Proc. No. 3.17.6
Rev. No. 1

ATTACHMENT B

ISI PROGRAM CHANGE

Date 9-21-82

Change No. PC Rev. 2 (Change No.) - 1982 (Year)

Program No. first (Interval) - last (Period)

Inspection Category Various

Description of Change Various changes to the examination requirement tables have been made and the relief request bases have been added. A detailed description of the changes and copies of the changed pages are attached.

Reason for Change The changes were made following a detailed review of the program to upgrade the requirements to the as-built conditions identified during previous ISI's. In addition, relief request bases were added which did not appear in the program, previously.

Originator

Plant ISI Coordinator

NSD ISI Coordinator

APPROVAL (Significant Changes Only):

Department Supervisor

Plant Manager

PORC

Manager of Operations

This letter addresses the corrections to and the Relief Requests for the systems and systems' components addressed in the Inservice Inspection Program of the Maine Yankee Atomic Power Station.

This Inservice Inspection Program covers a forty (40) month period which ends on December 28, 1982, the last period of the first interval.

The Relief Requests are referenced in the appropriate remark columns of the NDE SUMMARY TABLES.

The revisions to the Safety Class I components in the Section II portion of the program are:

Page I - Item No. 1.8 - Revise the figures in columns (per interval, per period, and in-plant) to read: 81, 27, and 81, for studs and 54, 18, and 54 for nuts.

Reason: Spare closure head studs are rotated with installed studs so that the NDE may be performed during plant operation.

Page I - Item No. 1.16 - Delete entirely

Reason: Category B-N-2 applies to boiling water reactors only.

Page I - Item No. 1.18 add new item: Category B-O / Examination Area: Peripheral CEDM Motor Housings / Cal. Block No: N/A / Method: Surface / No. Components per Interval: 3 / No. Components per Period: 1 / No. Components In-Plant: 28/ Remarks: Relief Request No. 3.

Reason: Required examinations not included previously in Inservice Inspection Program.

Page II - Item No. 2.2 - Revise the figures in columns (per interval, per period, and in-plant) to read: 6, 2 and 6, respectively.

Reason: Previous tabulation included nozzles which are 1" NPS, and thus exempted by Subparagraph IWB-1220 (b) (3).

Page II - Item No. 2.8 - Revise the figures in columns (per interval, per period, and in-plant) to read: 10% of 1 weld, 4% of 1 weld, 1 weld, and change the Examination Area to read: Integrally welded support skirt.

Reason: The support skirt weld was not previously included, but is required to be examined under Category B-H. The shear lugs should be deleted because they are not normally loaded inservice and there is no mode for failure. (Refer to Code Interpretation XI-80-03.)

Page II - Item No. 2.9 - Revise the figures in columns (per interval, per period, and in-plant) to read: 1 (one) patch; N/A, and 1 (one) patch. Add in the Remarks column; Deferred to end of interval.

Reason: Only 1 (one) pressurizer clad patch examination is required by Section XI.

Page III - Item No. 3.1 - Revise the figures in columns (per interval, per period, and in-plant) to read: 100% each weld, 100% each weld and 2 welds.

Reason: Rather than dividing the examinations into periods; 100% of both welds were done at the same time to eliminate re-entry into a high radiation area.

Page III - Item Nos. 3.2 - Delete this from S.C.I portion as this component is addressed in Section III of the program.

Page IV - Item No. 3.1 Revise the columns (per interval, per period, and in-plant) to read as follows:

a) Meridional welds: 10% each of 15 welds; 10% each of 5 welds on one generator, 15 welds.

b) Circumferential welds: 5% each of 15 welds, 5% each of 5 welds on 1 generator, 15 welds. Remarks: Includes 3 stay cylinder welds per steam generator.

c) Tubesheet welds: 5% each of 3 welds, 5% of 1 weld on 1 generator, 3 welds.

Reason: This change was made to clarify the examination requirements.

Page IV - Item No. 3.2 - Revise the figures in columns (per interval, per period and in-plant) to read: 6, 2, and 3 outlet - 3 inlet, respectively.

Reason: Correction of error in table to reflect actual number of nozzles. Subject to examination.

Page V - Item No. 4.5 - Revise the figures in columns (per interval, per period and in-plant) to read: 127, 43, and 506, respectively.

Reason: Previous tabulations were incorrect.

Page V - Item No. 4.6 - Revise the figures in columns (per interval, per period and in-plant) to read: 4, 2, and 15, respectively.

Reason: Previous tabulation reviewed and determined to be incorrect.

Page V - Item No. 4.7 - Revise the figures in columns (per interval, per period and in-plant) to read: 7, 3, and 28, respectively.

Reason: Previous tabulation reviewed and determined to be incorrect.

Page V - Item No. 4.8 - Revise the figures in columns (per interval, per period and in-plant) to read: 78, 26, and 310, respectively.

Reason: Previous tabulation reviewed and found to be incorrect.

Page V - Item 4.9 - Revise the figures in columns (per interval, per period and in-plant) to read: 17, 6, and 66.

Reason: Previous tabulation reviewed and determined to be incorrect.

Page V - Item 4.10 - Revise the figures in columns (per interval, per period and in-plant) to read: 252, 84, and 252.

Reason: Previous tabulation reviewed and determined to be incorrect.

Page V - Item 4.12 - Change number of components per interval to read: Suction flange bolting on 5 valves; change number of components per period to read: Suction flange bolting on 2 valves; change number of components in-plant to read: Suction flange bolting, on 5 valves.

Reason: Program addresses total number of valves and not the totals of bolting.

Page VI - Item No. 5.1 - Revise column (Method) to read Volumetric, Visual and Surface (when removed).

Reason: Visual examinations and surface examinations when removed are required by Section XI.

Page VI - Item 5.6 - Add a new item as follows: Category: B-L-1, Examination Area: Reactor Coolant Pump Casing Welds / Cal. Block No.: N/A / Method: Volumetric / No. Components per Interval: 1 / No. Components per Period: N/A / No. Components In-Plant: 3 /Relief Request No. 8

Page VII - Item 6.7 - Category: B-M-2 Valve Body Internal Surfaces, Cal. Block No.: N/A / Method: Visual / No. Components per Interval: 7 / No. Components per Period: 3/No. Components In-Plant: 23 (7 types)./Relief Request No. 11.

Reason: Required examinations not included previously in Inservice Inspection Program.

The Relief Request for the Safety Class I components in the Section II portion of the program are:

Page I RX - Item No. 1.2 - Longitudinal Circumferential Welds - Relief Request No. 1.

Page I RX - Item No. 1.4 - Primary Nozzle to Vessel Weld and Inside Radiused Sectior - Relief Request No. 2.

Page I RX - Item No. 1.18 - Vessel Penetrations CRD Housing and Instrument or Inst. Penetrations - Relief Request No. 3.

Page I RX - Item No. 1.14 - Vessel Cladding - Relief Request No. 4.

Page II PZR - Item No. 2.4 - Nozzle to Safend Welds - Relief Request No. 5.

Page V - Piping Pressure Boundary Safe End, Branch and Longitudinal and Circumferential Welds - Item Nos. 4.1, 4.5, and 4.6 - Relief Request Numbers 6, 7, 9, and 10.

Page VI - Main Coolant Pump - Pump Casing - Item No. 5.6, 5.7 - Relief Request No. 8.

Page VII - Not addressed (Valve to Safe End, Safe End to Pipe) Relief Request No. 10.

Page VII - Item No. 6.6 - Valve Body Welds - Relief Request No. 11.

NOTE: Relief Request No. 12, for Integrally Welded Supports is inclusive for all Safety Class I Systems.

The revisions to the Safety Class II components in Section III portion of the program are:

Page I - Item C1.1 - Steam generator - Change percentage over lifetime to: 20% each of 6 welds, and percentage for period to: 20% of 1 weld.

Reason: Previous tabulation reviewed and determined to be incorrect.

Page I - Item C1.1 - Component; High Pressure Drain Cooler (E-35) - Delete the volumetric examination of welds. Vendor Drawing No. CEU-B-16029 identifies no welds in the Safety Class II portion of this component.

The Relief Request for the Safety Class II components in the Section III portion of the program are:

Page 1 - Item C1.1, Volume Control Tank (TK-6) - Relief Request No. 13.

Page 1 - Item C1.1, Letdown Heat Exchanger (E-44) - Relief Request No. 14.

Page 1 - Item C1.1, Regenerative Heat Exchanger (E-67) - Relief Request No. 15.

Page 1 - Item C1.1, Seal Water Heater (E-96) - Relief Request No. 16.

Page 1 - Item C1.1, Seal Water Supply Filters (FL-34A & FL-34B) - Relief Request No. 17.

Page 1 - Item C1.1, Letdown Pre-Filter (FL-35A) - Relief Request No. 18.

Page 1 - Item C1.1, Purification Demineralizers (I-2A, I-2B, I-2C) - Relief Request No. 19.

Page 2 - Item C1.1, Deborating Demineralizer (I-3) - Relief Request No. 20.

The following hydrostatic Relief Requests are for Safety Class II and III systems:

Relief Request No. 21 - Chemical and Volume Control System

Class II Lines: CH-24, CH-25, CH-26, and CH-27

Relief Request No. 22 - Safety Inspection System

Class II Lines: SIH-20, SIH-22, SIH-24, SIH-30, SIH-31, SIH-33, SIH-34, SIH-41, SIH-42, RC-48, RC-49, RC-50, RC-51, RC-52, and RC-53

Relief Request No. 23 - Chemical and Volume Control; Seal Water Return from the Reactor Coolant Pumps

Class II Lines: CH-77, CH-81, CH-82, CH-83, CH-92, CH-95, CH-249, CH-251, CH-253, CH-255, CH-257, CH-258, CRL-121, and CRL-122

Relief Request No. 24 - Various Class 2 Systems

Class 2 Lines: Various

Relief Request No. 25 - Various Class 2 Lines on the Discharge Side of Centrifugal Pumps

Class 2 Lines: RH-7, RH-8, RH-9, RH-10, RH-11, RH-12, CS-21, CS-22, CS-23, CS-24, CS-25, CS-26, CH-20, CH-21, CH-22, CH-24, CH-25, and CH-26

Relief Request No. 26 - Various Class 2 and 3 Systems

Class 2/3 Lines: Various Noninsulated Class 2 and 3 Systems and Components

Relief Request No. 27 - Various Class 2 Portions of Systems at Containment Penetrations between Class 3 or Non-Nuclear Class Components with Attached Table

Relief Request No. 28 - Main and Auxiliary Feedwater

Class II Lines: WFPD-3, WFPD-4, WFPD-7, WFPD-8, WFPD-9, WFPD-10, WFPD-15, WFPD-16, WFPD-17, WAPD-21, WAPD-23, and WAPD-25.

Add a NEW Section following I.12 which contains:

System Boundaries Subject To Inservice Inspection

Revise the Section "Safety Class II System Hydrostatic Pressure Test" as follows:

Prior to the title page add the new section entitled, "System Pressure Testing" and Table I "Summary of Systems Subject to Pressure Testing".

Folloing the title page, delete the existing hydrostatic testing requirements table and add the table entitled, "Class 2 Hydrostatic Pressure Test Summary".

Revise the Section "Safety Class III System Hydrostatic Pressure Test" as follows:

Following the title page, delete the existing hydrostatic testing requirements table and add the table entitled, "Class 3 Hydrostatic Pressure Test Summary".

The revisions to the valve testing program in Section VI of the program are:

LEGEND FOR VALVE TESTING FREQUENCY - Delet item LT_S and replace it with: LT_e - leak test (exempted); Refer to "Exemptions from Leak Testing" section for justification for exemption from seat leakage testing.

MAIN STEAM AND FEEDWATER SYSTEM LEAK TEST EXEMPTION - Delete this page and replace it with the new section entitled "Exemptions from Leak Testing."

VALVE RELIEF REQUEST NUMBER: V-1 - Add valves HSI-61, HSI-62 and HSI-63.

REASON: These are new valves installed in 1981.

VALVE TEST REQUIREMENT TABLES -

For the valves listed below, delete category A from the category column, change LT_S to LT_e in the frequency column and add to the remarks column: Containment Boundary Valve Exempt from Leak Testing.

Valves: MS-S-12, MS-S-13, MS-S-14, MS-S-15, MS-S-16, MS-S-17, MS-S-22, MS-S-23, MS-S-24, MS-S-25, MS-S-26, MS-S-27, MS-S-32, MS-S-33, MS-S-34, MS-S-35, MS-S-36, MS-S-37, HSI-15, HSI-25, HSI-35, CS-3, CS-4, CS-54. .

REASON: These valves have been exempted from leak testing. See the "Exemptions from Leakage Testing."

For the valves listed below, delete category A from the category column and add category B, change LT_S to LT_e in the frequency column and add to the remarks column: Containment Boundary Valve Exempt from Leak Testing.

Valves: MS-M-10, MS-M-20, MS-M-30, MS-50, MS-70, MS-90, MS-M-161, MS-T-163, AFW-A-101, AFW-A-201, AFW-A-301, AFW-103, AFW-303, AFW-105, AFW-305, FW-M-104, FW-M-204, FW-M-304, CF-29, CF-31, CF-33, BD-T-12, BD-T-22, BD-T-32, BD-59, HSI-M-11, HSI-M-12, HSI-M-21, HSI-M-22, HSI-M-31, HSI-M-32, LSI-M-11, LSI-M-21, LSI-M-31, CS-M-1, CS-M-2, CS-A-55, CS-A-56, RH-M-2, RH-4, RH-6, RH-7.

REASON: These valves have been exempted from leak testing. See the "Exemptions From Leakage Testing."

Page 18 - Valve LSI-32: Add category A to the category column.

Add the following new valves to the table:

Page 15 - Valve Number: RC-M-54/Safety Class: 1/Coordinates: D-4/Category: B/Size: 1/Signal Type: MCB/Normal Position: C/Safety Position: O/Test Frequency: Q.

Page 15 - Valve Number: RC-M-56/Safety Class: 1/Coordinates: D-4/Category: B/Size: 1/Signal Type: MCB/Normal Position: C/Safety Position: O/Test Frequency: Q.

Page 18 - Valve Number: HSI-61/Safety Class: 1/Coordinates: A-4/Category: C,A/Size: 10/Valve Type: VCW/Normal Position: C/Safety Position: C/Test Frequency: R,LT.

Page 18 - Valve Number: HSI-62/Safety Class: 1/Coordinates: A-6/Category: C,A/Size: 10/Valve Type: VCW/Normal Position: C/Safety Position: C/Test Frequency: R,LT.

Page 18 - Valve Number: HSI-63/Safety Class: 1/Coordinates: A-6/Category: C,A/Size: 10/Valve Type: VCW/Normal Position: C/Safety Position: C/Test Frequency: R,LT.

Page 26 - Valve Number: PR-M-89/Safety Class: 1/Coordinates: C-1/Category: B/Size: 1/Normal Position: C/Safety Position: O/Test Frequency: Q.

Page 26 - Valve Number: PR-M-90/Safety Class: 1/Coordinates: C-1/Category: B/Size: 1/Normal Position: C/Safety Position: O/Test Frequency: Q.

REASON: The valves were installed after submittal of the current program.

Page 11 - Component Number: TR-23/Safety Class: 2/Coordinates: K-7/Category: B/Size: 1/Normal Position: M/Safety Position: M/Frequency: LT_e/Remarks: FM-26A & 87A; Containment Boundary Component Exempt from Leak Testing.

REASON: The trap was determined to be a containment boundary.

PUMP RELIEF REQUEST NUMBER: P-3--Change Alert Range to "none" and change Required Action Range to "$30 > \Delta P > 40$"

REASON: The Service Water Pumps are low head pumps. The ranges for allowable Δ P, which were previously specified as a percentage of total ΔP, were determined to be still prohibitively low. Based on additonal operational experience since the original relief request was submitted, it has been determined that the new values specified provide for satisfactory pump performance and reliability.

I. REACTOR VESSEL

RR - Relief Request

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
1.1	B-A	Longitudinal welds in core area		Volumetric	10%	N/A	6	
1.1	B-A	Circumferential welds in core area		Volumetric	5%	N/A	2	
1.2	B-B	Longitudinal welds in shell		Volumetric	10%	N/A	6	RR #1
1.2	B-B	Circumferential welds in shell		Volumetric	5%	N/A	2	
1.3	B-C	Vessel to Flange weld	TB-35	Volumetric	100%	33 1/3%	1	
1.3	B-C	Head to Flange weld	TB-16	Volumetric	100%	33 1/3%	1	
1.4	B-D	Primary hozzle to vessel weld & inside radiused section	TB-19	Volumetric	6	2	6	RR #2
1.5	B-E	Vessel penetrations CRD housing & inst. penetrations	N/A	Visual	25%	8%	-	
R1.8	B-G-1	Closure studs & nuts removed	TB-5, TB-6	Volumetric Surface	54 (Nuts) 81 (Studs)	18 (Nuts) 27 (Studs)	54 (Nuts) 81 (Studs)	
1.9	B-G-1	Ligaments between threaded stud holes	TB-20	Volumetric	54	18	54	
1.10	B-G-1	Closure washers & bushings	N/A	Visual	54	18	54	
1.11	B-G-2	Pressure retaining bolting	N/A	Visual	36	12	36	
1.13	B-I-1	Closure head cladding	N/A	Visual	6 Patches	2 Patches	6 Patches	
1.14	B-I-1	Vessel cladding	N/A	Visual	6 Patches	2 Patches	6 Patches	RR #4
1.15 R	B-N-1	Vessel interior	N/A	Visual	-	-	100% Available	
1.17	B-N-3	Core support structures	N/A	Visual	-	-	-	
R 1.18	B-O	Peripheral CEDM motor housings	N/A	Surface	3	1	28	RR #3
1.19	B-P	Exempted components	N/A	Visual	-	-	-	

II. PRESSURIZER

RR - Relief Request

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
2.1	B-B	Longitudinal welds		Volumetric	10%	4%	4 (52 ft.)	
2.1	B-B	Circumferential welds		Volumetric	5%	2%	3 (84 ft.)	
R 2.2	B-D	Nozzle to vessel welds including radiused sections	TB-15,17,19, 20	Volumetric	6	2	6	
2.3	B-E	Heater penetrations	N/A	Visual	100%	100%		
2.4	B-F	Nozzle to safe end welds	TB-21,22,23, 24,25,26	Volumetric Surface	6	2	6	RR #5
R 2.8	B-H	Integrally welded support skirt		Volumetric	10% of 1 weld	4% of 1 weld	1 weld	RR #11
R 2.9	B-I-2	Vessel cladding	N/A	Visual	1 patch	N/A	1 patch	Deferred to end of interval
2.11	L-G-2	Pressure retaining bolting	N/A	Visual	20	7	20	

III. REGEN. HEAT EXCHANGER

RR - Relief Request

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
R 3.1 R	B-B	Circumferential welds	TB-3	Volumetric	100% each weld	See note	2 welds	

NOTE: Rather than dividing the examinations into periods, 100% of both welds were done at the same time to eliminate reentry into a high radiation area.

