the steam jet air ejector suction isolation valves for penetration 94. Note (14) provides the control requirements (Valve will be locked shut in Modes 1, 2, 3 and 4). This is consistent with note (14) applied to the containment isolation valves listed for penetrations 90 and 91 and satisfies the requirements of specification 3.6.5.1.

3. Note (1) (May be opened on an intermittent basis under administrative control.) has been applied to the personnel and emergency airlock equalization valves since these valves must be opened to use the airlocks.

4. Note (8) (Temporarily removed and penetration plugged) is not applicable to any penetration listed on this table and has been deleted and identified as (Not used).

5. 2ISC-102 has been added to penetration 65 to identify the manual valve outside containment. This valve is not required to be Type C leak tested due to the double barrier seal arrangement on the fuel transfer tube inside containment isolation flange. Therefore, note (6) has been added to document this valve is listed for information only.

6. Note (3) has been revised consistent with BV-1 note (3) to specify these valves are tested in accordance with specification 4.0.5; this is consistent with the current note and provides clarification.

7. Note (2) has been added to the following valves since they are not Type C tested:

Penetration	Valves
65	2ISC-102
73	Safety Valves, 2SVS-PCV101A, 2SVS-HCV104
74	Safety Valves, 2SVS-PCV101B, 2SVS-HCV104
75	Safety Valves, 2SVS-PCV101C, 2SVS-HCV104
119	RVLIS

The fuel transfer tube gate valve 2ISC-102 is not required to be Type C leak tested due to the double barrier seal arrangement on the fuel transfer tube inside containment isolation flange. The safety, relief and RVLIS are also not required to be Type C leak tested because they are located on sealed systems that do not communicate with the RCS or containment atmosphere.

8. The following valve numbers have been changed to reflect UFSAR Table 6.2-60:

Penetration	Change from	Change to
73	2MSS-HYV101A	2MSS-AOV101A
74	2MSS-HYV101B	2MSS-AOV101B
75	2MSS-HYV101C	2MSS-AOV101C

9. For penetrations 76, 77, 78 the feedwater containment isolation valves closure time has been changed from 5 sec. to 7 sec. These valves receive a Train A feedwater isolation signal in accordance with TS Table 3.3-5 which specifies 7 sec. for feedwater isolation. Therefore, it is acceptable for valve stroke times of greater than 5 sec. as long as the total time including signal processing is less than 7 sec.

10. The main feedwater and auxiliary feedwater systems are closed systems which enter containment through penetrations 76, 77, 78, 79, 80, 83 and in accordance with GDC 57, the isolation arrangement for these penetrations is satisfied by one automatic valve outside containment. Therefore, the following valves currently listed for these penetrations are not required and have been deleted from the table:

	Valve	
Penetration	Inside	Outside
76		2FWS-28
77		2FWS-29
78		2FWS-30
79	2FWE-99	2FWE-42A,B
80	2FWE-100	2FWE-43A,B
83	2FWE-101	2FWE-44A,B

These changes will not affect the limiting conditions for operation or surveillance requirements. Changes to the valve listing have been made to correct errors and improve the notation applicable to the valves. Therefore, the proposed amendment will not result in an increase in the probability or consequences of a previously evaluated accident or reduce the safety of the plant.

ATTACHMENT C

No Significant Hazard Evaluation
Beaver Valley Power Station
Proposed Technical Specification Change
Unit No. 1 Change No. 160
Unit NO. 2 Change No. 20

Basis for Proposed No Significant Hazards Consideration Determination: The Commission has provided standards for determining whether a significant hazards consideration exists in accordance with 10 CFR 50.92(c). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety.

The proposed changes do not involve a significant hazard consideration because:

1. Changes to the valve listing have been made to correct errors and improve the notation applicable to the valves. Therefore, these changes are administrative in nature and will not involve a significant increase in the probability of occurrence or consequences of an accident previously analyzed.

2. The requirements of specification 3.6.3.1 will continue to govern the operability of the containment isolation valves. The proposed change does not introduce any new mode of plant operation or require any physical modification to the plant. Therefore, these changes will not create the possibility of a new or different kind of accident from any accident previously evaluated in the FSAR.

3. The proposed changes will not reduce the operability of the containment isolation valves or change the functional test requirements. The proposed changes will not affect any of the plant setpoints or margins to the accident analysis limits or technical specification limits and therefore, will not involve a significant reduction in the margin of safety of the plant.

Therefore, based on the above considerations, implementation of the proposed changes will not involve a significant hazard.

