

Attachment A

TECHNICAL SPECIFICATION 3.4.6.2

ADDITION OF CHECK VALVES TO TABLE 3.4-1

A. DESCRIPTION OF AMENDMENT REQUEST

This license amendment request (LAR) proposes to add the following check valves to Technical Specification 3.4.6.2, "Reactor Coolant System Operational Leakage," Table 3.4-1.

8949 A, B, C and D	RHR and SIS first off check valves from RCS hot legs
8905 A, B, C and D	SIS second off check valves from RCS hot legs
8740 A and B	RHR second off check valves from RCS hot legs
8802 A and B	SIS to RCS hot legs isolation valves
8703	RHR to RCS hot legs isolation valve

A footnote was also added to the above valves stating that for flow paths with 3 pressure isolation valves in series, at least 2 of the 3 valves shall meet the requirements of Specification 3.4.6.2f. Also, additional changes were made to the Limiting Condition for Operation and Surveillance Requirements of Specification 3.4.6.2 to facilitate the addition of the check valves.

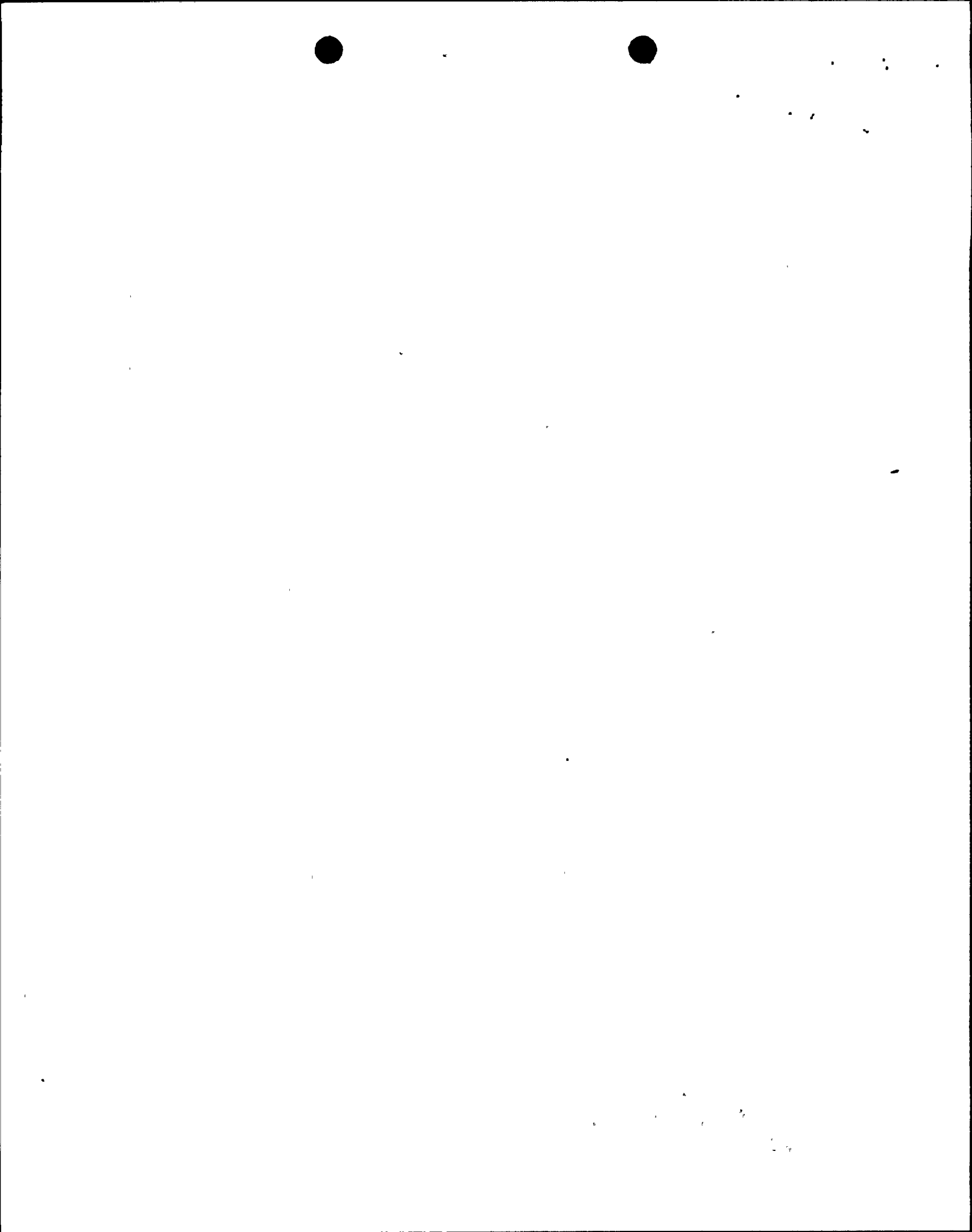
Changes to the Technical Specifications of Operating License Nos. DPR-80 and DPR-82 are noted in the revised copy of the applicable Technical Specification (Attachment B).