IV. STEAM GENERATOR

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
R 3.1	B-B	Meridional welds	TB-16	Volumetric	10% Ea. of 15 welds	10% Ea. of 5 welds on 1 steam generator	15 welds	
R 3.1	B-B	Circumferential welds	TB-16	Volumetric	5% Ea. of 15 welds	5% Ea. of 5 welds on 1 steam generator	15 welds	
R 3.1	B-B	Tube sheet welds		Volumetric	5% Ea. of 3 welds	5% of 1 weld on 1 steam gener.	3 welds	
R 3.2	B-D	Nozzle to head welds including inside radius	TB-16	Volumetric	6	2	3 Inlet 3 Outlet	
R 3.7	B-H	Integrally welded vessel supports	TB-11	Volumetric	3 (44 ft.)	1 (15 ft.)	3 (44 ft.)	RR #11
3.10	B-G-2	Pressure retaining bolting	N/A	Visual	120	40	120	

V. PIPING PRESSURE BOUNDARY

RR - Relief Request

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
R 4.1	B-F	Safe end welds	TB-11,18,21 23,26,27	Volumetric Surface	27	9	27	RR #10 RR #6 RR #5
R 4.5	B-J	Circumferential and longitudinal pipe welds		Volumetric	127	43	506	RR #6 RR #7 RR #9
R 4.6	B-J	Branch welds >6 in.	TB-3,4,11, 14	Volumetric	4	2	15	
R 4.7	B-J	Branch welds ≤6 in.	TB-1,TB-2	Surface	7	3	28	
R 4.8	B-J	Socket welds	N/A	Surface	78	26	310	
R 4.9	B-K-1	Integrally welded supports	N/A	Volumetric	17	6	66	RR #11
R 4.10	B-K-2	Support Components	N/A	Visual	252	84	252	RR #11
R 4.12	B-G-2	Pressure retaining bolting < 2"	N/A	Visual	5 Valves	2 Valves	5 Valves	Suction flange bolting

VI. PUMP PRESSURE BOUNDARY

RR - Relief Request

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
R 5.1	B-G-1	Pressure retaining bolting ≥2"	TB-7, 8	Volumetric Visual, surf.*	48	16	48	*When removed
5.5	B-K-2	Support components	N/A	Visual	3	1	3	
R 5.6	B-L-1	Reactor Coolant Pump casing welds	N/A	Volumetric	1	N/A	3	RR #8
R 5.7	B-L-2	Pump casings	N/A	Visual	1	N/A	3	RR #8

VII. VALVE PRESSURE BOUNDARY

ITEM NO.	CATEGORY	EXAMINATION AREA	CAL. BLOCK NO.	METHOD	NO. COMPONENTS PER INTERVAL	NO. COMPONENTS PER PERIOD	NO. COMPONENTS IN PLANT	REMARKS
6.6	B-M-1	Valve body welds	N/A	Volumetric	1	N/A	2	
R 6.7	B-M-2	Valve body internal surfaces	N/A	Visual	7	3	27 (7types)	
6.9	B-G-2	Pressure retaining bolting < 2"	N/A	Visual	75	25	75	

RELIEF REQUEST

Number: 1

System: Reactor Vessel

Safety Class: 1

Line(s)/Component(s): Circumferential and Meridional Welds in Vessel Heads

Code Class: B-B

Requirement: Perform examinations of 10% of head meridional welds and 5% of circumferential head welds.

Relief Request: Perform volumetric examination of closure head and lower head welds where access and geometry permit.

Basis for Relief: The code required volume cannot be met because of the interference of the instrument tubes in the lower head. The instrument penetrations prohibit the scan arm of the inspection equipment from adequately covering the required volumes.

The closure head has a shroud, insulation, and CRD drives mounted such that access to the head-to-dome weld and portions of the meridional welds are not accessible.

Alternate Testing: Sufficient areas of similar welds will be examined such that service problems will be discovered prior to a failure of the subject welds. No alternate is suggested.

RELIEF REQUEST

Number: 2

System: Reactor Vessel

Safety Class: 1

Line(s)/Component(s): Nozzle to Vessel Welds

Code Class: B-D

Requirement: Examine all nozzles each interval, using volumetric methods.

Relief Request: Relief is requested from the requirements of IWB-2512 which require inspections of the nozzle to vessel welds during each period of the inspection interval.

Basis for Relief: The examinations are fully performed during the tenth-year examination. Exams performed during the intermediate periods are either partially performed from the OD, with a large man-rem burden, or from the ID by using a remote device such as a RAR tool. This is also a high rem burden test. Additionally, latter editions of ASME Section XI provide for Category B-D exams at the end of each interval.

Alternate Testing: The requirements of Category B-D will be fulfilled at the end of each inspection interval during the full vessel examinations.

RELIEF REQUEST

Number: 3

System: Reactor Vessel

Safety Class: 1

Line(s)/Component(s): CRD Housing Welds

Code Class: B-O

Requirement: The examination of 10% of the peripheral control rod housing pressure retaining welds shall be performed once per interval.

Relief Request: Perform a liquid penetrant exam on all CRD housing welds when the CRD drive assemblies are removed for maintenance or inspection.

Basis for Relief: It is impractical to remove and disassemble a CRD housing to perform only an examination of a pressure boundary weld. The volumetric criteria was deleted in later editions of the inspection code in lieu of a surface exam. A maintenance schedule based on need will provide sufficient schedule for these examinations.

Alternate Testing: Perform a surface exam in lieu of a volumetric exam of the CRD pressure boundary welds according to the maintenance and disassembly schedule of the CRD housings.

RELIEF REQUEST

Number: 4

System: Reactor Vessel

Safety Class: 1

Line(s)/Component(s): Vessel Cladding

Code Class: B-I-1

Requirement: Perform visual and surface or volumetric examination of six (6) clad patches each on the interior at the closure head and the vessel.

Relief Request: Perform 100% visual exam of the interior of the closure head once per interval. Perform a visual exam of the cladding of the vessel when performing B-N-3 exams.

Basis for Relief: Required examinations have proven of little significance in detecting cladding cracks. Visual examination of 100% of the head will provide a crack indication by showing a dry boric acid mark against the very dark appearance of the head ID. The requirements for the vessel patches are not possible because of the high radiation environment. Additionally, both items were deleted or changed in the later codes.

Alternate Test: 100% visual exam of the interior surfaces of the closure head and visual exam of cladding during the B-N-3 exams.

RELIEF REQUEST

Number: 5

System: PZR Surge Line

Safety Class: 1

Line(s)/Component(s): Safe-End Welds

Code Class: B-F

Requirement: B-F - Perform a surface/volumetric exam of the dissimilar metal weld once per interval.

Relief Request: Relief is requested from the volumetric examination of the SA351-CF8M portion of the dissimilar metal weld.

Basis for Relief: The material of the safe-end is SA351-CF8M cast stainless steel. This material does not allow meaningful ultrasonic test results because of the large columnar grain structure. RT is not practical because the line is water filled which would require a high energy source. These high energy X-ray machines are only in the developmental stages.

Alternate Testing: Perform an ultrasonic exam from the nozzle side of the weld on the ferritic material. Perform the required surface exams. If the line is drained, perform an RT of the welds.

RELIEF REQUEST

Number: 6

System: Main Coolant Loops

Safety Class: 1

Line(s)/Component(s): Isolation Valve to Safe-End
Safe-End to Pipe Weld

Code Class: B-F (Safe-End to Pipe)
B-J (Valve to Safe-End)

Requirement:

B-F - Volumetric and surface exam of 100% of the weld each inspection interval.

B-J - Volumetric exam of 25% of the total welds each inspection interval. Exam shall include examination of 100% of each weld.

Relief Request: Relief is requested from the volumetric examinations of the valve to safe-end and safe-end to pipe weld.

Basis for Relief: The material specification of the valve body is SA351-CF8M. The specification of the safe-end material is SA451-CPF8M. Both materials are cast stainless steel which have a large columnar grain structure. This structure prohibits meaningful UT examination. Radiographic examination of these welds would require a high energy source capable of penetrating 7" of steel and 33" of water. At the present time, this source is only developmental. Should a practical high energy source become commercially available, Maine Yankee will participate in its evaluation and use.

Alternate Testing: The safe-end to pipe weld will be examined using ultrasonic techniques from the pipe side of the weld joint. Additionally, the weld surfaces (B-F and B-J) will be examined using a surface technique.

RELIEF REQUEST

Number: 7

System: PZR Surge Line
Loop By-Pass Lines

Safety Class: 1

Line(s)/Component(s): All Circumferential and Branch Connection Welds

Code Class: B-J

Requirement: Examine 25% of the total number of welds per interval using volumetric methods.

Relief Request: Relief is requested from the volumetric examination of the Category B-J welds.

Basis for Relief: The lines are fabricated from SA451-CPF8M material. This is of cast stainless steel with a large columnar grain structure. This structure does not provide meaningful ultrasonic examinations. In addition, those lines are not drained during a refueling outage. This would require radiography of a 8"/12" water filled pipe. The high energy RT sources available to do this work are in the developmental stage. Maine Yankee will evaluate future development and implement them when they are practical.

Alternate Testing: 1) LP at the intervals required by Category B-J.

2) RT if the line is drained.

RELIEF REQUEST

Number: 8

System: Main Coolant Loops

Safety Class: 1

Line(s)/Component(s): Main Coolant Pump

Code Class: B-L-1, B-L-2

Requirement: "The examinations performed during each inspection interval shall include 100% of the pressure-retaining welds in at least one pump in each group of pumps performing similar functions in the system."

The examinations required are volumetric and visual per Item B5.6 and Item B5.7 of IWB-2600.

Relief Request: Defer the volumetric examination and visual exams of the pump casing welds until the pumps are fully disassembled for maintenance. At this time, evaluate the ability to perform a meaningful volumetric exam using either advanced ultrasonic techniques or high energy radiography.

Basis for Relief: The pump casings are made of SA351-CF8M material. This cast stainless steel has the large columnar grain structure which prohibits meaningful ultrasonic examination. The pump and associated piping are in high radiation areas which could reduce the quality of radiography by severe fogging. The limited ability to inspect the casings is offset by the inherent fracture toughness of this material, and cast stainless steel casings in general. The service history of these pumps shows no reason to anticipate a service-induced weld failure, and, of the pumps examined to date, no evidence of failure has been observed.

Alternate Testing: Defer the B-L-1 and B-L-2 exams until the pump is dismantled for maintenance. Perform the B-L-2 exams at that time and evaluate, and, if practical, perform the volumetric exams required by B-L-1.

RELIEF REQUEST

Number: 9

System: Main Coolant Loops

Safety Class: 1

Line(s)/Component(s): Main Recirculation Pump to Isolation Valve Weld

Code Class: B-J

Requirement: Perform an examination of 100% of the weld per examination interval using a volumetric technique.

Relief Request: Relief is requested from the volumetric examination of this weld because, methods do not exist for meaningful ultrasonic examination of cast stainless steel (SA351-CF8M). The geometry of this weld joint is not consistent with good ultrasonic practice, gamma radiography of this material at the thicknesses and distances is not practical, and high energy sources are on a one of a kind basis.

Alternate Testing: Maine Yankee will evaluate the use of high energy radiography and perform exams using this technique when they are practical. In lieu of this code requirement, the welds will be examined using surface methods and be subjected to pressure testing per ASME Section XI schedules.

RELIEF REQUEST

Number: 10

System: Main Coolant System

Safety Class: 1

Line(s)/Component(s): Lines - SI and RHR-3 Loops - Components - Main Loop Nozzles (Branch Connections) to Safe-End and Safe-End to Pipe Welds in 14" SI and RHR Piping Systems.

Code Class: B-F

Requirement: "The volumetric...examinations performed during each inspection interval shall include 100% of those dissimilar metal welds in the piping runs selected for examination..."

Relief Request: Relief is requested from the volumetric portion of a dissimilar metal weld exam where the ultrasonic beam must pass through the cast stainless steel materials of the safe-end. This relief is required only when the material specification lists SA351-CF8M, SA451-CPF8M.

Basis for Relief: The cast stainless steel materials defined by the material specification SA351 and SA451 are large columnar grained materials which impair meaningful ultrasonic examination. The material adjacent to these safe-ends is acceptable to ultrasonic examination. A valid examination can be performed on the forging side of the safe-end and on the pipe run side. This exam will cover the base material and heat affected zones leaving only the tougher weld metal and cast stainless material unintegrated by the ultrasonic beam.

Alternate Testing: The required surface examination will be performed. Maine Yankee will also continue to evaluate new techniques being developed by the industry.

RELIEF REQUEST

Number: 11

System: Main Coolant Loops

Safety Class: 1

Line(s)/Component(s): Isolation Valves

Code Class: B-M-1, B-M-2

Requirement: The examinations performed during each inspection interval shall include 100% of the pressure-retaining welds in at least one valve within each group of valves that are of the same constructional design, (e.g., globe, gate, or check valve), manufacturing method and manufacturer and that are performing similar functions in the system (e.g., containment isolation, system overpressure protection, etc.).

The examinations required are volumetric and visual per Item B6.6 and Item B6.7 of IWB-2600.

Relief Request: Defer the volumetric examination and visual exams of the valve casing welds until the pumps are fully disassembled for maintenance. At this time, evaluate the ability to perform a meaningful volumetric exam using either advanced ultrasonic techniques or high energy radiography.

Basis for Relief: The valve casings are made of SA351-CF8M material. This cast stainless steel has the large columnar grain structure which prohibits meaningful ultrasonic examination. The valve and associated piping are in high radiation areas which could reduce the quality of radiography by severe fogging. The limited ability to inspect the casings is offset by the inherent fracture toughness of this material, and cast stainless steel casings in general. The service history of these valves shows no reason to anticipate a service-induced weld failure, and, of the valves examined to date, no evidence of failure has been observed.

Alternate Testing: Defer the B-M-1 and B-M-2 exams until the valve is dismantled for maintenance. Perform the B-M-2 exams at that time and evaluate, and, if practical, perform the volumetric exams required by B-M-1.

RELIEF REQUEST

Number: 12

System: All

Safety Class: 1

Line(s)/Component(s): Integrally Welded Supports

Code Class: BH, B-K-1, BK-2

Requirements:

BH - In the case of vessel support skirts, the examination performed during each inspection interval shall cover, at least, 10% of the circumference of the weld to the vessel. In the case of support lug attachments, 100% of the welding to the vessel shall be examined.

BK-1 - The examinations performed during each inspection interval shall cover 25% of the integrally-welded supports.

BK-2 - The examination performed during each inspection interval shall cover all support components.

The support settings of constant and variable spring type hangers, snubbers, and shock absorbers shall be verified.

Relief Request: Relief is requested from performing the volumetric examination of welds on supports.

Basis for Relief: The support welds are partial penetration welds and coupled with the configurations of support design, we do not feel a meaningful volumetric examination can be performed. Additionally, per 117 Code, Section XI, either a surface or a volumetric examination may be performed.

Alternate Testing: To perform the Alternate Surface Examination given in the 1977 Code.

NON DESTRUCTIVE EXAMINATION REQUIREMENTS FOR SAFETY CLASS 2 COMPONENTS

PRESSURE VESSELS

RR - Relief Request

	ITEM NO.	CATEGORY	AREAS SUBJECT TO EXAMINATION	COMPONENT	METHOD	PERCENTAGE OVER LIFETIME	PERCENTAGE FOR PERIOD	REMARKS
R	C1.1	C-A	Circumferential Butt Welds	Steam Generators (E-1A, E-1B, E-1C)	Volumetric	20% of each of 6 welds	20% of 1 weld	
R				Volume Control Tank (TK-6)	Volumetric	20% of each of 2 welds	4% of 1 weld	RR #12
R				Residual Heat Removal Heat Exchanger (E-3A)	Volumetric	20% of each of 2 welds	4% of 1 weld	
R				Letdown Heat Exchanger (E-44)	Volumetric	20% of each of 5 welds	9% of 1 weld	RR #13
R				Regenerative Heat Exchanger (E-67)	Volumetric	20% of each of 7 welds	12% of 1 weld	RR #14
R				Seal water Heater (E-96)	Volumetric	20% of each of 3 welds	5% of 1 weld	RR #15
R				Seal Water Supply Filter (FL-34A & FL-34B)	Volumetric	20% of each of 2 welds	4% of 1 weld	RR #16
R				Letdown Prefilter (FL-35A)	Volumetric	20% of each of 3 welds	5% of 1 weld	RR #17
R				Purification Post Filter (FL-35B)	Volumetric	20% of each of 3 welds	5% of 1 weld	
R				Purification Demineralizer (I-2A, I-2B, I-2C)	Volumetric	20% of each of 2 welds	4% of 1 weld	RR #18

NON DESTRUCTIVE EXAMINATION REQUIREMENTS FOR SAFETY CLASS 2 COMPONENTS

RR - Relief Request

	ITEM NO.	CATEGORY	AREAS SUBJECT TO EXAMINATION	COMPONENT	METHOD	PERCENTAGE OVER LIFETIME	PERCENTAGE FOR PERIOD	REMARKS
R	C1.1 (Cont'd)	C-A	Circumferential Butt Welds	Deborating Demineralizer (I-3)	Volumetric	20% of each of 2 welds	4% of 1 weld	RR #19
R	C1.2	C-B	Nozzle to Vessel Welds	Steam Generators (E-1A, E-1B, E-1C)	Volumetric	100% of each of 2 welds	17% of 1 weld	
R				Volume Control Tank (TK-6)	Volumetric	100% of 1 weld	9% of 1 weld	RR #12
R				Residual Heat Removal Heat Exchanger (E-3A)	Volumetric	100% of each of 2 welds	17% of 1 weld	
R	C1.3	C-C	Integrally-Welded Supports	Steam Generators (E-1A, E-1B, E-1C)	Surface	100% of each of 6 welds	50% of 1 weld	
R				Volume Control Tank (TK-6)	Surface	100% of each of 4 welds	34% of 1 weld	RR #12
R				Seal Water Supply Filter (FL-34A, FL-34B)	Surface	100% of each of 4 welds	34% of 1 weld	RR #16
R				Letdown Prefilter (FL-35A)	Surface	100% of each of 4 welds	34% of 1 weld	RR #17
R				Purification Demineralizer (I-2A, I-2B, I-2C)	Surface	100% of each of 4 welds	34% of 1 weld	RR #18
R				Deborating Demineralizer (I-3)	Surface	100% of each of 4 welds	34% of 1 weld	RR #19
				Boronometer	Surface	100% of each of 3 welds	25% of 1 weld	

NON DESTRUCTIVE EXAMINATION REQUIREMENTS FOR SAFETY CLASS 2 COMPONENTS

ITEM NO.	CATEGORY	AREAS SUBJECT TO EXAMINATION	COMPONENT	METHOD	PERCENTAGE OVER LIFETIME	PERCENTAGE FOR PERIOD	REMARKS
R C1.4	C-D	Pressure Retaining Bolting Greater than 1" dia.	Steam Generator (E-1A, E-1B, E-1C)	Visual	8 studs, nuts, washers per interval	3 studs, nuts, washers	
				Surface or Volumetric	4 studs, nuts	1 stud, nut	
R			Residual Heat Removal Heat Exchanger (E-3A)	Visual	48 studs, nuts, washers per interval	16 studs, nuts, washers	
				Surface or Volumetric	5 studs, nuts	1 stud, nut	
R			High Pressure Drain Cooler (E-35)	Visual	24 studs, nuts, washers per interval	9 studs, nuts, washers	
				Surface or Volumetric	3 studs, nuts	1 stud, nut	
R			Seal Water Heater (E-96)	Visual	12 studs, nuts, washers per interval	4 studs, nuts, washers	
				Surface or Volumetric	2 studs, nuts	1 stud, nut	
R			Seal Water Supply Filter (FL-34A, FL-34B)	Visual	16 studs, nuts, washers per interval	6 studs, nuts, washers	
				Surface or Volumetric	2 studs, nuts, washers	None	

RELIEF REQUEST

Number: 13

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Volume Control Tank (TK-6)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from the volumetric examination of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. Piping to and from this system component (TK-6) is 4" and less. A failure of this system component should be no greater than the failure of the system piping. Additionally, the operating pressure and temperature is 50 psig and 120°F, respectively. These normal operating conditions are exempt per 1977 Code, IWC-1220. Also, the high radiation levels are 1.5-2 R/hr at the water level and 5-6 R/hr up to 60 R/hr at the gas level.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 14

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Letdown Heat Exchanger (E-44)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from the volumetric examination of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. Piping to and from this system component (E-44) is 4" and less. A failure of this system component should be no greater than the failure of the system piping.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 15

System: Reactor Coolant

Safety Class: 2

Line(s)/Component(s): Regenerative Heat Exchanger (E-67)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from performing the volumetric examination of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping, and associated valves and vessels (and their supports), that are 4" nominal pipe size and smaller. Piping to and from this system component (E-67) is 4" and less. A failure of this system component should be no greater than the failure of the system piping. Additionally, due to the high radiation levels; i.e., cubicle area is 3-5 R/hr. Component contact is 1-10 R/hr.