ATTACHMENT D

Beaver Valley Power Station, Unit No. 1

UFSAR Changes

Proposed Technical Specification Change No. 160

Changes to UFSAR Table 5.3-1

Rearrange the listing by penetration number, and

Penetration	Changes
24	Add RH-16 to reflect UFSAR Figure 9.3-1.
44	Delete this check valve since it would not isolate a pressurized containment atmosphere during accident conditions.
73, 74, 75	Add the main steam trip valve bypass valves MOV-MS-101A, B and C and the RHR valve HCV-MS-104 to reflect UFSAR Figure 10.3-1.
76, 77, 78	Delete the manual valve listed, Replace the remote-manual valve with a check valve, and Replace the isolation valve position for normal and shutdown with closed, Replace the 1971 GDC or Exception Met to FSAR 5.3.3.9, Replace the outside valve closure time with check, Replace the outside valve type with check, Replace the outside power source with check.
92, 93	Revise the valve listing for these penetrations to reflect DCP-621 and Technical Specification Amendment No. 127 (removed the hydrogen recombiner inside containment check valve internals), and Replace the inside valve with none, Replace the 1971 GDC or Exception Met with FSAR 5.3.3.8, For both the 2 auto trip in series and the 2 manual valves: Change the inside valve closure time to none, Change the inside type to none, Change the inside power source to none.
90, 91	Delete the discussion under auto actuation signal, this information is addressed in note 7. Add note 11 (Valve is locked shut in Modes 1, 2, 3 & 4) to these valves to reflect Figure 5.4-1.
94	Add note 11 to these valves to reflect the deletion of specification 3.6.5.1.

Personnel Airlock

Correct the mark number from PM-P-1 to PH-P-1.
Correct the isolation valves listed, these are Class D penetrations and the valves are normally closed and administratively controlled:
One manual valve is listed for both the inside and outside of each containment airlock door, two of the valves are used to equalize pressure when entering containment and the other two valves are used to equalize pressure when exiting containment.
Change the isolation valve failure position from closed to AS-IS, to reflect the manual valves.
Change the power source for both inside and outside isolation valves from none to manual.

Emergency Airlock

Correct the mark number from PM-P-2 to PH-P-2.
Change the isolation valve failure position from closed to AS-IS, to reflect the manual valves.
Change the power source for both inside and outside isolation valves from none to manual.

Notes

(11) Add this note "Valve is locked shut in Modes 1, 2, 3 and 4" to reflect Figure 5.4-1.

relative void content. Connections at the reactor vessel head, hot legs A and B, and the seal table provide the RVLIS sensing points. Tubing from these connections runs to high volume sensors which isolate the reactor coolant system from the remainder of the RVLIS tubing. The remainder of RVLIS tubing is filled with deaerated demineralized water.

Capillary tubing runs from the high volume sensors, penetrates the containment. and runs to the hydraulic isolators. Tubing then connects the hydraulic isolators to differential pressure transmitters.

Containment isolation is provided by the high volume sensor, hydraulic isolator, and connecting capillary tubing.

Within the high volume sensor is a check valve which will close under reactor coolant system pressure if the connecting capillary tubing fails.

Containment Hydrogen Monitoring System lines and RVLIS lines pass through containment penetrations 95 and 109. RVLIS lines that penetrate the containment structure conform to the intent of General Design Criterion 57.

8. Post DBA Hydrogen Control Suction and Discharge to Containment (Penetrations 87, ~~and~~ 88, 92 and 93

INSERT B →

~~These lines have 2 inch manual ball valves in series outside containment which are normally closed and administratively controlled.~~ The valves are located as close as possible to the containment wall. The piping meets the break/crack exclusion criteria set forth in Branch Technical Position MEB 3-1, Postulated Rupture Locations in Fluid System Piping Inside and Outside Containment[15,16]. The post DBA Hydrogen Control System is part of the Engineered Safety Features and the system's normally closed containment isolation valves must be opened manually by the operator for long-term hydrogen control.

INSERT A →

Shortly after a DBA, the ambient temperature within the containment may be as high as 280°F. Although such high temperatures are short lived (the containment is reduced to subatmospheric conditions in less than 60 minutes as the containment depressurization system, Section 6.4, cools the containment atmosphere), it is possible that water trapped in the lines of the systems isolated by the containment isolation system may expand more rapidly than the associated piping. This could result in pressures exceeding the design pressure of the piping. To ensure that such overpressurization of isolated piping cannot adversely affect containment isolation integrity, a relief valve set to relieve at a pressure below the design pressure of the

INSERT A

9. Auxiliary Feedwater Pump Discharge (Penetration 76, 77, and 78)

The auxiliary feedwater piping connects to the main feedwater piping downstream of the main feedwater isolation valve before the main feedwater piping enters containment as shown in Figure 10.3-5. The auxiliary feedwater piping is Class Q2 from the main feedwater piping to and including the check valve shown in the figure. An exemption from the requirements of GDC-57 was required for the auxiliary feedwater containment isolation configuration since a simple check valve provides the isolation function outside containment. This configuration was found acceptable by the NRC since this design was licensed at Virginia Electric Company's North Anna plants.

INSERT B

The hydrogen recombiner suction lines have 2 inch manual ball valves in series outside containment which are normally closed and administratively controlled. These lines connect to the containment vacuum pump suction lines between the two in series auto trip isolation valves and containment penetrations 92 and 93. The hydrogen recombiner discharge lines have two 2 inch manual ball valves in series outside penetrations 87 and 88 which are normally closed and administratively controlled.