CPSES - TECHNICAL REQUIREMENTS MANUAL (TRM)
AMENDMENT / REVISION 15
DETAILED DESCRIPTION

TR Page (as amended)	Group	Description
4-1	4	Changes the reference to technical specification section from 3.8.4 to 3/4.8.4. Editorial : This is an editorial change to identify the complete technical specification reference applicable to this part of the TRM. Change Request Number : TR-93-12.5 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No
4-5	2	See Sheet No(s) :6,18 and 19 Deletes 51M2 relays associated with the Reactor Coolant Pumps from surveillance requirements for containment electrical penetration conductor overcurrent protective devices. Revision : The primary protection for the containment RCP electrical penetration conductor is provided by relays 50M1-51 and the backup protection by relay 51M3. Although the relay 51M2 provides additional protection for RCP penetration conductor during Modes 1, 2 and 3, the sole purpose of the relay is to provide RCP motor protection during hot loop operation. Change Request Number : TR-93-15.1 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No
4-11	2	Deletes from surveillance requirements, breakers pertaining to the motor operated valves 1-HV-4782 and 1-8811A. Revision : Containment isolation tanks CP1-CTAVT-01 and CP1-RHATVT-01 located outside the containment used to be part of the containment barrier and the associated valves 1-HV-4782 and 1-8811A are installed inside the respective tanks and therefore the electrical protection devices for the valves were considered as containment penetration conductor overcurrent protective devices. However the tanks were later declassified and per FSAR section 6.2.2.2.1 (for CP1-CTAVT-01) and per DBD-ME-260 section 5.1 (for CP1-RHATVT-01), the tanks are no longer part of the containment barrier. Therefore the breakers feeding these valves are no longer containment penetration conductor overcurrent

TR Page (as amended)	Group	Description
		protective devices. Change Request Number : TR-93-12.1 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No
4-12	2	Deletes from surveillance requirements, breakers pertaining to the motor operated valves 1-HV-4783 and 1-8811B. Revision : Containment isolation tanks CP1-CTATVT-02 and CP1-RHATVT-2 located outside the containment used to be part of the containment barrier and the associated valves 1-HV-4783 and 1-8811B are installed inside the respective tanks and therefore the electrical protection devices for the valves were considered as containment penetration conductor overcurrent protective devices. However the tanks were later declassified and per FSAR section 6.2.2.2.1 (for CP1-CTATVT-02) and per DBD-ME-260 section 5.1 (for CP1-RHATVT-02), the tanks are no longer containment penetration conductor overcurrent protective devices. Change Request Number : TR-93-12.2 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No
4-25	2	Deletes from surveillance requirements, breakers pertaining to the motor operated valves 2-HV-4782 and 2-8811A. Revision : The electrical penetrations from the tanks are spared and therefore not connected to the THED breakers in the MCC 2EB3-2 compartments 9RF and 9RM. See also TR-93-12.1. Change Request Number : TR-93-12.3 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No
4-26	2	Deletes from surveillance requirements, breakers pertaining to the motor operated valves 2-HV-4783 and 2-8811B. Revision : The electrical penetrations from the tanks had been spared and are not connected to the THED breakers in the MCC 2EB4-2 compartments 8RF and 8RM. See also TR-93-12.2. Change Request Number : TR-93-12.4 Commitment Register Number : Related SER : 8.4.1 SSER :22 8.3 SER/SSER Impact : No

ENCLOSURE TO TXX-94071

COMANCHE PEAK STEAM ELECTRIC STATION UNITS 1 & 2
TECHNICAL REQUIREMENTS MANUAL (TRM)

INSTRUCTION SHEET
(Page 1 of 1)

The following instructional information and checklist is being furnished to help insert Revision 15 into the Comanche Peak Steam Electric Station TRM. A description of this revision is provided in TXX-94071, dated April 15, 1994.

Discard the old sheets and insert the new sheets, as listed below. Keep all instruction sheets in the front of the Effective Page Listing to service as a record of changes.