Alternate Testing: Perform a visual inspection during a system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 16

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Seal Water Heater (E-96)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from the volumetric examination of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping, and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. The piping to and from this system component (E-96) is 4" and less. A failure of this system component should be no greater than the failure of the system piping. Additionally, the operating pressure and temperature is 85 psig and 160°F, respectively. These normal operating conditions are exempt per 1977 Code, IWC-1220.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 17

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Seal Water Supply Filters (FL-34A & FL-34B)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from performing the volumetric examinations of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping, and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. Piping to and from these system components (FL-34A & FL-34B) is 4" and less. A failure of this system component should be no greater than the failure of the system piping.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 18

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Letdown Pre-Filter (FL-35A)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from the volumetric examination of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping, and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. Piping to and from this system component (FL-35A) is 4" and less. A failure of this system component should be no greater than the failure of the system piping.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 19

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Purification Demineralizers (I-2A, I-2B, I-2C)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from performing the volumetric examinations of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping, and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. The piping to and from these system components (I-2A, I-2B, I-2C) is 3" and less. A failure of these system components should be no greater than the failure of the system piping. Additionally, the operating pressure and temperature is 65 psig and 120°F, respectively. These normal operating conditions are exempt per 1977 Code, IWC-1220. Also, the radiation levels are 500 R/hr on contact.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 20

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): Deborating Demineralizer (I-3)

Code Class: C-A

Requirement: The examinations shall cover at least 20% of each circumferential weld, uniformly distributed among three areas around the vessel circumference.

Relief Request: Relief is requested from performing the volumetric examinations of welds.

Basis for Relief: Per Section XI, 1977 Code, IWC-1220d; component connections, piping and associated valves and vessels (and their supports) that are 4" nominal pipe size and smaller. The piping to and from this system component (I-3) is 3" and less. A failure of this system component should be no greater than the failure of the system piping. Additionally, the operating pressure and temperature is 65 psig and 120°F, respectively. These normal operating conditions are exempt per 1977 Code, IWC-1220.

Alternate Testing: Perform a visual inspection during system hydrostatic pressure and leak testing.

RELIEF REQUEST

Number: 21

System: Chemical and Volume Control

Safety Class: 2

Line(s)/Component(s): CH-24, CH-25, CH-26 and CH-27

Requirement: Subparagraph IWC-5220(a) - "The System Hydrostatic Test pressure shall be at least 1.25 times the system design pressure (P_D) ".

Basis for Relief: The charging pump recirculation lines listed above have a design pressure of 2750 psig. There are no test connections which would permit these lines to be tested while isolated from the suction side of the charging pumps. The charging pump suction piping has a design pressure of 150 psig and would be overpressurized if exposed to the pressure of 3438 psig, which is 1.25 times the recirculation line design pressure.

Alternate Testing: The recirculation lines will be included in the hydrostatic test boundary for the suction side piping. The test pressure is 188 psig (1.25 x 150 psig).

RELIEF REQUEST

Number: 22

System: Safety Injection

Safety Class: 2

Line(s)/Component(s): SIH-20, SIH-22, SIH-24, SIH-30, SIH-31, SIH-33, SIH-34, SIH-41, SIH-42, RC-48, RC-49, RC-50, RC-51, RC-52 and RC-53

Requirement: Paragraph IWB-5210 - "The components shall be subjected to (a) a system leakage test prior to startup following each reactor refueling outage ".

Basis for Relief. The lines listed above are not subjected to full Reactor Coolant System pressure during the Reactor Coolant System leak test. The design of the system is such that there are two check valves installed in the safety injection lines for each loop to prevent overpressurization of the upstream lower pressure residual heat removal lines. These lines are subject to volumetric examination in accordance with the requirements of IWB-2000 and are subject to periodic hydrostatic testing at or near the end of the inspection interval in accordance with Paragraph IWA-5210.

Alternate Testing: None

RELIEF REQUEST

Number: 23

System: Chemical and Volume Control; Seal Water Return from the Reactor Coolant Pumps

Safety Class: 2/3

Line(s)/Component(s): CH-77, CH-81, CH-82, CH-83, CH-92, CH-95, CH-249, CH-251, CH-253, CH-255, CH-257, CH-258, DRL-121 and DRL-122

Requirement: Paragraph IWD-1200 - "The examination requirements of IWD shall apply to Class 3 pressure retaining components (and their supports)".

Basis for Relief: The Seal Water System was classified as Safety Class 3 based on ANSI N18.2-1973. Due to the design of the reactor coolant pump seals, however, it has been determined that the return lines (listed above) are not required for the functioning of "Components Important to Safety" (i.e., the reactor coolant pumps), which is the criteria used to classify components as Quality Group C under Regulatory Guide 1.26. A failure of any of these lines would not necessitate the shutdown of the reactor coolant pumps or significantly affect plant safety. Therefore, these lines are functionally NNS and are exempt from testing. See Relief Request 27 for the basis for exempting the Class 2 portions between containment isolation valves from testing.

Alternate Testing: None

RELIEF REQUEST

Number: 24

System: Various Class 2 Systems

Safety Class: 2

Line(s)/Component(s): Subparagraph IWC-5220(a) states that hydrostatic tests shall be "conducted at a test temperature not less than 100°F except as may be required to meet test temperature requirements of IWA-5230".

Basis for Relief: A method does not exist at Maine Yankee for preheating water being used to fill and hydrostatically test a system. Where systems are constructed of ferritic steel and the temperature of the contained fluid is mandated by fracture prevention criteria, the contained fluid will be heated by normal system heat-up methods prior to performing the test. Where the system is constructed of austenitic steel, no limit on system temperature will be imposed. This position is consistent with Paragraph IWC-5230, as it appears in the 1980 Edition of Section XI, which has been accepted by the NRC.

Alternate Testing: None

RELIEF REQUEST

Number: 25

System: Various Class 2 Lines on the Discharge Side of Centrifugal Pumps

Line(s)/Component(s): RH-7, RH-8, RH-9, RH-10, RH-11, RH-12, CS-21, CS-22, CS-23, CS-24, CS-25, CS-26, CH-20, CH-21, CH-22, CH-24, CH-25 and CH-26

Requirement: Subparagraph IWC-5220(a) - "The system hydrostatic test pressure shall be at least 1.25 times the system design pressure (P_D) ".

Basis for Relief: The lines listed above are on the discharge side of various centrifugal charging pumps. In each case, these lines have higher design pressures than the pump suction side lines. In order not to subject the pump suction lines to excessive pressure which could damage them, the hydrostatic boundary between the high and low pressure will be the first isolation valve on the discharge side of the pump. This position is consistent with Subparagraph IWA-5224(d), as it appears in the 1980 Edition of Section XI, which has been accepted by the NRC.

Alternate Testing: Piping on the discharge side of centrifugal pumps, up to the first isolation valve, will be tested to the hydrostatic test pressure required for the suction side of the pump where the pressure ratings on the suction and discharge of the pump differ.

RELIEF REQUEST

Number: 26

System: Various

Safety Class: 2 and 3

Line(s)/Component(s): Various Noninsulated Class 2 and 3 Systems and Components

Requirement: Subparagraph IWA-5210(a) - "The test pressure and temperature shall be maintained for at least four hours prior to the performance of the examinations".

Basis for Relief: Section XI, 1974 Edition through Summer 1975 Addenda, requires a hold time for System Pressure tests of four hours whether or not the system is insulated. The purpose of this time is to provide for leakage to penetrate the insulation on the line and accumulate so that it can be readily detected visually. In the case where a line or component is not insulated, this extra hold time is not required. Therefore, for systems and components which are not insulated, the required hold time for test temperature and pressure will be only 10 minutes. This position is consistent with Subparagraph IWA-5713(d) as it appears in the 1977 Edition (including Addenda through the Summer 1978) of Section XI, which has been accepted by the NRC.

Alternate Testing: None

RELIEF REQUEST

Number: 27 (with attached Table 1)

System: Various Class 2 Portions of Systems at Containment Penetrations between Class 3 or Non-Nuclear Class Components

Safety Class: 2

Line(s)/Component(s): See Table 1

Requirement: Paragraph IWC-1210 - "The examination requirements of IWC shall apply to Class 2 pressure-retaining components (and their supports)".

Basis for Relief: Those portions of process piping that serve as part of the containment boundary are constructed to meet the rules for Class 2 components. The Process System functions however, would require that these components be classified as Class 3 or non-nuclear class.

The system pressure tests required by Section XI are intended to detect service-induced degradation of systems based upon the operational loads that a component is expected to sustain over its service lifetime; therefore, the application of Section XI rules should be in accordance with the Process System function. Containment leak tightness is the subject of a separate series of tests. This position is consistent with Subparagraph IWA-1300(f), as it appears in the 1980 Edition of Section XI, which has been accepted by the NRC. This subparagraph states: "The portion of piping that penetrates a containment vessel, which is required by Section III to be constructed to Class 1 or 2 rules for piping and which may differ from the classification of the balance of the Piping System, need not affect the overall system classification that determines the applicable rules of this section". Accordingly, where the components beyond the containment penetration are classified as Class 3, the Class 2 process piping will be examined in accordance with the rules of Subsection IWD of Section XI. Where the components beyond the penetration area are classified as non-nuclear class, the Class 2 piping will be considered exempt from the requirements of Section XI.

Alternate Testing: See Table 1

RELIEF REQUEST 27 - ATTACHMENT

TABLE 1

LINE/COMPONENT	DRAWING	SAFETY CLASS	EXAMINE "PER"
PCC-147, 148, 154, 157, 167, 169, 186, 192, 194-200, 237, 238, 242- 246, 251-265, 270- 280, 282, 284- 290, 370, 372	FM-34C	2	Subarticle IWD, Functionally Class 3
GN-2	FM-29A	2	No Examination Required, Functionally NNS
VRL-39	FM-33A	2	No Examination Required, Functionally NNS
RWL-1	FM-40A	2	No Examination Required, Functionally NNS
VL-22	FM-33B	2	No Examination Required, Functionally NNS
CH-82, 83, 77, 81, 89, 255, DRL-121, 122	FM-31A	2	No Examination Required, Functionally NNS

RELIEF REQUEST

NUMBER: 28

SYSTEM: Main and Auxiliary Feedwater.

SAFETY CLASS: 2

LINE(S)/COMPONENT(S): WFPD-3, WFPD-4, WFPD-7, WFPD-8, WFPD-9, WFPD-10, WFPD-15, WFPD-16, WFPD-17, WAPD-21, WAPD-23 and WAPD-25.

REQUIREMENT: Subparagraph IWC-5220(A) - "The system hydrostatic test pressure shall be at least 1.25 times the system design pressure (P_D)."

BASIS FOR RELIEF: There is no isolation valve between the main and auxiliary feed lines listed above and the associated steam generators. The design pressure of the lines is 1250* psig, but the design pressure for the steam generators is only 985 psig. Therefore, the feed lines cannot be tested to the code required 1560 psig without overpressurizing the steam generators and main piping.

ALTERNATE TESTING: The main and auxiliary feed lines listed will be tested to 1230 psig (1.25 x 985 psig) along with the steam generators and main steam lines.

* Normal operating pressure is 1000 psig.

SYSTEM BOUNDARIES SUBJECT TO INSERVICE INSPECTION

The systems and components within the scope of the Maine Yankee Inservice Inspection Program have been divided into Safety Class 1, 2, and 3 so that the rules of Section XI of the ASME Boiler and Pressure Vessel Code may be applied. The components selected for examination conform to the classification requirements* of 10CFR 50.55a for the Reactor Coolant Pressure Boundary and with the guidelines of USNRC Regulatory Guide 1.26, Revision 3, "Quality Group Classifications and Standards for Water, Steam and Radioactive Waste Containing Components of Nuclear Power Plants," for other safety-related systems.

The classifications and identifications of the components and the system boundaries are given on the plant flow diagrams (FM's). These classifications and identifications correspond with the NRC group classification as follows:

NRC Quality Group Classification	Flow Diagram and ASME Class
A	1
B	2
C	3
D	0

The system classifications assigned by the plant constructor and which appear on the plant flow diagrams (FM series) were reviewed for consistancy with the requirements of 10CFR 50.55a for Class 1 systems and components and with Regulatory Guide 1.26 for Class 2 and 3 systems and components. The original assignment of Safety Classifications at the time of plant construction was done in accordance with ANSI Standard N18.2 and, as a result. some differences exist. These differences are summarized below.

1. Regulatory Guide 1.26 for Class 2 and 3 systems applies to "Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants." Systems and components designated by the plant constructor to meet ANSI N18.2 requirements, but containing other materials such as air, nitrogen, diesel oil or lube oil are outside the scope of Section XI and will not be part of the Inservice Inspection Program. The systems and components affected are listed in Table -1.

*Refer to the ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition through Summer 1975 Addenda, IWA-1400(a), Note 3.

2. Certain portions of radioactive waste management systems were classified as Class 3 by the constructor, however, paragraph C2d of Regulatory Guide 1.26, which defines Quality Group C, applies to "Systems, other than radioactive waste management systems*,... ". Therefore, radioactive waste management systems, other than those included in Quality Group B, will not be part of the Inservice Inspection Program.

*Specific guidance on the quality group classification of radioactive waste management systems is under development.

TABLE -1

SYSTEMS AND COMPONENTS OUTSIDE THE SCOPE OF ASME SECTION XI

System Description	Code Class	Fluid Contained	Affected Components	Drawing Reference
Nitrogen	2	Nitrogen	2" - GN-2 . 2" - GN-3	FM-29A (H-2) (H-2)
Carbon Dioxide	2	CO_2	CO_2 line to entrance room	FM-40A (J-4)
Containment Leakage	2	Air	3/8" - LM-1 3/8" - LM-2 3/8" - LM-3 3/8" - LM-4	FM-20B (D-2) to (G-2) (D-2) to (G-2) (D-3) to (G-3) (D-3) to (G-3)
Compressed Air	2/3	Air	3" ASC - 35	FM-20B (D-4) to (E-5)
Instrument Control Air	2	Air	1 1/2" line to containment	FM-20B (D-5)
Containment Air Activity Monitoring	2	Air	1" - Acc-33 1" - Acc-36 8" - Acc-25	FM-20B (D-6) (D-6) (A-7)
Diesel Generator Starting Air	3	Air	1 1/2" - DCC-1 1 1/2" - DCC-2 1 1/2" - DCC-3 1 1/2" - DCC-4 3/4" - DCC-5	FM27-A (H-2) to (H-6) (K-2) to (K-6) (H-3) to (K-3) (H-5) to)K-5) (L-1) to (L-5)
Post Accident Purge System	2/3	Air	2" - ACC-26 2" - ACC-39 3/4" - ACC-40 H_2 Analyzer 100lx H_2 Analyzer	FM-35A (A-6) to (A-8) (B-8) to (G-8) (B-8) (E-9) (E-8)
Lubricating and Fuel Oil Piping	3	Diesel Oil	1" OF-16 1" OF-20 Day Tank (TK-62A) Day Tank (TK-62B) Diesel Gen. 1A Diesel Gen. 1B	FM-19A (H-7) (J-7) (G-6) (J-6) (I-6) (K-6)
Containment Purge	2	Air	Supply Exhaust	

SYSTEM PRESSURE TESTING

The systems and portions of systems in the Maine Yankee plant to be subjected to system pressure tests are listed in Table I. To further aid in review and implementation of the pressure test portion of the ISI program, individual hydrostatic test boundary diagrams have been prepared for the various areas to be tested. These diagrams appear at the end of this section[1]. A detailed list of the lines to be tested along with their design pressure, test procedure reference and flow diagram reference for each line appear in Table II.

Certain portions of systems cannot be pressure tested due to their design or location. Section XI has identified generic cases which may be either excluded from pressure testing entirely or are subject to alternate testing. The cases and the alternative testing is given below.

1. Open-ended portions of nonclosed systems such as a containment spray header and the suction lines from storage tanks extending to the first shutoff valve, may be exempted from the pressure test requirements of IWC-2510 and IWD-5200 for Safety Class 2 and 3 systems respectively.