B. JUSTIFICATION

The changes are in accordance with the NRC Staff request in Diablo Canyon SSER 31, Section 5.2.8.1, and NRC meeting minutes dated December 9, 1985. The NRC Staff required that two series check valves from both the Safety Injection (SI) and Residual Heat Removal (RHR) systems be included in Specification 3.4.6.2 to ensure adequate pressure isolation between the Reactor Coolant System (RCS) and the lower pressure support systems. Since there are three series valves in each RCS high pressure boundary of the safety injection and residual heat removal systems, three valves for each flowpath will be included in Table 3.4-1 with the requirement that any two out of the three valves meet the requirements of Specification 3.4.6.2f.

Attachment C contains the system drawings as requested by the NRC Staff showing the location of the valves to be added to Table 3.4-1 of Specification 3.4.6.2.

8602190127 860213  
PDR ADDOCK 05000275  
P PDR



Attachment A (Cont'd)

C. SAFETY EVALUATION

Pacific Gas and Electric Company has evaluated the hazard considerations involved with the proposed amendment, focusing on the three standards set forth in 10 CFR 50.92(c) as quoted below:

"The Commission may make a final determination, pursuant to the procedures in 50.91, that a proposed amendment to an operating license for a facility licensed under 50.21(b) or 50.22 or for a testing facility involves no significant hazards considerations, 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; or
- (2) Create the possibility of a new or different kind of accident from any previously evaluated; or
- (3) Involve a significant reduction in a margin of safety."

The following evaluation is provided for the significant hazards consideration standards.

1. Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

The addition of check valves to Technical Specification 3.4.6.2 is a change that constitutes an additional restriction by requiring leakage testing of the valves. The leakage testing does not affect the accident analysis. Therefore, this license amendment request does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not necessitate physical alteration of the plant or changes in parameters governing normal plant operation. Therefore, the change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the change involve a significant reduction in a margin of safety?

As indicated above, the proposed change constitutes an additional restriction that is not presently included in the DCPD Units 1 and 2 Technical Specifications and, therefore, the change does not involve a significant reduction in a margin of safety.



. : .

. ?

.

.

Attachment A (Cont'd)

D. NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

In conclusion, based on the above safety evaluation, PGandE concludes that the activities associated with this license amendment request satisfy the significant hazards consideration standards of 10 CFR 50.92(c) and, accordingly, a no significant hazards finding is justified.

E. ENVIRONMENTAL EVALUATION

The proposed changes will not affect the environmental analyses in the FSAR Update, Environmental Report, or the Final Environmental Impact Statement. Therefore, there are no unreviewed environmental questions involved.



.  
:  
.  
.  
.  
.