Remove	Insert
Section 4	
4-1	4-1
4-5 and 4-6	4-5 and 4-6
4-11 and 4-12	4-11 and 4-12
4-18 and 4-19	4-18 and 4-19
4-25 and 4-26	4-25 and 4-26
List of Effective Pages	
EPL-1 and EPL-4	EPL-1 and EPL-4

TECHNICAL REQUIREMENT 4.1 CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTION DEVICES

NOTE: This Technical Requirement contains the listing of overcurrent protection devices subject to the requirements of Technical Specification 3/4.8.4. Although the Specification is repeated here, care must be taken not to overlook Technical Specification Requirements. | 15

TABLE 4.1.1a | 8

UNIT 1 | 8

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION	SYSTEM POWERED	
1. 6.9 KVAC from Switchgears		
a. Switchgear Bus 1A1	RCP #11	
1) Primary Breaker 1PCPX1		
a) Relay 50M1-51		
b) Relay 86M		9 15
2) Backup Breakers 1A1-1 or 1A1-2		
a) Relay 51M3		
b) Relay 51 for 1A1-1		
c) Relay 51 for 1A1-2		
d) Relay 86/1A1		
b. Switchgear Bus 1A2	RCP #12	
1) Primary Breaker 1PCPX2		
a) Relay 50M1-51		
b) Relay 86M		9 15
2) Backup Breakers 1A2-1 or 1A2-2		
a) Relay 51M3		
b) Relay 51 for 1A2-1		
c) Relay 51 for 1A2-2		
d) Relay 86/1A2		

TABLE 4.1.1a (continued) | 8

UNIT 1 | 8

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION	SYSTEM POWERED	
1. 6.9 KVAC from Switchgears (continued)		
c. Switchgear Bus 1A3	RCP #13	
1) Primary Breaker 1PCPX3		
a) Relay 50M1-51 b) Relay 86M		9 15
2) Backup Breakers 1A3-1 or 1A3-2		
a) Relay 51M3 b) Relay 51 for 1A3-1 c) Relay 51 for 1A3-2 d) Relay 86/1A3		
d. Switchgear Bus 1A4	RCP #14	
1) Primary Breaker 1PCPX4		
a) Relay 50M1-51 b) Relay 86M		9 15
2) Backup Breaker 1A4-1 or 1A4-2		
a) Relay 51M3 b) Relay 51 for 1A4-1 c) Relay 51 for 1A4-2 d) Relay 86/1A4		
2. 480 VAC from Switchgears		
2.1 Device Location - 480V Switchgears 1EB1, 1EB2, 1EB3 and 1EB4	Containment Recirc. Fans and CRDM Vent Fans	
a. Primary Breakers - 1FNAV1, 1FNAV2, 1FNAV3, 1FNAV4, 1FNCB1 and 1FNCB2		

TABLE 4.1.1a (continued) | 8

UNIT 1 | 8

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER
AND LOCATION

3. 480VAC from Motor Control Centers (continued)

MCC 1EB3-2 COMPT. NO.	G.E. BKR. TYPE	SYSTEM POWERED	
8RF	THED	JB-1S-10050, Altern. Feed to Motor Operated Valve 1-8702A	
1G	THED	Motor Operated Valve 1-8112	
9G	THED	Motor Operated Valve 1-8701A	
9M	THED	Motor Operated Valve 1-8701B	
5M	THED	Motor Operated Valve 1-8000A	
5G	THED	Motor Operated Valve 1-HV-6074	
4G	THED	Motor Operated Valve 1-HV-6076	
4M	THED*	Motor Operated Valve 1-HV-6078	
2G	THED	Motor Operated Valve 1-HV-4696	
2M	THED	Motor Operated Valve 1-HV-4701	
3G	THED*	Motor Operated Valve 1-HV-5541	
3M	THED*	Motor Operated Valve 1-HV-5543	
1M	THED	Motor Operated Valve 1-HV-6083	
6F	THED	Motor Operated Valve 1-8808A	12
6M	THED	Motor Operated Valve 1-8808C	12
7M	THED	Containment Ltg. XFMR-18 (PNL SC1 & SC3)	
8M	THED	Neutron Detector Well Fan-09	
7F	THFK	Electric H_2 Recombiner Power Supply PNL-01	
8RM	THED	Motor Operated Valve 1-HV-4075C	15
			15

* Primary protection is provided by Gould Tronic TR5 fusible switch with 3.2A fuse.