2. Storage tanks and suction lines up to the first shutoff valve shall be subjected to an inservice leak test in lieu of a hydrostatic pressure test. The leak test shall utilize the hydrostatic pressure developed with the tank filled to its design capacity. The storage tanks affected are:

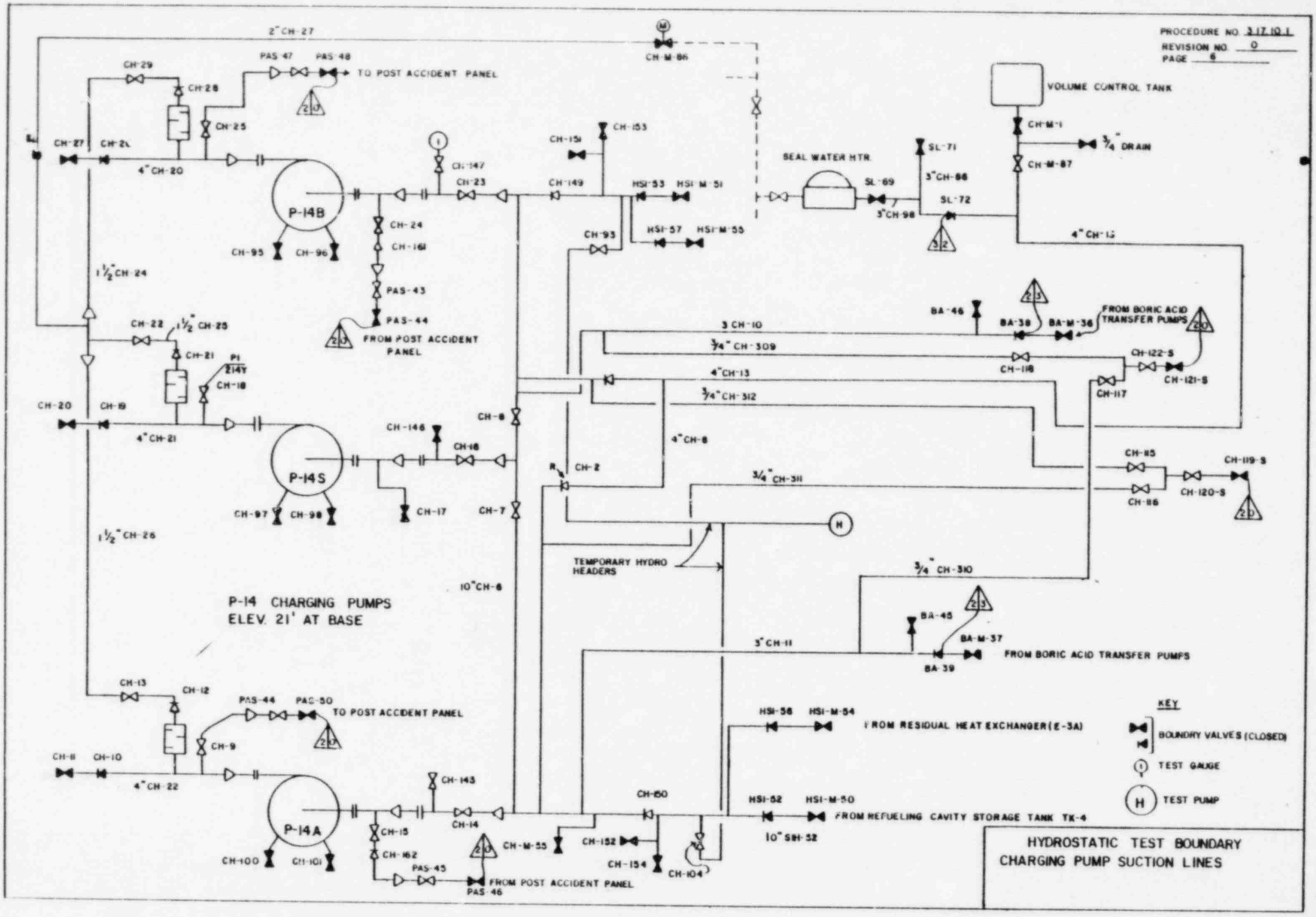
   A. Volume Control Tank
   B. Safety Injection Tank (Loop 1)
   C. Safety Injection Tank (Loop 2)
   D. Safety Injection Tank (Loop 3)
   E. PCC Surge Tank - 1500 gal.
   F. SCC Surge Tank - 1500 gal.
   G. Refueling Cavity Water Storage Tank
   H. Boric Acid Storage Tank
   I. Boric Acid Mix Tank
   J. Spray Chemical Addition Tank

1. Included are only those areas to be tested during the final period of the first inspection interval. A complete set of diagrams will be included with the second interval ISI program.

SYSTEM DESCRIPTION	FLOW DIAGRAM	SYSTEM BOUNDARY	REMARKS
1. Reactor Coolant System	FM-30A FM-31A FM-31B FM-35A	As shown on referenced FM's highlighted in yellow	Includes safety class 1 portions of the CVCS, high pressure drain, safety injection (high and low pressure) and sampling systems.
2. Chemical and Volume Control System	FM-31A FM-31B FM-31C FM-40B	As shown on referenced FM's highlighted in orange	All safety class 2 except for the following class 3 portions: (1) Aux. charging pump discharge (2) RC pump seal water injection (3) Boric acid mixing and storage tanks (4) Boric acid supply lines including the boric acid transfer pumps
3. High Pressure Safety Injection System	FM-31B	As shown on referenced FM's highlighted in orange	Class 2

TABLE I
SUMMARY OF SYSTEMS SUBJECT TO PRESSURE TESTING

SYSTEM DESCRIPTION	FLOW DIAGRAM	SYSTEM BOUNDARY	REMARKS
13. Secondary High Pressure Drain System	FM-26A	As shown on referenced FM's highlighted in orange	Safety Class 2
14. Steam Generator Blowdown System	FM-26B	As shown on referenced FM's highlighted in orange	Safety Class 2
15. Auxiliary Steam System	FM-9A FM-11A	As shown on referenced FM's highlighted in orange and blue	Safety Class 2 to the outermost containment isolation valve and safety Class 3 to the aux. feed pump turbine
16. Service Water System	FM-16A	As shown on referenced FM's highlighted in blue	Safety Class 3
17. Secondary Component Cooling Water System	FM-17A	As shown on referenced FM's highlightd in blue	Safety Class 3


PROCEDURE NO. 3.17.10.1
REVISION NO. 0
PAGE 6
2" CH-27
CH-M-86
PAS-47
PAS-48
TO POST ACCIDENT PANEL
CH-29
CH-28
CH-25
CH-27
CH-26
4" CH-20
P-14B
CH-95
CH-96
CH-147
CH-23
CH-151
CH-153
CH-149
HSI-53
HSI-M-51
CH-93
HSI-57
HSI-M-55
CH-24
CH-161
PAS-43
PAS-44
FROM POST ACCIDENT PANEL
1½" CH-24
SEAL WATER HTR.
SL-71
3" CH-86
SL-69
3" CH-98
SL-72
VOLUME CONTROL TANK
CH-M-1
¾" DRAIN
CH-M-87
4" CH-13
BA-46
BA-38
BA-M-36
FROM BORIC ACID TRANSFER PUMPS
3 CH-10
¾" CH-309
CH-118
CH-122-S
CH-121-S
CH-117
4" CH-13
¾" CH-312
CH-22
1½" CH-25
CH-21
PI 214Y
CH-18
CH-20
CH-19
4" CH-21
P-14S
CH-97
CH-98
CH-146
CH-16
CH-17
CH-8
CH-7
4" CH-8
CH-2
¾" CH-311
CH-85
CH-86
CH-119-S
CH-120-S
1½" CH-26
TEMPORARY HYDRO HEADERS
H
¾" CH-310
10" CH-6
P-14 CHARGING PUMPS
ELEV. 21' AT BASE
BA-45
BA-M-37
BA-39
3" CH-11
FROM BORIC ACID TRANSFER PUMPS
CH-13
CH-12
PAS-44
PAS-50
TO POST ACCIDENT PANEL
CH-9
CH-11
CH-10
4" CH-22
P-14A
CH-100
CH-101
CH-143
CH-14
CH-15
CH-162
PAS-45
PAS-46
FROM POST ACCIDENT PANEL
CH-M-55
CH-150
CH-152
CH-154
CH-104
HSI-56
HSI-M-54
FROM RESIDUAL HEAT EXCHANGER (E-3A)
HSI-52
HSI-M-50
FROM REFUELING CAVITY STORAGE TANK TK-4
10" SH-52
KEY
BOUNDRY VALVES (CLOSED)
TEST GAUGE
TEST PUMP
HYDROSTATIC TEST BOUNDARY
CHARGING PUMP SUCTION LINES

PROCEDURE NO. 3.1702
REVISION NO. 0
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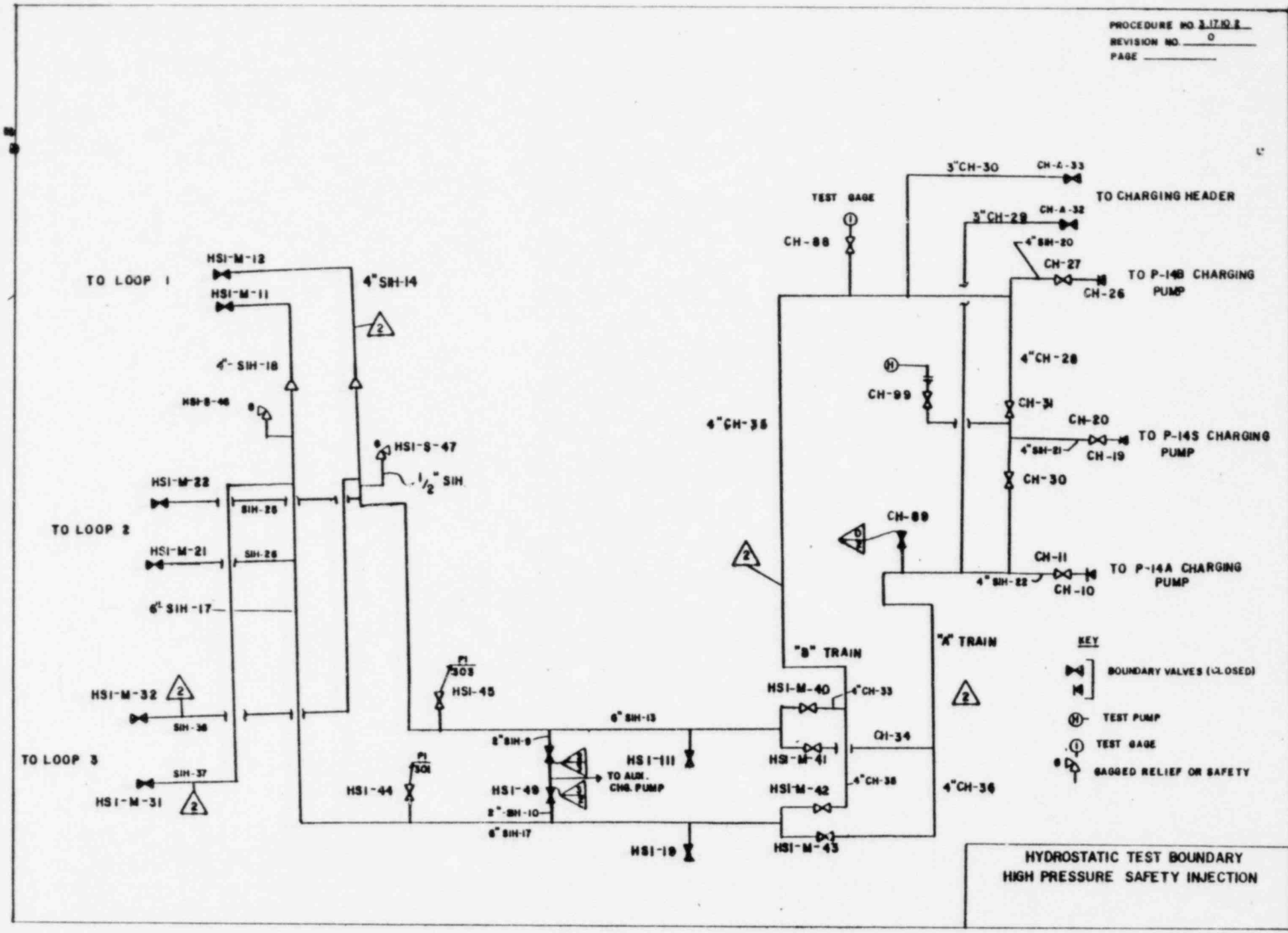
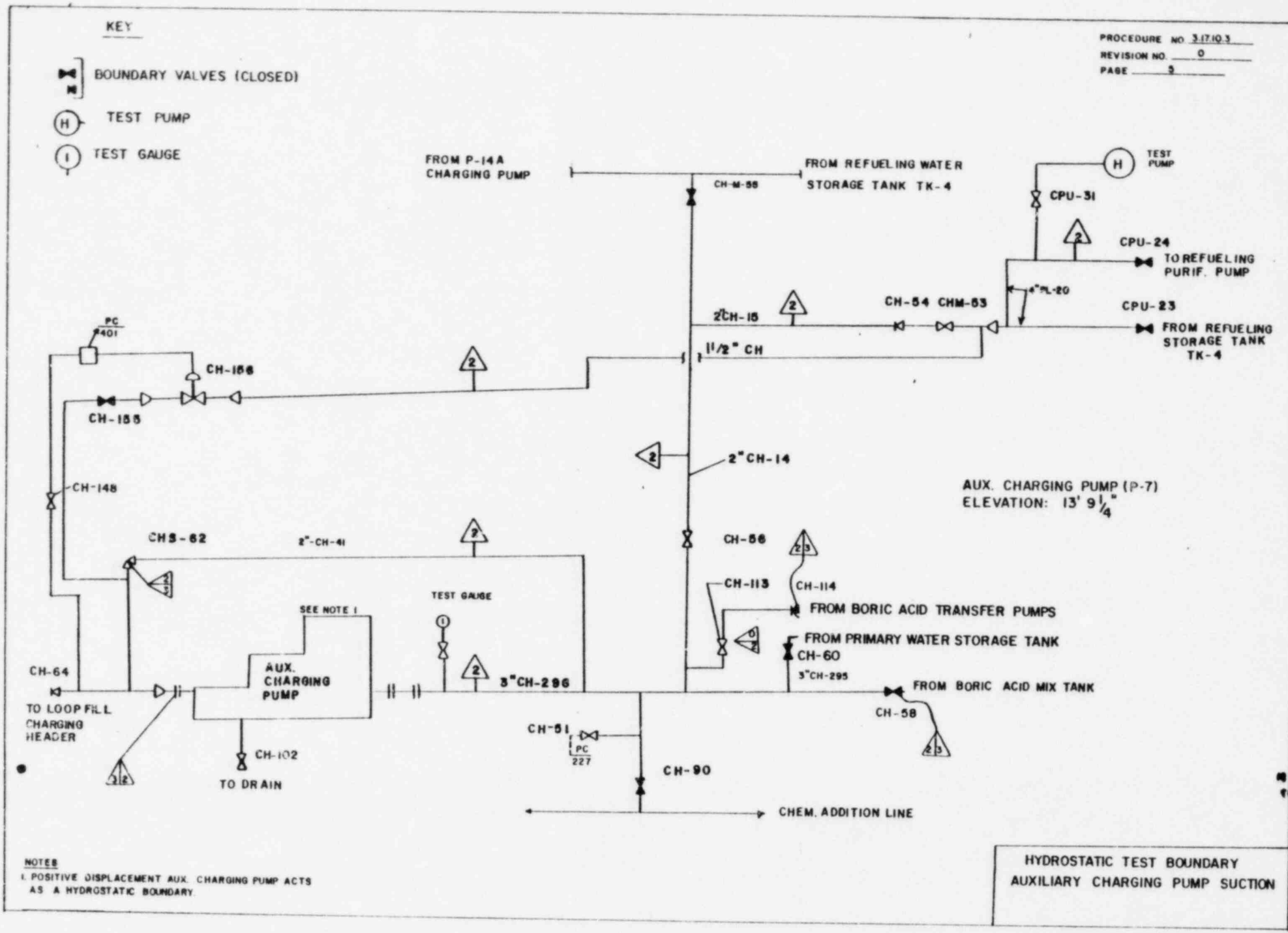


KEY

BOUNDARY VALVES (CLOSED)