Attachment B

REVISED TECHNICAL SPECIFICATION 3.4.6.2

REMOVE

3/4 4-19

3/4 4-20

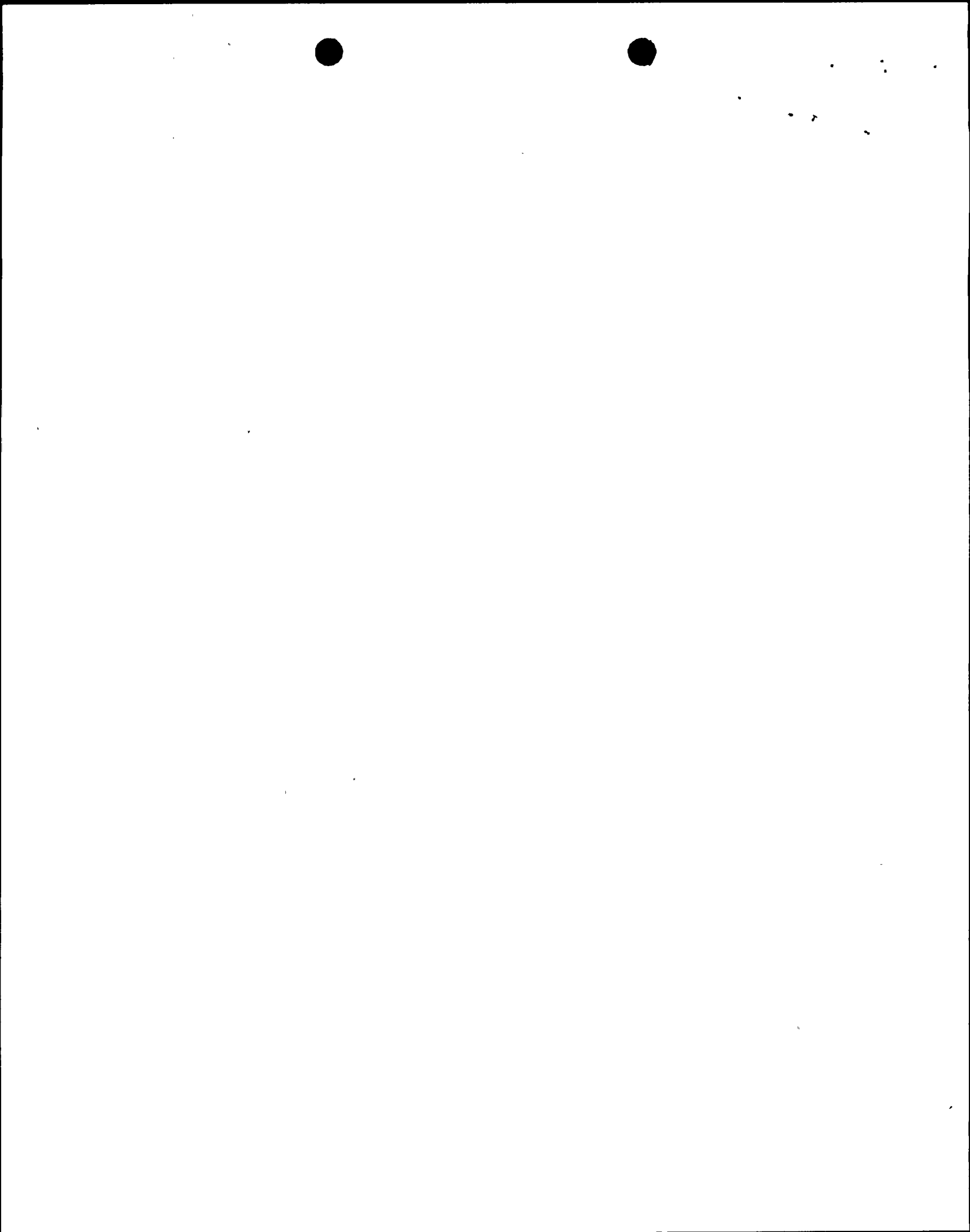
3/4 4-21

INSERT

3/4 4-19

3/4 4-20

3/4 4-21





REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATION

---

3.4.6.2 Reactor Coolant System leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 gpm UNIDENTIFIED LEAKAGE,
- c. 1 gpm total reactor-to-secondary leakage through all steam generators and 500 gallons per day through any one steam generator,
- d. 10 gpm IDENTIFIED LEAKAGE from the Reactor Coolant System,
- e. 40 gpm CONTROLLED LEAKAGE at a Reactor Coolant System pressure of  $2235 \pm 20$  psig, and
- f. 1 gpm leakage at a Reactor Coolant System pressure of  $2235 \pm 20$  psig for Reactor Coolant System Pressure Isolation Valves as specified in Table 3.4-1.

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

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE and leakage from Reactor Coolant System pressure isolation valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With any Reactor Coolant System pressure isolation valve leakage greater than the above limit, isolate the high pressure portion of the affected system from the low pressure portion within 4 hours by use of at least two closed manual and/or deactivated automatic valves, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.