TABLE 4.1.1a (continued) | 8

UNIT 1 | 8

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER
AND LOCATION

3. 480VAC From Motor Control Centers (continued)

3.4 Device Location - MCC 1EB4-2 Compartment numbers listed below. | 12

Primary and Backup - Unless noted otherwise, both primary and backup breakers have identical trip ratings and are located in the same MCC compt. These breakers are General Electric type THED or THFK with thermal-magnetic trip elements.

MCC 1EB4-2 COMPT. NO.	G.E. BKR. TYPE	SYSTEM POWERED
1M	THED	JB-1S-1230G, Altern. Feed to Motor Operated Valve 1-8701B
8G	THED	Motor Operated Valve 1-8702A
8M	THED	Motor Operated Valve 1-8702B
4M	THED	Motor Operated Valve 1-8000B
4G	THED	Motor Operated Valve 1-HV-6075
3G	THED	Motor Operated Valve 1-HV-6077
3M	THED*	Motor Operated Valve 1-HV-6079
2G	THED	Motor Operated Valve 1-HV-5562
2M	THED*	Motor Operated Valve 1-HV-5563
5F	THED	Motor Operated Valve 1-8808B
5M	THED	Motor Operated Valve 1-8808D
6M	THED	Containment Ltg. XFMR-19 (PNL SC2 & SC4)
7M	THED	Neutron Detector Well Fan-10
6F	THFK	Elect. H_2 Recombiner Power Supply PNL-02

15
15

* Primary protection is provided by Gould Tronic TR5 fusible switch with 3.2A fuse.

TABLE 4.1.1b

UNIT 2

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION	SYSTEM POWERED
1. 6.9 KVAC from Switchgears	
a. Switchgear Bus 2A1	RCP #21
1) Primary Breaker 2PCPX1	
a) Relay 50M1-51	
b) Relay 86M	
2) Backup Breakers 2A1-1 or 2A1-2	
a) Relay 51M3	
b) Relay 51 for 2A1-1	
c) Relay 51 for 2A1-2	
d) Relay 86/2A1	
b. Switchgear Bus 2A2	RCP #22
1) Primary Breaker 2PCPX2	
a) Relay 50M1-51	
b) Relay 86M	
2) Backup Breakers 2A2-1 or 2A2-2	
a) Relay 51M3	
b) Relay 51 for 2A2-1	
c) Relay 51 for 2A2-2	
d) Relay 86/2A2	

TECHNICAL REQUIREMENT 4.1 (continued)

TABLE 4.1.1b (continued)

UNIT 2

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER AND LOCATION	SYSTEM POWERED
1. 6.9 KVAC from Switchgears (continued)	
c. Switchgear Bus 2A3	RCP #23
1) Primary Breaker 2PCPX3	
a) Relay 50M1-51	
b) Relay 86M	
2) Backup Breakers 2A3-1 or 2A3-2	
a) Relay 51M3	
b) Relay 51 for 2A3-1	
c) Relay 51 for 2A3-2	
d) Relay 86/2A3	
d. Switchgear Bus 2A4	RCP #24
1) Primary Breaker 2PCPX4	
a) Relay 50M1-51	
b) Relay 86M	
2) Backup Breaker 2A4-1 or 2A4-2	
a) Relay 51M3	
b) Relay 51 for 2A4-1	
c) Relay 51 for 2A4-2	
d) Relay 86/2A4	
2. 480 VAC from Switchgears	
2.1 Device Location - 480V Switchgears 2EB1, 2EB2, 2EB3 and 2EB4	Containment Recirc. Fans and CRDM Vent Fans
a. Primary Breakers - 2FNAV1, 2FNAV2, 2FNAV3, 2FNAV4, 2FNCB1 and 2FNCB2	

TECHNICAL REQUIREMENT 4.1 (continued) | 8

TABLE 4.1.1b (continued) | 8

UNIT 2 | 8

CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES | 8 8

DEVICE NUMBER AND LOCATION

3. 480VAC from Motor Control Centers (continued)