(H) TEST PUMP

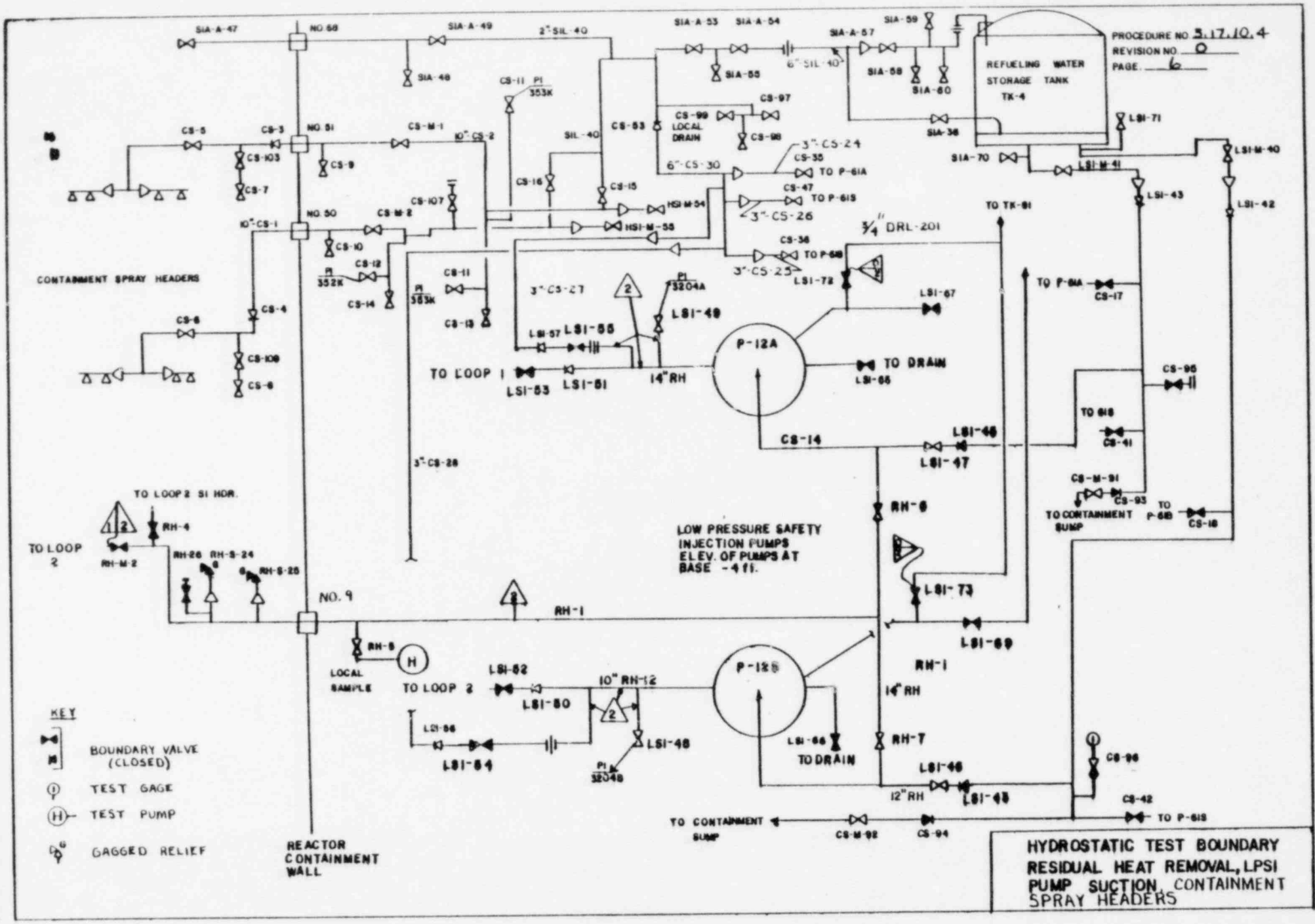
(I) TEST GAUGE



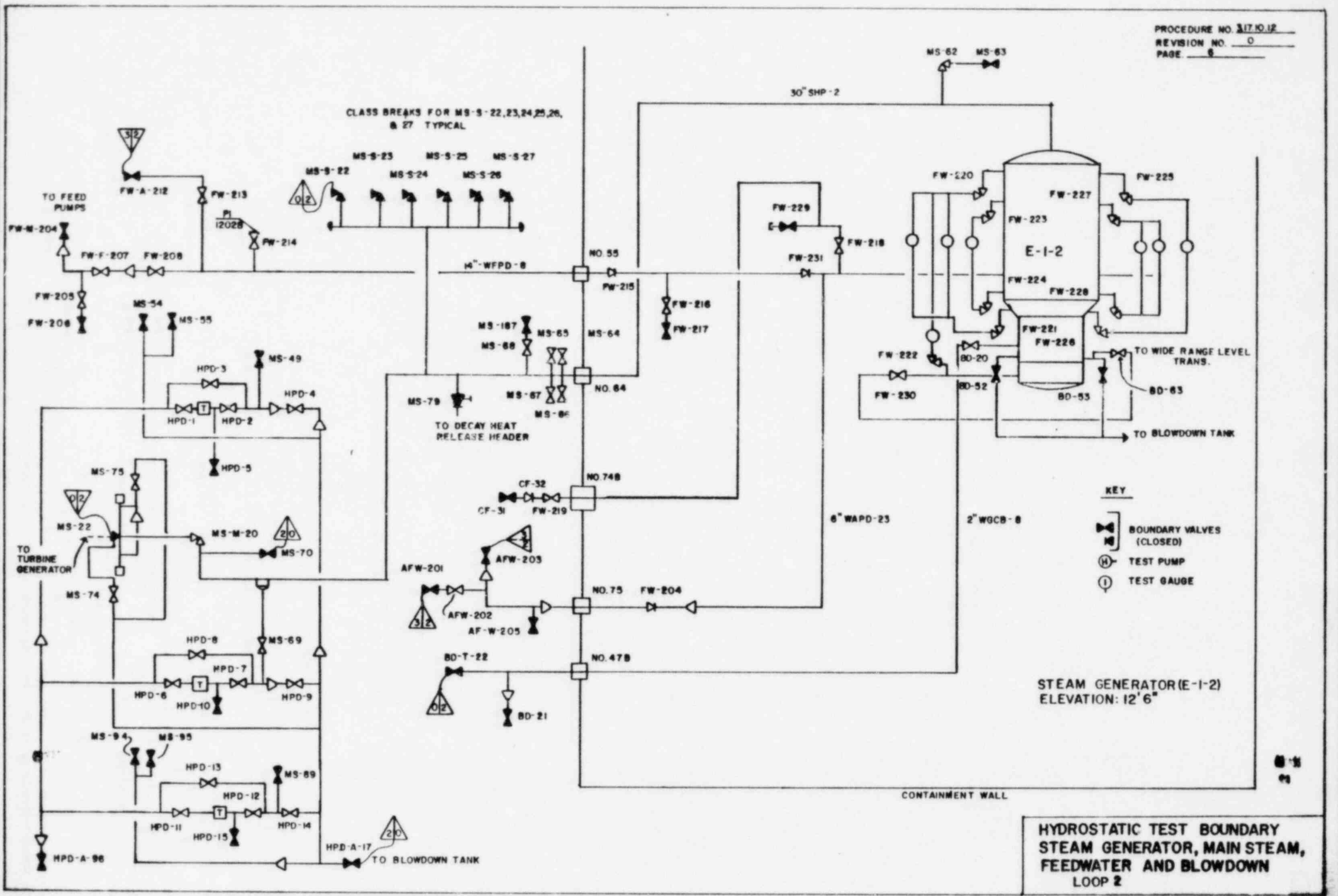
NOTES

1. POSITIVE DISPLACEMENT AUX. CHARGING PUMP ACTS AS A HYDROSTATIC BOUNDARY.

HYDROSTATIC TEST BOUNDARY
AUXILIARY CHARGING PUMP SUCTION

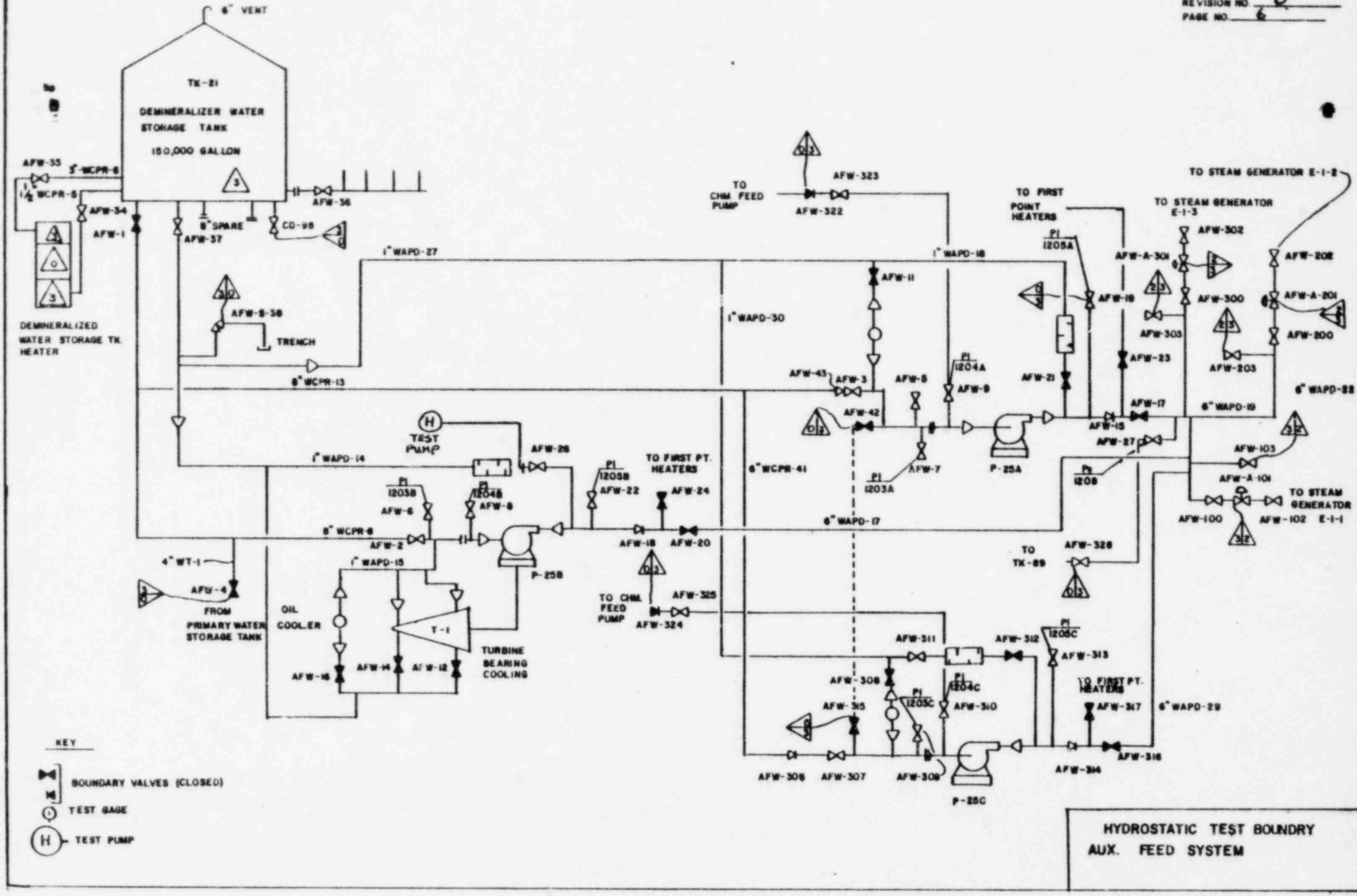

PROCEDURE NO 5.17.10.4
REVISION NO 0
PAGE 6
REFUELING WATER STORAGE TANK TK-4
CONTAINMENT SPRAY HEADERS
LOW PRESSURE SAFETY INJECTION PUMPS ELEV. OF PUMPS AT BASE -4 ft.
TO LOOP 1
TO LOOP 2
TO LOOP 2 SI HDR.
TO DRAIN
TO CONTAINMENT SUMP
LOCAL SAMPLE
REACTOR CONTAINMENT WALL
KEY
BOUNDARY VALVE (CLOSED)
TEST GAGE
TEST PUMP
GAGGED RELIEF
HYDROSTATIC TEST BOUNDARY
RESIDUAL HEAT REMOVAL, LPSI PUMP SUCTION, CONTAINMENT SPRAY HEADERS