•  
•  
•  
•  
•

## REACTOR COOLANT SYSTEM

### SURVEILLANCE REQUIREMENTS

---

4.4.6.2.1 Reactor Coolant System leakages shall be demonstrated to be within each of the above limits by:

- a. Monitoring the containment atmosphere particulate or gaseous radioactivity monitor at least once per 12 hours;
- b. Monitoring the containment structure sump inventory and discharge at least once per 12 hours;
- c. Measurement of the CONTROLLED LEAKAGE to the reactor coolant pump seals at least once per 31 days when the Reactor Coolant System pressure is  $2235 \pm 20$  psig with the modulating valve fully open. The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4.
- d. Performance of a Reactor Coolant System water inventory balance at least once per 72 hours, except when  $T_{avg}$  is being changed by greater than  $5^{\circ}\text{F}/\text{hour}$  or when diverting reactor coolant to the liquid holdup tank, in which cases the required inventory balance shall be performed within 12 hours after completion of the excepted operation; and
- e. Monitoring the Reactor Head Flange Leakoff System at least once per 24 hours.

4.4.6.2.2 As specified in Table 3.4-1, Reactor Coolant System pressure isolation valves shall be demonstrated OPERABLE pursuant to Specification 4.0.5, except that in lieu of any leakage testing required by Specification 4.0.5, each valve shall be demonstrated OPERABLE by verifying leakage to be within its limit:

- a. Every refueling outage during startup,
- b. Prior to returning the valve to service following maintenance, repair or replacement work on the valve, and
- c. Within 24 hours following valve actuation due to automatic or manual action or flow through the valve. After each disturbance of the valve, in lieu of measuring leak rate, leak-tight integrity may be verified by absence of pressure buildup in the test line downstream of the valve.

The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4.



TABLE 3.4-1

REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>
1. 8948 A, B, C, and D	Accumulator, RHR and SIS first off check valves from RCS cold legs
2. 8819 A, B, C, and D	SIS second off check valves from RCS cold legs
3. 8818 A, B, C, and D	RHR second off check valves from RCS cold legs
4. 8956 A, B, C, and D	Accumulator second off check valves from RCS cold legs
5. 8701* and 8702*	RHR suction isolation valves
6. 8949# A, B, C, and D	RHR and SIS first off check valves from RCS hot legs
7. 8905# A, B, C, and D	SIS second off check valves from RCS hot legs
8. 8740# A and B	RHR second off check valves from RCS hot legs
9. 8802* # A and B	SIS to RCS hot legs isolation valves
10. 8703* #	RHR to RCS hot legs isolation valve

---

\* Testing per Specification 4.4.6.2.2c. not required.

# For flowpaths with 3 pressure isolation valves in series, at least 2 of the 3 valves shall meet the requirements of Specification 3.4.6.2f.