MCC 2EB3-2 COMPT. NO.	G.E. BKR. TYPE	SYSTEM POWERED	
			8 8
8RF	THED	Altern. Feed to Motor Operated Valve 2-8702A	8 8
1G	THED	Motor Operated Valve 2-8112	8
9G	THED	Motor Operated Valve 2-8701A	8
9M	THED	Motor Operated Valve 2-8701B	8
5M	THED	Motor Operated Valve 2-8000A	8
5G	THED	Motor Operated Valve 2-HV-6074	8
4G	THED	Motor Operated Valve 2-HV-6076	8
4M	THED*	Motor Operated Valve 2-HV-6078	8
2G	THED	Motor Operated Valve 2-HV-4696	8
2M	THED	Motor Operated Valve 2-HV-4701	8
3G	THED	Motor Operated Valve 2-HV-5541	8
3M	THED	Motor Operated Valve 2-HV-5543	8
1M	THED	Motor Operated Valve 2-HV-6083	8
6F	THED	Motor Operated Valve 2-8808A	12
6M	THED	Motor Operated Valve 2-8808C	12
7M	THED	Containment Ltg. XFMR-18 (PNL 2SC1 & 2SC3)	8 8
8M	THED	Neutron Detector Well Fan-09	8
7F	THFK	Electric H_2 Recombiner Power Supply PNL-01	8 8
8RM	THED	Motor Operated Valve 2-HV-4075C	8 15 15

* Primary protection is provided by Gould Tronic TR5 fusible switch with 3.2A fuse. | 8

TECHNICAL REQUIREMENT 4.1 (continued)

TABLE 4.1.1b (continued)

UNIT 2

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

DEVICE NUMBER
AND LOCATION

3. 480VAC From Motor Control Centers (continued)

3.4 Device Location - MCC 2EB4-2 Compartment numbers listed below.

Primary and Backup - Unless noted otherwise, both primary and backup breakers have identical trip ratings and are located in the same MCC compt. These breakers are General Electric type THED or THFK with thermal-magnetic trip elements.

MCC 2EB4-2 COMPT. NO.	G.E. BKR. TYPE	SYSTEM POWERED
1M	THED	Altern. Feed to Motor Operated Valve 2-8701B
8G	THED	Motor Operated Valve 2-8702A
8M	THED	Motor Operated Valve 2-8702B
4M	THED	Motor Operated Valve 2-8000B
4G	THED	Motor Operated Valve 2-HV-6075
3G	THED	Motor Operated Valve 2-HV-6077
3M	THED*	Motor Operated Valve 2-HV-6079
2G	THED*	Motor Operated Valve 2-HV-5562
2M	THED*	Motor Operated Valve 2-HV-5563
5F	THED	Motor Operated Valve 2-8808B
5M	THED	Motor Operated Valve 2-8808D
6M	THED	Containment Ltg. XFMR-19 (PNL 2SC2 & 2SC4)
7M	THED	Neutron Detector Well Fan-10
6F	THFK	Elect. H_2 Recombiner Power Supply PNL-02

* Primary protection is provided by Gould Tronic TR5 fusible switch with 3.2A fuse.

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Original	Submitted July 21, 1989
Revision 1	September 15, 1989
Revision 2	January 15, 1990
Revision 3	July 20, 1990
Revision 4	April 24, 1991
Revision 5	September 6, 1991
Revision 6	November 22, 1991
Revision 7	March 18, 1992
Revision 8	June 30, 1992
Revision 9	December 18, 1992
Revision 10	January 22, 1993
Revision 11	February 3, 1993
Revision 12	July 15, 1993
Revision 13	September 14, 1993
Revision 14	November 30, 1993
Revision 15	April 15, 1994

EFFECTIVE PAGE LISTING

3-9	June 30, 1992
3-10	Revision 11
3-11	Revision 11
Sec. 4-Tab	Original
4-1	Revision 15
4-2	Revision 12
4-3	July 15, 1993
4-4	July 15, 1993
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4-22	July 15, 1993
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4-29	Revision 12
4-30	Revision 10
4-31	July 15, 1993
EPL-Tab	Original
EPL-1	April 15, 1994
EPL-2	November 30, 1993
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April 8, 1994

If revisions are required to distribution or distribution sheet, contact Gayle Peck (812-8219), Don Woodlan (812-8225) or John Marshall (812-8220).