PROCEDURE NO. 317.10.12
REVISION NO. 0
PAGE 6



HYDROSTATIC TEST BOUNDARY STEAM GENERATOR, MAIN STEAM, FEEDWATER AND BLOWDOWN
LOOP 2

PROCEDURE NO. 3.17.10.15
REVISION NO. 0
PAGE NO. 6



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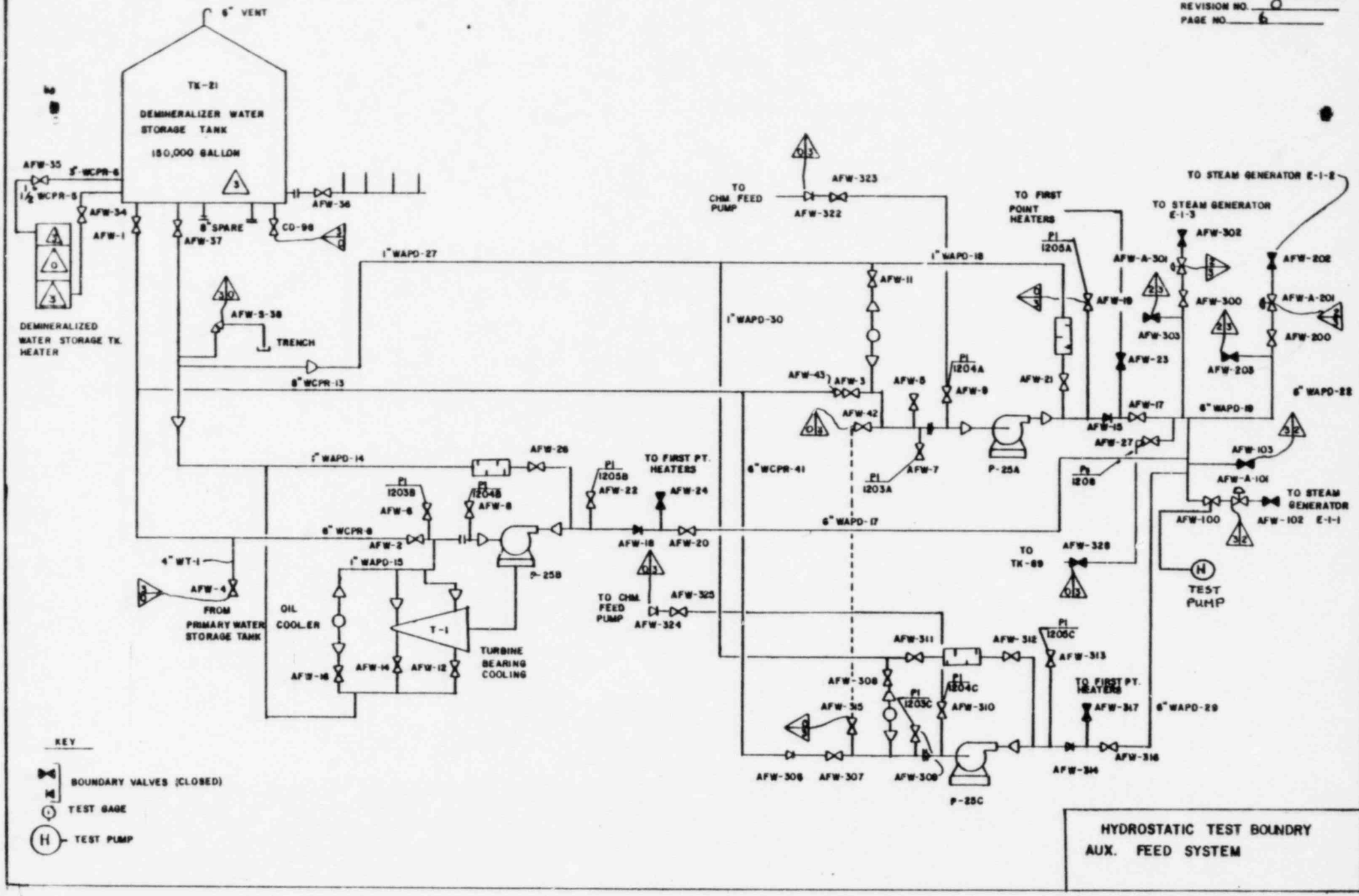
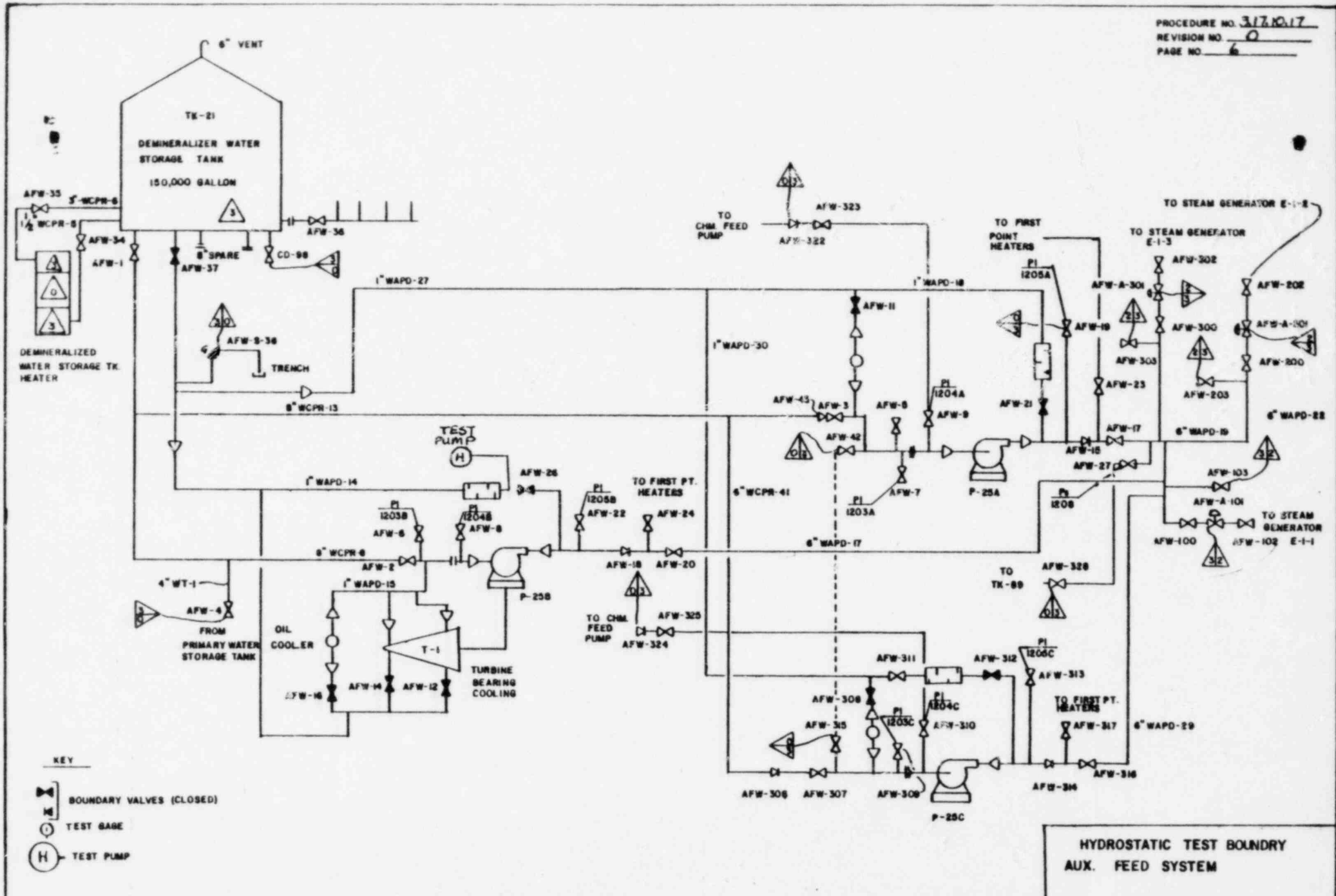
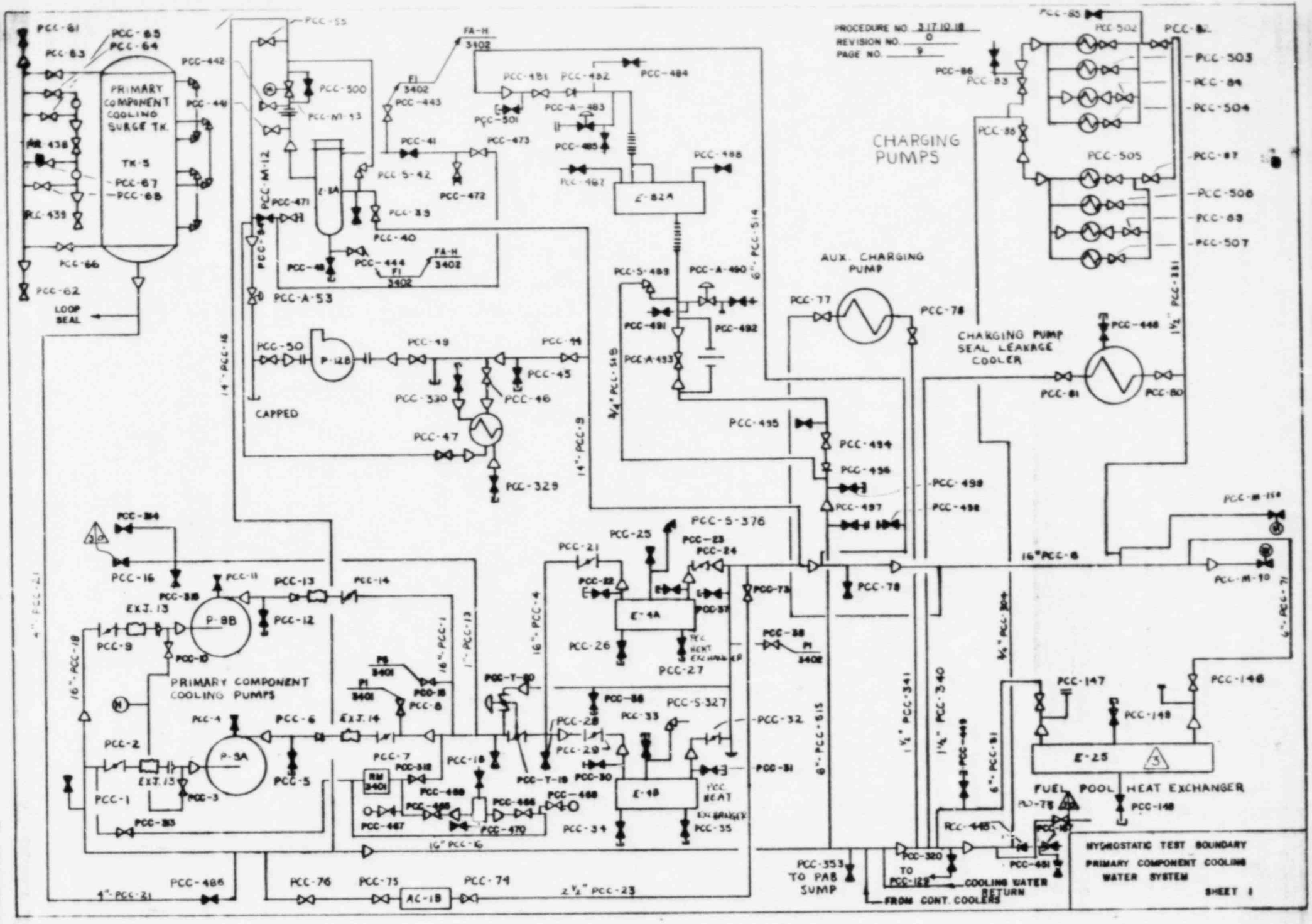
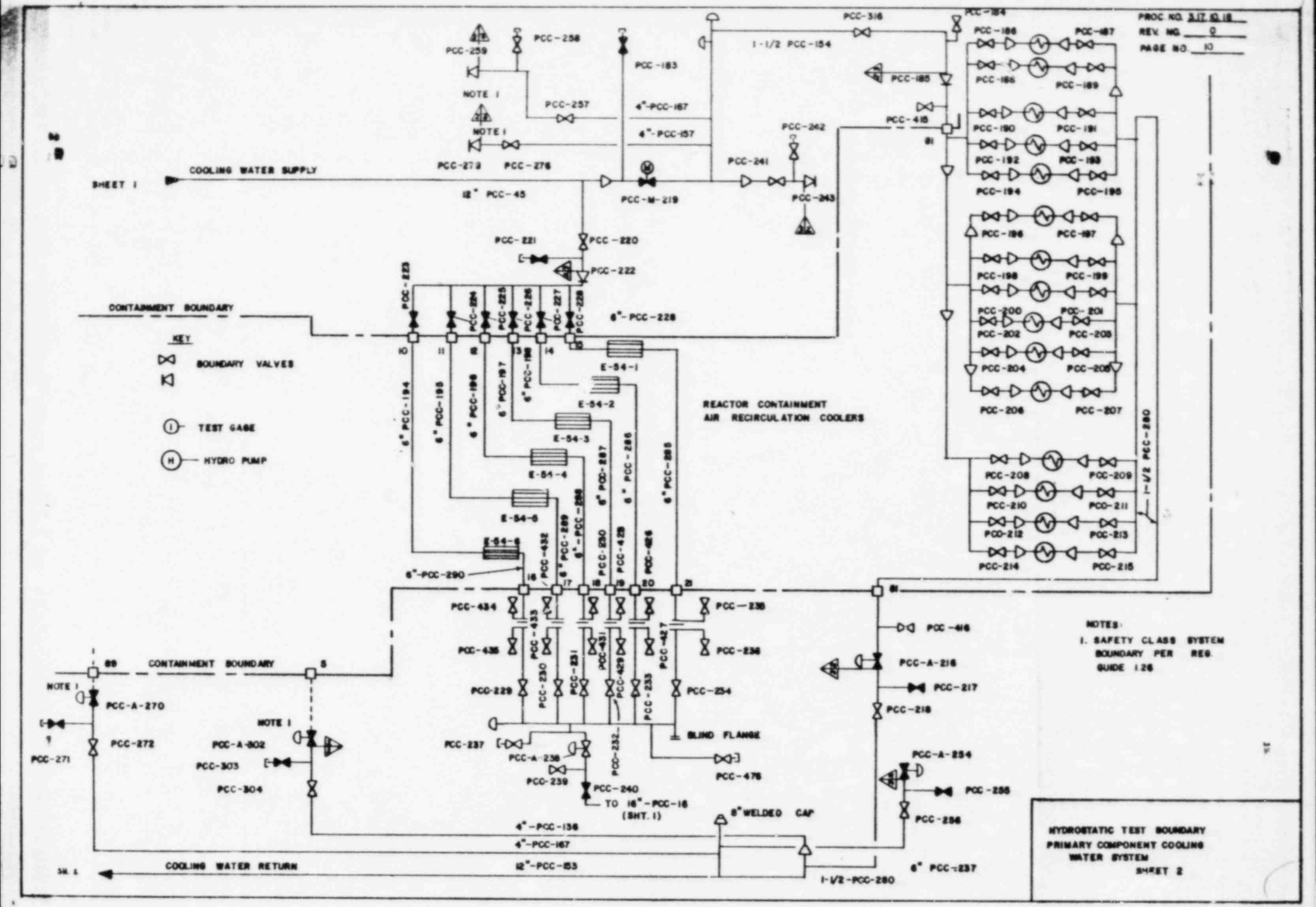
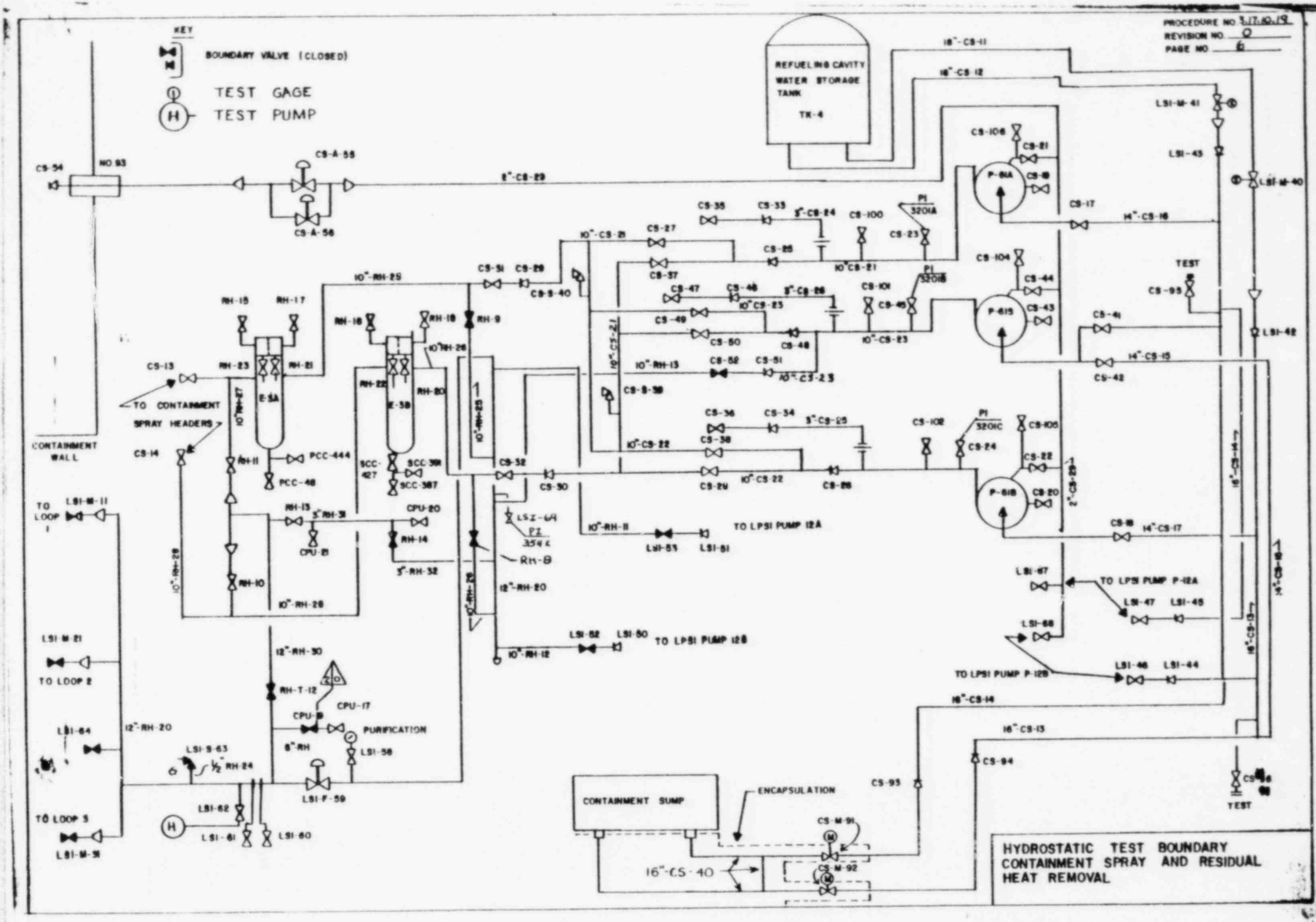


PROCEDURE NO. 317.0.17
REVISION NO. 0
PAGE NO. 6

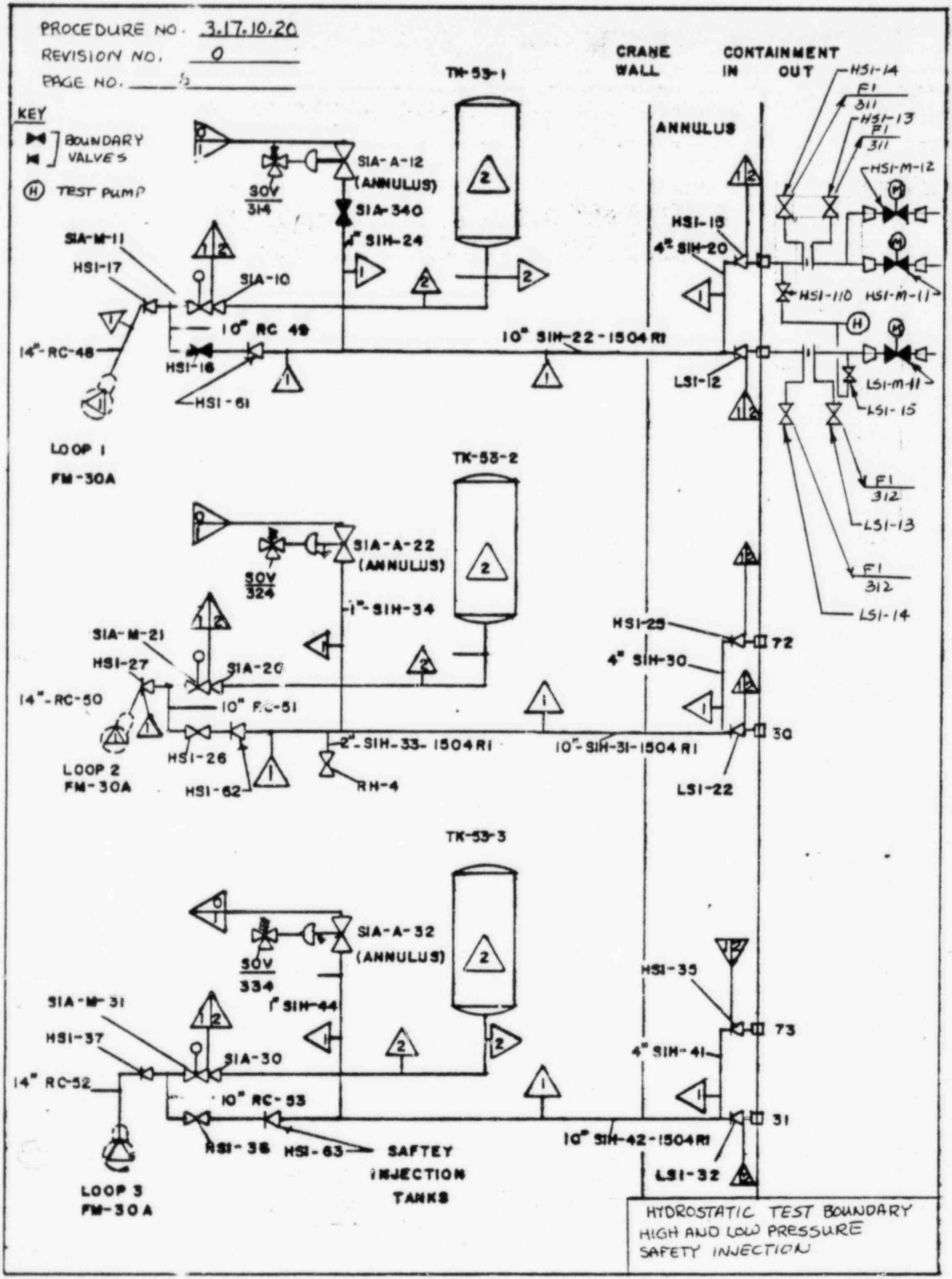



PROCEDURE NO. 3.17.10.18
REVISION NO. 0
PAGE NO. 9
PRIMARY COMPONENT COOLING SURGE TK.
TK-5
CHARGING PUMPS
AUX. CHARGING PUMP
CHARGING PUMP SEAL LEAKAGE COOLER
CAPPED
LOOP SEAL
PRIMARY COMPONENT COOLING PUMPS
P-9B
P-9A
P-12B
E-82A
E-82B
E-4A
E-4B
E-25
AC-1B
FUEL POOL HEAT EXCHANGER
PCC-TO-PAB SUMP
TO PCC-122
COOLING WATER RETURN
FROM CONT. COOLERS
HYDROSTATIC TEST BOUNDARY
PRIMARY COMPONENT COOLING WATER SYSTEM
SHEET 1


PROC NO. 3.17.10.18
REV. NO. 0
PAGE NO. 10
COOLING WATER SUPPLY
SHEET 1
12" PCC-45
PCC-M-219
PCC-316
1-1/2 PCC-154
PCC-184
PCC-185
PCC-415
PCC-186
PCC-187
PCC-188
PCC-189
PCC-190
PCC-191
PCC-192
PCC-193
PCC-194
PCC-195
PCC-196
PCC-197
PCC-198
PCC-199
PCC-200
PCC-201
PCC-202
PCC-203
PCC-204
PCC-205
PCC-206
PCC-207
PCC-208
PCC-209
PCC-210
PCC-211
PCC-212
PCC-213
PCC-214
PCC-215
1-1/2 PCC-280
PCC-258
PCC-259
PCC-183
NOTE 1
PCC-257
4"-PCC-167
4"-PCC-157
PCC-279
PCC-276
PCC-242
PCC-241
PCC-243
PCC-221
PCC-220
PCC-222
PCC-223
PCC-224
PCC-225
PCC-226
PCC-227
PCC-228
6"-PCC-228
CONTAINMENT BOUNDARY
KEY
BOUNDARY VALVES
TEST GAGE
HYDRO PUMP
E-54-1
E-54-2
E-54-3
E-54-4
E-54-5
E-54-6
REACTOR CONTAINMENT
AIR RECIRCULATION COOLERS
6" PCC-194
6" PCC-195
6" PCC-196
6" PCC-197
6" PCC-198
6" PCC-199
6" PCC-285
6" PCC-286
6" PCC-287
6" PCC-288
6" PCC-289
6"-PCC-290
PCC-432
PCC-230
PCC-428
PCC-426
PCC-434
PCC-235
PCC-433
PCC-427
PCC-435
PCC-236
PCC-431
PCC-231
PCC-429
PCC-233
PCC-229
PCC-254
PCC-237
PCC-A-238
PCC-239
PCC-232
PCC-240
TO 16"-PCC-16 (SHT. 1)
BLIND FLANGE
PCC-476
8"WELDED CAP
4"-PCC-136
4"-PCC-167
12"-PCC-153
COOLING WATER RETURN
SH. 1
1-1/2-PCC-280
6" PCC-237
89
CONTAINMENT BOUNDARY
S
NOTE 1
PCC-A-270
PCC-271
PCC-272
PCC-A-302
PCC-303
PCC-304
PCC-416
PCC-A-216
PCC-217
PCC-218
PCC-A-254
PCC-255
PCC-256
NOTES:
1. SAFETY CLASS SYSTEM BOUNDARY PER REG. GUIDE 1.26
HYDROSTATIC TEST BOUNDARY
PRIMARY COMPONENT COOLING WATER SYSTEM
SHEET 2


KEY
BOUNDARY VALVE (CLOSED)
TEST GAGE
TEST PUMP
PROCEDURE NO 3.17.80.19
REVISION NO. 0
PAGE NO 6
REFUELING CAVITY WATER STORAGE TANK
TK-4
CONTAINMENT WALL
TO CONTAINMENT SPRAY HEADERS
TO LPSI PUMP 12A
TO LPSI PUMP 12B
TO LPSI PUMP P-12A
TO LPSI PUMP P-12B
TO LOOP 1
TO LOOP 2
TO LOOP 3
CONTAINMENT SUMP
ENCAPSULATION
PURIFICATION
TEST
HYDROSTATIC TEST BOUNDARY
CONTAINMENT SPRAY AND RESIDUAL
HEAT REMOVAL