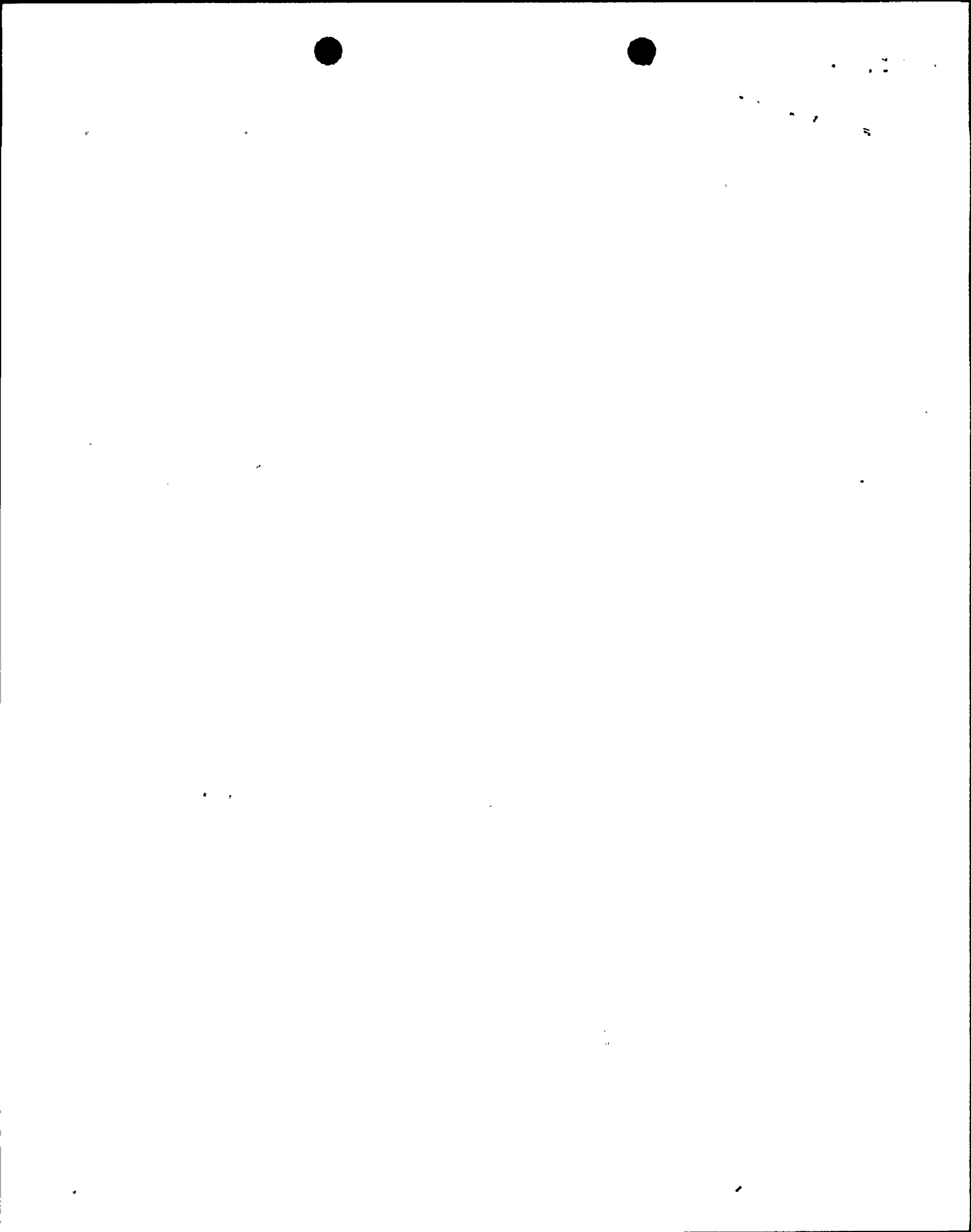


11  
12  
13  
14  
15

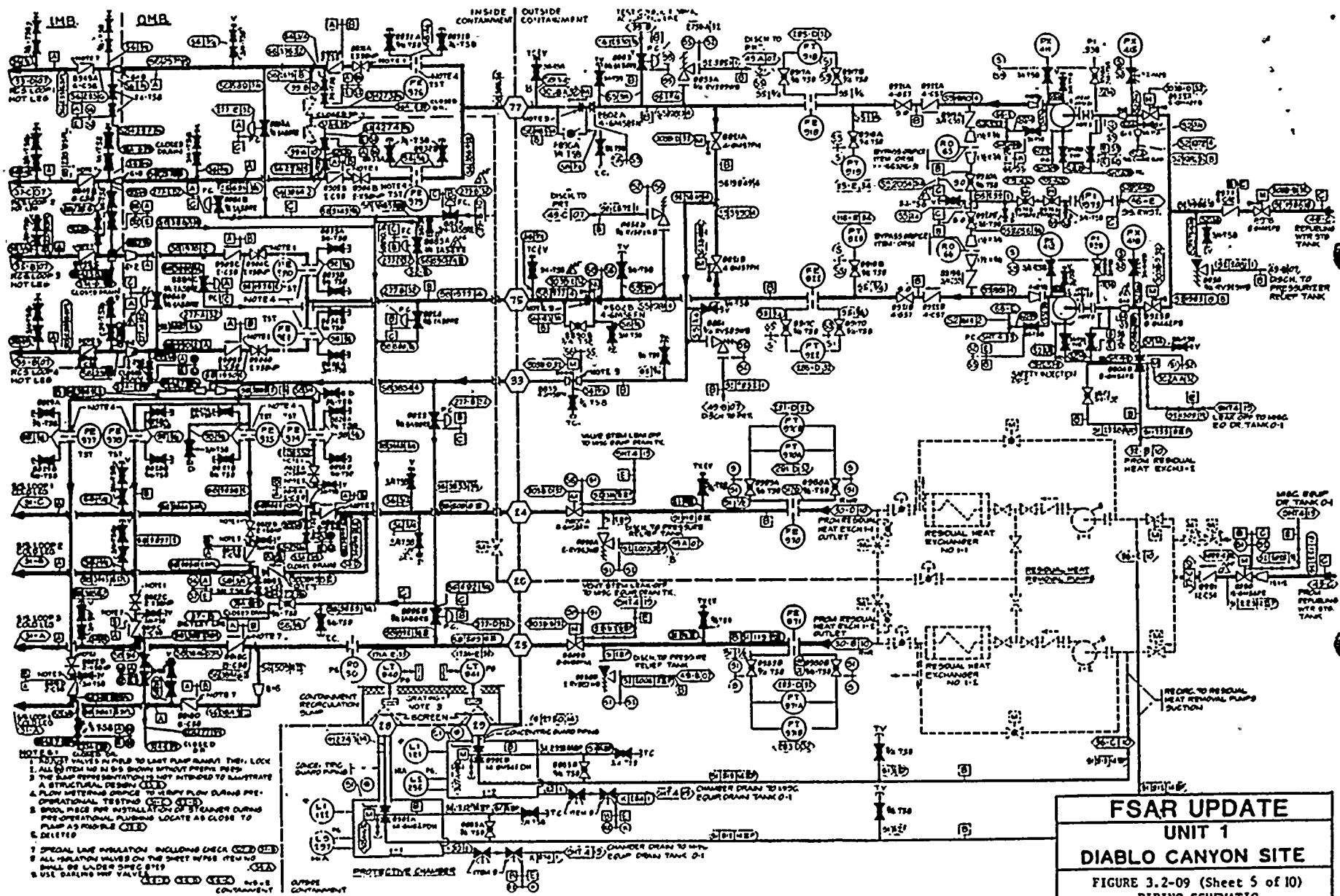
Attachment C

SYSTEM DRAWINGS

0708S/0041K



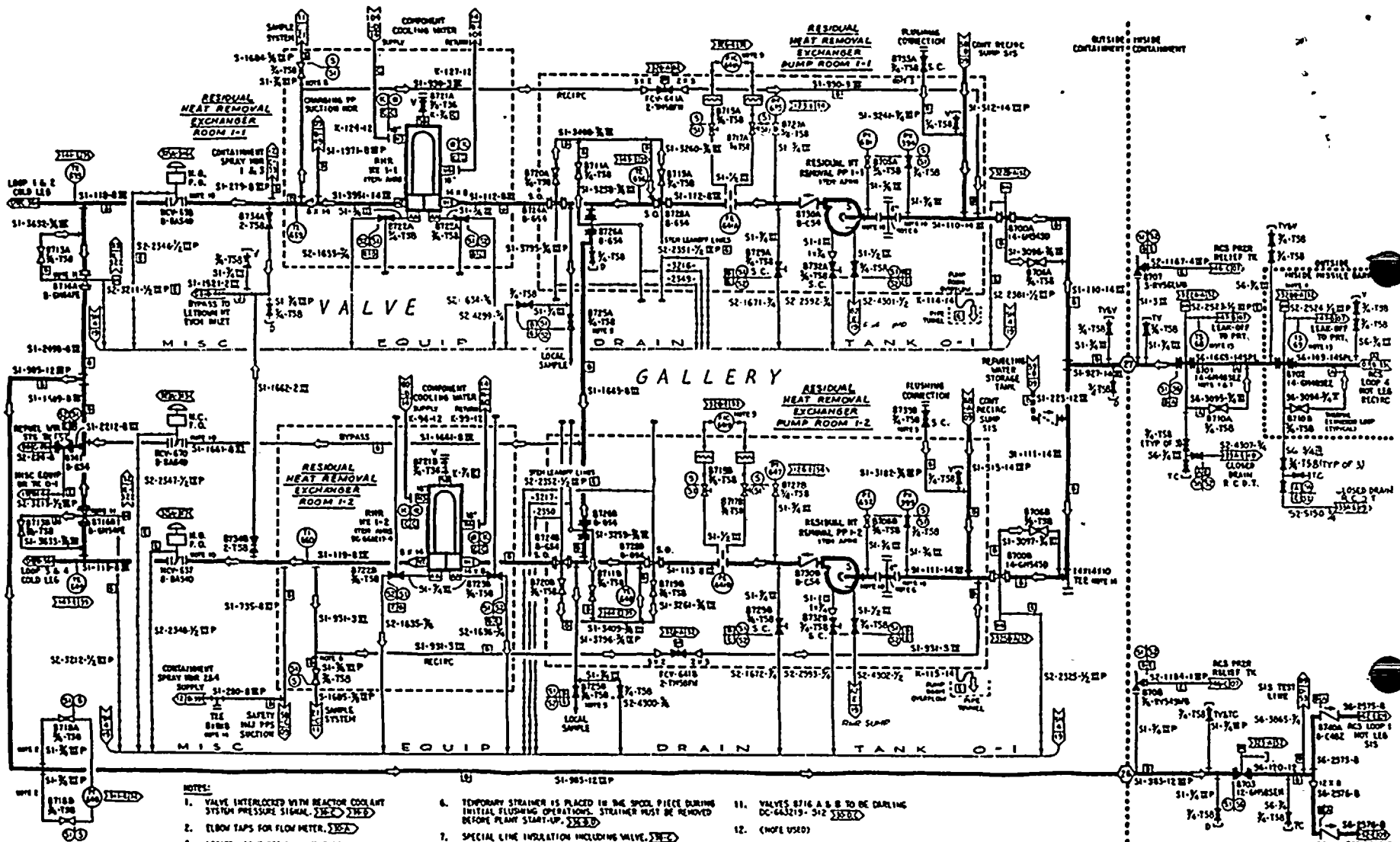




**FSAR UPDATE**  
**UNIT 1**  
**DIABLO CANYON SITE**  
 FIGURE 3.2-09 (Sheet 5 of 10)  
 PIPING SCHEMATIC  
 SAFETY INJECTION SYSTEM



11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100



- NOTES:
1. VALVE INTERLOCKED WITH REACTOR COOLANT SYSTEM PRESSURE SIGNAL. **INT**
  2. ELBOW TAPS FOR FLOW METER. **INT**
  3. LOCATE ABOVE RESIDUAL HEAT REMOVAL PUMP SHIELDING. **INT**