PROCEDURE NO. 3.17.10.20
REVISION NO. 0
PAGE NO. 5



CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Chemical and Volume Control					
CH-1	50	188[1,2]	3.17.10.1	FM-31 B	Includes entire line
CH-2	50	188[1,2]			Includes entire line
CH-3	150	188			
CH-4	150	188			
CH-5	150	188			
CH-6	150	188			
CH-8	150	188			
CH-9	215	188[2]			
CH-10	150	188			
CH-11	150	188			
CH-12	215	188[2]			
CH-13	150	188			
CH-14	50	188[1]	3.17.10.3		Includes portion from line CH-296 to valve CH-M-55
CH-15	150	188			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-20	2750	188[3]	3.17.10.i	FM-31 B	
CH-21	↓	188[3]	↓	↓	
CH-22		188[3]			
CH-24		188[4]			Refer to relief request no. 21
CH-25		188[4]			↓
CH-26		188[4]			
CH-27		188[4]			
CH-28		3438	3.17.10.2		
CH-29		3438	↓		
CH-30		3438			
CH-33		3438			
CH-34		3438			
CH-35		3438			
CH-36		3438			
	↓			↓	

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH -41	150	188	3.17.10.3	FM-31 B	
CH-42	150	188	↓	↓	
CH-45	2485	3106		FM-31 A	
CH-46	2485	3438[1.]	3.17.10.14		Includes portion from line CH-61 to first isol. valve
CH-47	2485	3438[1.]			Includes portion from line CH-46 to first isol. valve
CH-48	2485	3438[1.]			Includes portion from line CH-61 to first isol. valve
CH-51	2485	3106			
CH-52	2485	3106			
CH-53	500	625			
CH-56	2500	3438[1.]	3.17.10.14		Includes portion from line CH-57 to first isol. valve
CH-57	2750	3438			
CH-58	2750	3438			
CH-59	2500	3438[1.]			Includes portion from line CH-56 to first isol. valve
CH-60	2750	3438			
CH-61	2485	3438[1.]			Includes portion from Regen. Hx to first isol. valve.
CH-62	2500	3125			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-63	2500	3125		FM-31 A	
CH-64					
CH-65					
CH-67					
CH-72					
CH-73					
CH-74					
CH-75					
CH-76					
CH-77	225	281			Refer to relief request No. 23
CH-79					
CH-80					
CH-81					Refer to relief request No. 23
CH-82					
CH-83					
CH-86					
CH-89	150	188			
CH-92					Refer to relief request No. 23
CH-94					
CH-95					Refer to relief request No. 23

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-98	150	188		FM-31 A	
CH-100	200	250			
CH-101					
CH-102					
CH-105					
CH-107					
CH-109	150	188			
CH-110					
CH-111					
CH-112	200	250			
CH-113	500	625			
CH-114	500	625			
CH-115	300	375			
CH-116	300	375			
CH-118	200	250			
CH-120	200	250			
CH-121	200	250			
CH -126	2750	3438.7	3.17.10.14		

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-127	2750	3438 7.	3.17.10.14	FM-31 A	
CH-128	2750	3438 7.	3.17.10.14		
CH-129	150	188			
CH-130	300	375			
CH-131	200	250			
CH-132	2500	3125			
CH-133	2500	3125			
CH-136	200	250		FM-31 C	
CH-137	↓	↓		↓	
CH-138					
CH-139					
CH-140					
CH-141					
CH-142					
CH-143					
CH-144					
CH-150					
CH-151					

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-190	200	250		FM-31C	
CH-191					
CH-193					
CH-194					
CH-195					
CH-196					
CH-197					
CH-198					
CH-199					
CH-200					
CH-201					
CH-202					
CH-203					
CH-204					
CH-205					
CH-206					

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-216	200	250		FM-31 A	
CH-217	500	625			
CH-218	500	625			
CH-221	500	625			
CH-222	2485	3106			
CH-223	200	250			
CH-224	2485	3106			
CH-225	2485	3106			
CH-226	500	625			
CH-227	300	375			
CH-228	300	375			
CH-229	200	250			
CH-230	150	188			
CH-231	300	375			
CH-232	300	375			
CH-233	200	250			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH -234	150	188		FM-31 A	
CH -235	200	250			
CH -236	200	250			
CH -237	300	375			
CH -238	150	188			
CH-239	200	250			
CH-240	200	250			
CH-241	2750	3438	3.17.10.14		
CH-242	2500	3438[1.]	↓		Includes portion from line CH-126 to first isol. valve
CH-243	2485	3106			
CH-244	2500	3438[1.]	3.17.10.14		Includes portion from Line CH-58 to first isol. valve
CH-246	2500	3438[1.]	↓		Includes portion from line CH-57 to first isol. valve
CH-247	2750	3438			
CH-248	2500	3125			
CH-249	2485	3106			Refer to relief request No.23
CH-250	2485	3106			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-251	2485	3106			Refer to relief request no. 23
CH-252	2485	3106			
CH-253	2485	3106			Refer to relief request no. 23
CH-254	2485	3106		FM-31 A	
CH-255	225	281		↓	Refer to relief request no. 23
CH-260	150	188		↓	
CH-261	200	250		FM-31 C	
CH-262	200	250		↓	
CH-268	2750	3438		FM-31 A	
CH-270	2750	3438	3.17.10.14	↓	
CH-274	225	281		↓	
CH-275	225	281		↓	
CH-294	2485	3106		FM-31 B	
CH-295	150	188	3.17.10.3	↓	
CH-296	150	188	↓	↓	
CH-304		NA[9].		FM-31 A	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH-305		NA[9.]		FM-31 A	
CH-306		NA[9.]			
CH-307		3125[10.]			
CH-308		3125[10.]			
CH-309		188[11]			
CH-310		188[11]			
CH-311		188[11]			
CH-312		188[11]			
CHEMICAL FEED SYS.					
CHM-4	700	875[12]	3.17.10.11	FM-22 A	
CHM-5	700	875[12]	3.17.10.12		
CHM-6	700	875[12]	3.17.10.13		
CONTAINMENT SPRA SYS.					
CS-1	235	294	3.17.10.9	FM-32 A	
CS-2			3.17.10.8		
CS-3			3.17.10.9		
CS-4			3.17.10.8		
CS-6			3.17.10.9		

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CS-8	235	294	3.17.10.8	FM-32 A	
CS-9	↓	↓		↓	
CS-10					
CS-11	50	63			
CS-12	50	63			
CS-13	70	88	3.17.10.5		
CS-14	↓	↓	↓		
CS-15					
CS-16					
CS-17					
CS-18					
CS-19					
CS-20					
CS-21	215	269[6]			See relief request no. 25
CS-22	↓	↓			↓
CS-23			↓		
CS-24		269[3]	3.17.10.4/ 3.17.10.5	↓	Line CS-21 to valve CS-35/ valve CS-35 to line CS-30; see relief request 25

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CS-25	215	269[3]	3.17.10.4/ 3.17.10.5	FM-32 A	Line CS-22 to valve CS-36/ valve CS-36 to line CS-30; see relief request 25
CS-26	215	269[3]	↓	↓	Line CS-23 to valve CS-47/valve CS-47 to line CS-30; see relief request 25
CS-27	215	269	3.17.10.4		
CS-28	215	269	↓		
CS-29	70	88	3.17.10.5		
CS-30	250	313	3.17.10.4		
CS-31	215	269	3.17.10.5		To safety valve CS-S-39
CS-32	↓	↓	↓		To safety valve CS-S-40
CS-33					To pressure instrument 3201 A
CS-34					To pressure instrument 3201 C
CS-35					To pressure instrument 3201 B
CS-36			Exempt		Open ended line
CS-37			↓		↓
CS-38					
CS-39	↓	↓			
CS-40	70	88			
CS-41	60	75	↓	↓	not a fluid pressure boundary

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CS-42	60	75	exempt	FM-32 A	not a fluid boundary
CS-43	250	313	3.17.10.4		
CS-44	70	88	3.17.10.5		P-61A vent
CS-45			3.17.10.4		P-12A vent
CS-46			3.17.10.5		P-61S vent
CS-47			3.17.10.4		P-12B vent
CS-48			3.17.10.5		P-61B vent
Residual Heat Removal system					
RH-1	400	500	3.17.10.4	FM-32 A	
RH-2					
RH-3					
RH-4					
RH-7	600	500[3]			Refer to relief request no. 25
RH-8					
RH-9					
RH-10					
RH-11			3.17.10.4/ 3.17.10.19		From RH-7 to LSI-53/from LSI-53 to RH-20, refer to relief request no. 25

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
RH-12	600	500[3]	3.17.10.4/ 3.17.10.19	FM-32 A	From RH-8 to LSI-52/ from LSI-52 to RH-20, refer to relief request no. 25
RH-13		750	3.17.10.19		
RH-14					
RH-15			3.17.10.4		To PI-3204 A
RH-16					To PI-3204 B
RH-17					Drain line P-12 A
RH-18					Drain line P-12 B
RH-19			3.17.10.19		
RH-20					
RH-24					
RH-25			3.17.10.6/ 3.17.10.19		From E-3A to valve RH-9/from valve RH-9 to RH-20
RH-26			3.17.10.7/ 3.17.10.19		From E-3B to valve RH-8/from valve RH-8 to RH-20
RH-27			3.17.10.6		
RH-28			3.17.10.7		
RH-29			3.17.10.19		
RH-30			3.17.10.7/ 3.17.10.19		From RH-27 to valve RH-T-12/ from valve RH-T-12 to RH-20

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
RH-31	600	750	3.17.10.7	FM-32 A	
RH-32	600	750	3.17.10.19		
RH-33	600	750	3.17.10.19		
RH-34	400	750	3.17.10.4		
RH-36	—	500	↓		
RH-37	—	500			
RH-39	600	750	3.17.10.6		Vent E-3A
RH-40	↓	↓	3.17.10.7		Vent E-3B
RH-41			3.17.10.6		Drain E-3A
RH-42			3.17.10.7	↓	Drain E-3B

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Decay Heat Release and Auxiliary Steam					
SDHV-1	985	1230	3.17.10.11	FM-9 A	
SDHV-2	↓	↓	↓	↓	
SDHV-3					
SDHV-4					
SA -42					
Secondary High Press. Drain					
SHPD-15	950	1230	3.17.10.12	FM-26 A	
SHPD-17	↓	↓	↓	↓	
SHPD-18					
SHPD-19					
SHPD-20					
SHPD-21					
SHPD-22					
SHPD-23					
SHPD-24					

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
SHPD-25	950	1230	3.17.10.12	FM-26 A	
SHPD-27	↓	↓	↓	↓	
SHPD-28					
Primary Sampling Sys,					
SL-7	2485	3106		FM-35 A	
SL-8	↓	↓		↓	
SL-9					
SL-14					
SL-15					
SL-33					

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Main Stream Sys.					
SHP-1	950	1230	3.17.10.11	FM-9 A	From steam gen. to excess flow check valve
SHP-2	↓	↓	3.17.10.12	↓	"
SHP-3			3.17.10.13		"
SHP-4			3.17.10.11		
SHP-5			3.17.10.12		
SHP-6			3.17.10.13		
SHP-30			3.17.10.11		
SHP-31			3.17.10.12		
SHP-32			3.17.10.13		

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
High Pressure Safety Injection					
SIH-1	2750	3438	3.17.10.2	FM-31 B	
SIH-2					
SIH-3					
SIH-4					
SIH-9					
SIH-10					
SIH-11					
SIH-12					
SIH-13					
SIH-14					
SIH-16	2485	3106			
SIH-17	2750	3438	3.17.10.2		
SIH-18	2750	3438			
SIH-19	2485	3106			
SIH-20	2485	3106			Refer to relief request no.22

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
SIH-22	2485	3106		FM-31 B	Refer to relief request no. 22
SIH-23	2485	3106			
SIH-24	2485	3106			Refer to relief request no. 22
SIH-25	2750	3438	3.17.10.2		
SIH-26	↓	↓	↓		
SIH-29		↓	3.17.10.21		
SIH-30		3438[8]	↓		Refer to relief request no. 22
SIH-31		3438[8]			↓
SIH-36		3438	3.17.10.2		
SIH-37	↓	3438	↓		
SIH-40	2485	3106[8]	3.17.10.22		
SIH-41		3106[8]			Refer to relief request no. 22
SIH-42		3106[8]			↓
SIH-44		3106[8]	↓	↓	
SIH-51		3106		FM-32 A	
SIH-52	↓	3106		↓	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Low Pressure Safety System					
SIL-10	250	313	3.17.10.4	FM-32 A	Note: these lines may be tested separately by reference to test supplement 3.17.10.10.
SIL-40	250	313	↓	↓	
SIL-41	250	313			
SIL-41	250	313			
SIL-43	250	313			

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Auxilisry Feed System					
WAPD-21	1250	1230	3.17.10.11	FM-12 A	See relief request no. 28
WAPD-23			3.17.10.12		
WAPD-25			3.17.10.13		
Main Feed System					
WFPD-3			3.17.10.11		See relief request no. 28
WFPD-4			3.17.10.11		
WFPD-7			3.17.10.12		
WFPD-8			3.17.10.12		
WFPD-9			3.17.10.13		
WFPD-10			3.17.10.13		
WFPD-15			3.17.10.11		
WFPD-16			3.17.10.12		
WFPD-17			3.17.10.13		

CLASS 2

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Steam Generator Blowdown System					
WGCB-1	950	1230[13]	3.17.10.13	FM-26 B	
WGCB-2	↓	↓	↓	↓	
WGCB-4					
WGCB-5					
WGCB-6			↓		
WGCB-7			3.17.10.12		
WGCB-8			↓		
WGCB-10					
WGCB-11			↓		
WGCB-12			3.17.10.13		
WGCB-13			3.17.10.11		
WGCB-14			↓		
WGCB-16					
WGCB-17			↓		
WGCB-18	↓	↓	3.17.10.13	↓	

Notes for Hydrostatic Test

Summary Table

1. This line is unisolable from a line with a higher design pressure. The hydrostatic test pressure was chosen based on the higher design pressure. This position is justified by the "Design Notes" in the "Maine Yankee Specification for Piping," MYS-442 which states, "When two lines of different primary pressure ratings are connected, the higher pressure ratings shall prevail up to and including the first shutoff valve in the line of lower rating."

2. This line CH-1 (CH-2) has a design pressure of 50 psi and is uninsolable from line CH-9 (CH-12) which has a design pressure of 235 psig. The downstream lines, CH-3 and CH-6 (CH-5 and CH-6) both have design pressures of 150 psig. and are seperated from it by a check valve. A review of construction records show that they were all tested to a pressure consistant with a design pressure of 150 psig. Therefore, during ISI these lines will be tested to 188 psig. (1.25 X 150 psig.)

3. This line is unisolable from the suction side piping of a centrifugal pump which has a lower design pressure. The test boundary will be extended from the suction side piping to the first shutoff valve on the discharge side of the pump.

4. This line is a high pressure safety injection pump recirculation line. It has a nominal operating pressure of 50 psig., but a design pressure of 2750 psig. Since there are no test connections available in this line, it will be added to the suction piping test boundary and tested to 188 psig.

5. This line has no design pressure given in the line designation table. Since it is unisolable from other lines with known design pressure, it will be hydrostatically tested to the same pressure as those lines. (See note 1 for design justification that it will not be over pressurized.)

6. Portions of these lines, although beyond the first isolation on the pump discharge , are being tested to the test pressure corresponding to the pump suction. This is because there are no available test connections on those lines which will permit isolation of the pump suction during a hydrostatic test.

7. In order to test the class 2 portions of lines CH-58 and CH-60 between valves CH-72, CH-85 and CH-F-70, it is necessary to subject the class 1 portions of CH-126 upstream of RC-M-35, CH-127 upstream of RC-M-25, CH-128 upstream of RC-M-35 and CH-242 upstream of CH-73 to a test pressure of 1.25 X P_D instead of 1.1 X P_O as required by Section XI. This is considered acceptable since all these lines are of the same pipe class and were tested to 1.5 X P_D during construction.

8. This test includes lines of similar design pressure, but different safety classes. Section XI requires class 1 lines to be tested at 1.1 X nominal operating pressure at 100% reactor power whereas class 2 lines are to be tested at 1.25 X design pressure. Since all the lines included in this test are the same design pressure and pipe class, all the lines will be tested to the higher class 2 pressure.

9. This line is part of a closed pressure level indicating loop attached to the Volume Control Tank. For the purpose of ISI, it is considered to be an extension of the tank and will be tested, along with the tank, at a pressure equal to the nominal hydrostatic pressure developed with the tank filled to its design capacity. See ASME SECTION XI, subparagraph IWC-5000(c).

10. No design pressure is listed in the plant Line Designation List for this line. The line, however, is unisolable from a line with a design pressure of 2500 psig. and, therefore, the line will be tested to 3215 psig. along with the connected lines.

11. No design pressure is listed in the plant Line Designation List for this line. The line, however, is unisolable from a line with a design pressure of 150 psig. and , therefore, will be tested to 188 psig. along with the connected lines.

12. This line has a design pressure of 700 psig., but it is not isolated from the steam generator feedwater lines and steam generator during normal operation. It will, therefore, be tested to the same pressure as the steam generator and main feedwater lines. It has the same pipe class as the attached main feedwater line.

13. This line is the same pipe class as similar lines listed in the piping specification as having a design pressure of 985 psig. These lines will be tested along with those lines having the 985 psig. design pressure for convenience. Since the lines are of the same pipe class as the 985 psig. lines, they are designed to withstand the higher pressure.

14. This line is considered part of a tank and will be tested, along with the tank, at a pressure equal to the nominal hydrostatic pressure developed with the tank filled to its design capacity.