  4. ALL ITEM NOS ARE SHOWN WITHOUT PREFIX PGE-AC, REFER TO STATUS REPORT
  5. LOCATE VALVE OUTSIDE SHIELD WALL. SAMPLE LINE MUST BE AT A LOWER ELEVATION THAN THE 8 INCH PIPE BEING SAMPLED. **INT**
  6. TEMPORARY STRAINER IS PLACED IN THE SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT START-UP. **INT**
  7. SPECIAL LINE INSULATION INCLUDING VALVE. **INT**
  8. LOCATE SAMPLE LINE CONNECTION AS CLOSE AS POSSIBLE TO THE 8 INCH BWR LINE DISCHARGE LINE. **INT**
  9. LOCATE ORIFICE FLOW METER INDICATION OUTSIDE OF SHIELD WALL. **INT**
  10. 300P S16 SS FLANGES **INT** & **INT** AND 4 PCS FLUSHING SPOOLS FLANGES ON LINE NO T10 & T11.
  11. VALVES 8716 A & B TO BE CARLING DC-663215 - 312 **INT**
  12. (NONE USED)
  13. TS-68 & 69 ARE TO BE STRAPPED TO PIPE 18"-24" FROM VALVE. **INT**
  14. PROVISIONS FOR SPENT FUEL POOL COOLING WATER SYSTEM INCREASED CAPACITY **INT**

**FSAR UPDATE**  
**UNIT 1**  
**DIABLO CANYON SITE**

FIGURE 3.2-10 (Sheet 1 of 6)  
 PIPING SCHEMATIC  
 RESIDUAL HEAT REMOVAL SYSTEM



Handwritten scribbles and marks at the top center of the page.

Handwritten marks and dots at the top right of the page.