CLASS 3

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Service Water System					
WS-1	55	60.5		FM-16 A	
WS-2					
WS-3					
WS-4					
WS-5					
WS-6					
WS-7					
WS-8					
WS-9					
WS-10					
WS-11					
WS-12					From E-5B to SW-36
WS-13					From E-5A to SW-34
WS-14					From E-4B to SW-40
WS-15					From E-4A to SW-38

CLASS 3

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
ARWP-17	75	82.5		FM-18 A	
ARWP-18	↓	↓		↓	
ARWP-19					
ARWP-20					

CLASS 3

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
PCC-1 thru 9	150	165		FM-34 A	
PCC-12				FM-34 A,B	
PCC-13				FM-34 C	
PCC-15 thru 25				FM-34 C	
PCC-28				FM-34 B	
PCC-29				↓	
PCC-33				FM-34 A	
PCC-35					
PCC-37					
PCC-38					
PCC-41					
PCC-45thru 47				FM-34 B	
PCC-61 thru 63				FM-34 A,B	
PCC 71				FM-34 B	
PCC-81				↓	
PCC 146 thru 154				FM-34 B,C	
PCC 156 thru 159				FM-34 C	
PCC 167 thru 171	↓	↓		↓	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
PCC-186 thru 202	150	165		FM-34 C	
PCC-238					
PCC-240 thru 246					
PCC-251 thru 290					
PCC-308				FM-34 A	
PCC-311					
PCC-313 thru 316					
PCC-327					
PCC-328					
PCC-333				FM 34 B	
PCC-336					
PCC-339 thru 341					
PCC-345				FM-34 A	
PCC-352 thru 355				FM-34 A,B	
PCC-374				FM-34 A	
PCC-378thru 381				FM-34 A,B	
PCC-387				FM-34 C	
PCC -485				FM-34 B	
PCC-511				FM-34 A	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Auxiliary Steam System					
SA-41	985	1084		FM-11 A	To turbine drive for auxiliary feed pump P-25 B
SA-42	985	1084		↓	"
SA-44	630	693		↓	"
Auxiliary Feedwater System					
WAPD-14	1430	1573	3.17.10.18	FM-12 A	
WAPD-15	↓	↓		↑	
WAPD-17			3.17.10.16		
WAPD-18			3.17.10.18		
WAPD-19			3.17.10.16		
WAPD-20					
WAPD-22					
WAPD-24					
WAPD-27			3.17.10.18		
WAPD-28	—	33	3.17.10.15		
WAPD-29	—	1573	3.17.10.16	↓	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
WAPD-30	—	1573	3.17.10.18	FM-12A	
WAPD-31	—	1573	3.17.10.16	↓	
WCPR-5	30	33		↓	See note 14
WCPR-6	↓	↓		↓	See note 14
WCPR-8	↓	↓	3.17.10.15	↓	
WCPR-12	↓	↓	↓	↓	
WCPR-13	↓	↓	↓	↓	
WCPR-15	—	↓	↓	↓	
WCPR-141	—	↓	↓	↓	
WT -1	100	110	3.17.10.15	↓	Portion from WCPR-8 to valve AFW-4

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
SCC-1 thru 8	150	165		FM-17 A	
SCC-11					
SCC-13					
SCC-14					
SCC-16 thru 22					
SCC-106				FM-17 B	
SCC-109-111					
SCC-116				FM-17 A	
SCC-117					
SCC-119					
SCC-120 thru 123					
SCC-135 thru 150					
SCC-151 thru 174					
SCC-177 thru 196					
SCC-197 thru 199					
SCC-200					
SCC-201					
SCC-204					
SCC-205					
SCC-208				FM-17 B	

CLASS 3

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Chemical And Volume Control					
CH-11	150	165		FM-31 B	
CH-17	150	165		↓	
CH-23	2750	3025		↓	
CH-31	↓	↓		↓	
CH-32	↓	↓		↓	
CH-37	↓	↓		↓	
CH-86	225	2475		FM-31 A	
CH-92	150	165		↓	
CH-94	150	165		↓	
CH-95	225	248		↓	
CH-98	150	165		↓	
CH-129	↓	↓		↓	
CH-159	↓	↓		FM-31 C	
CH-160	↓	↓		↓	
CH-162	↓	↓		↓	
CH-165 thru 167	↓	↓		↓	
CH-172 CH-173	↓	↓		↓	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
CH - 175 thru 188	150	165		FM-31 C	
CH - 218	500	550		FM-31 A	
CH - 245	2500	2750		↓	
CH - 256 thru 259	225	248			
CH - 264	150	165		FM-31 C	
CH - 265	↓	↓		FM-31 C	
CH - 269				FM-31 C	
CH - 271				FM-31 B	
CH - 276				FM-31 C	
CH - 278 thru 286				↓	
CH - 290					
CH - 300	↓	↓			
BEB- 16	50	55			
PW - 17	150	165			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Primary Vent and Drain Piping					
DRL-6	150	165		FM-31 C	
DRL-7	↓	↓		↓	
DRL-9	↓	↓		↓	
DRL-10	2750	3025		FM-33 A	
DRL-11	150	165		↓	
DRL-12,13	2500	2750		↓	
DRL-14	2750	3025		↓	
DRL-15	150	165		↓	
DRL-16	400	450		↓	
DRL-17	150	165		↓	
DRL-18	↓	↓		↓	
DRL-20	↓	↓		↓	
DRL-25,26	2750	3025		↓	
DRL-27,28	150	165		↓	
DRL-30 thru 35	↓	↓		↓	
DRL-38	↓	↓		↓	
DRL-48	↓	↓		FM-33 B	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
DRL -62	-	-		FM-34 A	
DRL - 103,104	150	165		FM-31 A/33B	
DRL - 106 thru 108	150	165		FM-33A	
DRL - 114	2500	2750		↓	
DRL - 115	150	165			
DRL - 117	500	550			
DRL - 118,119	3550	3905			
DRL - 123	250	2750			
DRL - 124	150	165		↓	
DRL - 132,135	150	165		FM-39A	
DRL - 151 thru 153	150	165		FM-33A	
SL - 38	75	825		FM-35A	
VRL - 4 thru 7	150	165		FM-33A	
VRL - 12	150	165		↓	
VRL - 38	150	165		↓	

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Primary Sampling System					
SL- 10 thru 13	2485	2734		FM-35 A	
SL-19	2485	2734			
SL-20	2485	2734			
SL-22	300	330			
SL-23	300	330			
SL-24 thru 27	75	825			
SL-28	2485	2734			
SL-29	75	825			
SL-34 thru 36	75	825			
SL-37	2485	2734			
SL-38	75	825			
SL-39	300	330			
SL-40	2485	2734			
SL-41	75	825			
SL-44	75	825			
SL-65	75	825			
SL-66	75	825			
SL 67 thru 69	2485	2734			

HYDROSTATIC PRESSURE TEST SUMMARY

SYSTEM/LINE	DESIGN PRESS. (psig.)	TEST PRESS (psig.)	TEST SUPPLEMENT	FLOW DIAGRAM	REMARKS
Fuel Pool Cooling					
FP-1 thru 10	150	165		FM-36 A	
FP-21	150	165		↓	
FP-36	—	165			

LEGEND FOR VALVE TESTING FREQUENCY

Q - Exercise valve (full stroke) every (3) months

Qp - Exercise valve (part stroke) every (3) months

LT - Leak test valves per Section XI Article IWV-3420, every refueling

LTe - Leak test (exempted); Refer to "Exemptions From Leak Testing" section for justification for exemption from seat leakage testing.

R

SRV - Safety and relief valves are tested per Section XI Article IWV-3510 & Appendix J.

ET - Valve positions are verified and recorded before operations are performed and after operations are completed.

CS - Exercise valve (full stroke) during cold shutdowns.

CSp - Exercise valve (part stroke) during cold shutdowns.

R - Exercise valve (full stroke) every reactor refueling

Rp - Exercise valve (part stroke) every reactor refueling

EXEMPTIONS FROM LEAK TESTING

Systems Included

The systems for which exemptions claimed include the Main Steam, High Pressure Drain, Auxiliary Feed, Chemical Feed, Containment Spray, High Pressure Safety Injection, Low Pressure Safety Injection and Residual Heat Removal Systems.

General

Appendix J to 10 CFR 50 requires periodic testing of containment isolation valves to "assure that (a) leakage through the primary reactor containment and systems and components penetrating primary reactor containment shall not exceed allowable leakage rate values as specified in the Technical Specifications or associated bases and (b) periodic surveillance of reactor containment penetrations and isolation valves is performed so that the proper maintenance and repairs are made during the service life of the containment, and systems and components penetrating primary containment." Appendix J further defines "containment isolation valves" as "any valve relied upon to perform a containment isolation function" and that leakage tightness tests are required for certain containment isolation valves designated as "Type C." Appendix J defines "Type C" valves as "those that:

1. Provide a direct connection between the inside and outside atmosphere of the primary reactor containment under normal operation, such as purge and ventilation, vacuum relief, and instrument valves;

2. Are required to close automatically upon receipt of a containment isolation signal in response to controls intended to effect containment isolation;

3. Are required to operate intermittently under post accident conditions; and

4. Are in main steam and feedwater piping and other systems which penetrate containment of direct-cycle boiling water power reactors."

A careful review of various Maine Yankee systems has been made relative to the above criteria as well as Maine Yankee's own needs and requirements. As a result of this review, it has been determined that certain systems contain isolation valves that do not require testing to the requirements for "Type C" valves as detailed in Appendix J and ANSI/ANS-56.8 - 1981. The systems and valves as well as the basis for the exemption is given below.

SPECIFIC

A. System(s): Main Steam, Feedwater, Decay Heat Release, High Pressure Drain, Chemical Feed, Blowdown and Auxiliary Feed.

Containment Penetrations: 45, 47A, 47B, 47C, 53, 54, 55, 64, 65, 66, 74A, 74B, 74C, 75 and 76.

Basis for exemption: The Main Steam System does not provide a direct connection between the inside and outside primary reactor containment atmospheres. Isolation from the containment atmosphere is provided by the steam generator shell and connected piping. These components are protected by design against postulated missles and water jets. Integrity of these systems is further assured by periodic inservice inspection under the rules of Article IWC of the ASME Boiler and Pressure Vessel Code. Isolation from the reactor coolant system is provided by the steam generator tubes which are subject to periodic eddy current testing as required by Section 4.10 of the Maine Yankee Technical Specifications.

During normal operation the systems would be operating and not isolated from the portions inside containment. Isolation from the containment atmosphere, however, would be as described above. Under most accident conditions the pressure in the steam generator and the associated unisolated systems would be greater than the expected peak containment pressure. Leakage out of containment via these systems would not be expected in either the case where steaming was secured or where the systems were operational and being used to remove decay heat.

Leakage past the containment isolation valves in these systems would also not be expected in the particular case following a steam generator tube rupture. In this case the affected generator would be isolated and the reactor coolant system would be cooled down and depressurized to prevent or limit leakage into the steam generator from the reactor coolant system. The particular valves involved would not be relied upon to prevent leakage, but rather the Reactor Coolant System would be cooled down and depressurized to prevent leakage of reactor coolant. Any additional leakage past the isolation valves would be minimal and be retained in the main condenser where it would be controlled in accordance with approved plant procedures. Refer to the Maine Yankee FSAR, Section 14.12, for a complete analysis of this type of accident.

B. System(s): Containment Spray

Containment Penetrations: 50, 51 and 93

Basis for relief: The Containment Spray System, although open to the inside containment atmosphere, does not provide a direct connection between the inside and outside primary reactor containment atmospheres. This sytem is not connected to the reactor coolant system inside containment. Isolation from the containment atmosphere is provided inside containment by CS-3 for Train A, CS-4 for Train B, and CS-54 for the containment spray pump vent line. Outside containment it is a closed seismically designed system and isolation is provided by normally closed motor operated valves CS-M-1 for Train A, CS-M-2 for Train B, and normally closed air operated valves

CS-A-55 and CS-A-56 for the containment spray pump vent line. Since the system is open to the containment atmosphere, the leak tightness of these valves is verified, along with the containment structure as a whole, during the class A integrated leakage rate test. The components in this system are protected by design against postulated missles and water jets.

During normal operation the system is static and containment isolation is provided as above. During an accident that resulted in an increase in containment pressure to 20 psig, the containment spray system would be actuated and remain pressurized to a pressure higher than the containment pressure until manually secured by operations personnel and leakage out of containment via the containment spray system is not expected.

C. System(s): High and Low Pressure Safety Injection

Containment Penetrations: 29, 30, 31, 71, 72 and 73

Basis for relief: The high and low pressure safety injection systems do not provide a direct connection between the inside and outside primary reactor containment atmospheres. They are isolated from the reactor coolant system inside containment by check valves HSI-17, HSI-61 and HSI-15 or LSI-12 for Loop 1, HSI-27, HSI-62 and HSI-25 or LSI-22 for Loop 2 and HSI-37, HSI-63 and HSI-35 or LSI-32 for Loop 3. Outside containment it is a closed seismically designed system and isolation is provided by motor operated valves HSI-M-11, HSI-M-12 or LSI-M-11 for Loop 1, HSI-M-21, HSI-M-22 or LSI-M-21 for Loop 2 and HSI-M-31, HSI-M-32 and LSI-M-31 for Loop 3. Leakage past these valves would result in the pressurization of the safety injection headers and be readily detected by the lifting of relief valves HSI-S-46, HSI-S-47 or LSI-S-63. The components in this system are protected by design against postulated missiles and water jets.

During normal operation the system is static and containment isolation is provided as above. During an accident the system would be pressurized to a pressure higher than the peak containment pressure and leakage out of containment via the safety injection lines is not expected to occur.

D. System(s): Residual Heat Removal

Penetration: 9

Basis for relief: The residual heat removal system does not provide a direct connection between the inside and outside primary reactor containment atmospheres. It is isolated from the reactor coolant system inside containment by two normally locked closed valves RH-M-1 and RH-M-2 which are located in series. Leakage of reactor coolant past these valves during normal operation would result in the pressurization of the RHR suction header and be readily detected by

the lifting of relief valves RH-S-24 and RH-S-25. Outside containment the RHR system is a closed seismically designed system. Containment isolation is provided by two locked closed valves RH-6 and RH-7.

During normal operation the system is static and containment isolation is provided above. During an accident the system would be initially isolated, but once the plant is shutdown and cooled down to a pressure under 400 psig, the system would be placed in operation to remove decay heat from the reactor core. At this time the system would normally be pressurized to a pressure higher than the peak pressure inside containment and leakage out of containment via the RHR system is not expected to occur. In the unlikely event, however, that during a loss of coolant accident the reactor coolant system was depressurized to containment ambient pressure, any leakage past the three containment valves in series would be retained within the RHR system.

VALVE RELIEF REQUEST

NUMBER: V-1

SYSTEM: High Pressure Safety Injection

R VALVE: HSI-17, HSI-27, HSI-37, HSI-61, HSI-62, HSI-63
DRAWING NO.: FM-30A/90A
CATEGORY: C

CLASS: 1

FUNCTION: Injection Check Valve

EXEMPT TEST: Q

BASIS FOR RELIEF: These valves cannot be exercised during power operation since this would require injecting highly borated water into the reactor coolant system causing reactivity excursions on the reactor. Furthermore, this would cause thermal stresses on the reactor coolant system piping by the introduction of relatively cold water.

ALTERNATE TEST: (CSp, R) These valves will be partial stroke exercised during cold shutdown conditions providing the residual heat removal (RHR) system is being utilized to remove reactor decay heat. The RHR system cannot be placed in service during a cold shutdown specifically for the purpose of testing these valves due to extensive manpower utilization and man-rem exposure. Full stroke exercising of these valves shall be done during refueling outages with the RCS depressurized and the safety injection tanks being utilized. The safety injection tanks provide the only means for full stroking as the RHR system provides only sufficient flow to partial stroke exercise these valves.

SYSTEM NAME: MAIN STEAM PIPING — FM DRAWING NO. 9A, 70A — PAGE 1

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
R	MS-S-12	2	J-2	C	6"	SV		C	O	SRV,LTe		Containment Boundary Valve Exempt from Leak Testing
R	MS-S-13	2	J-2	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-14	2	J-2	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-15	2	K-2	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-16	2	K-2	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-17	2	K-2	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-22	2	J-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-23	2	J-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-24	2	J-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-25	2	K-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-26	2	K-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-27	2	K-4	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-32	2	J-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-33	2	J-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-34	2	J-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-35	2	K-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-36	2	K-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-S-37	2	K-6	C	6	SV		C	O	SRV,LTe		" "
R	MS-M-10	2	I-3	B	30	VAW	MCB	O	C	CS,LTe	V-6	" "
R	MS-M-20	2	I-4	B	30	VAW	MCB	O	C	CS,LTe	V-6	" "
R	MS-M-30	2	I-6	B	30	VAW	MCB	O	C	CS,LTe	V-6	" "
	MS-11	2	I-3	C	30	VCW		O	C	Qp,CS	V-7	
	MS-22	2	I-4	C	30	VCW		O	C	Qp,CS	V-7	
	MS-33	2	I-6	C	30	VCW		O	C	Qp,CS	V-7	
R	MS-50	2	I-3	B,E	2	VOS		LC	LC	ET,LTe		Containment Boundary Valve Exempt from Leak Testing
R	MS-70	2	I-4	B,E	2	VOS		LC	LC	ET,LTe		" "
R	MS-90	2	I-6	B,E	2	VOS		LC	LC	ET,LTe		" "
	MS-59	2	K-3	C	6	VSW		O	C	Q		
	MS-79	2	K-5	C	6	VSW		O	C	Q		

SYSTEM NAME: MAIN STEAM PIPING FM DRAWING NO. 9A, 70A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
MS-99	2	K-6	C	6	VSW		O	C	Q		
MS-M-161	2	K-7	B	6	VCW	MCB	O	C	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
MS-A-162	2	K-7	B	6	VCW	MCB	O	M	Q		

SYSTEM NAME: AUXILIARY STEAM PIPING FM DRAWING NO. 11A/72A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
AS-540		H-4	A/E	1	VGS		LC	LC	ET, LT		
AS-542		H-4	A/E	1	VGS		LC	LC	ET, LT		
MS-164	3	D-4	C	3	VCW		C	0	Q		
MS-P-168	3	E-3	B	1-½	VGS	MCB	C	M	Q		Signal (SGEP)
MS-A-173	3	E-2	B	3	VGF	MCB	0	M	Q		Governor Valve
MS-185	3	D-4	E	3	VGW		LO	LO	ET		
R MS-T-163	2	K-7	B	3	VCW	CIS	0	C	Q, LTe		Containment Boundary Valve Exempt from Leak Testing

SYSTEM NAME: STEAM GENERATOR FEEDWATER FM DRAWING NO. 12A/73A

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	AFW-1	3	A-6	E	8	VGW		LO	LO	ET		
	AFW-2	3	C-8	E	8	VGW		LO	LO	ET		
	AFW-3	3	I-7	E	8	VGW		LO	LO	ET		
	AFW-15	3	F-7	C	6	VCW		C	O	CS	V-45	
	AFW-17	3	F-7	E	6	VGW		LO	LO	ET		
	AFW-18	3	D-8	C	6	VCW		C	O	CS	V-45	
	AFW-20	3	D-8	E	6	VGW		LO	LO	ET		
	AFW-43	3	E-7	C	8	VCW		C	O	Qp, CS	V-43	
	AFW-100	3	G-7	E	3	VGW		LO	LO	ET		
R	AFW-A-101	2	G-7	B	2-½	HCV	MCB	O	M	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
	AFW-102	2	G-7	E	3	VGW		LO	LO	ET		
	AFW-200	3	H-7	E	3	VGW		LO	LO	ET		
R	AFW-A-201	2	G-7	B	2-½	HCV	MCB	O	M	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
	AFW-202	2	H-7	E	3	VGW		LO	LO	ET		
	AFW-300	3	G-7	E	3	VGW		LO	LO	ET		
R	AFW-A-301	2	G-7	B	2-½	HCV	MCB	O	M	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
	AFW-302	2	G-7	E	3	VGW		LO	LO	ET		
	AFW-306	3	I-8	C	6	VCW		C	O	Qp, CS	V-43	
	AFW-314	3	F-8	C	6	VCW		C	O	CS	V-45	
	AFW-316	3	G-8	E	6	VGW		LO	LO	ET		
	AFW-37	3	A-6	E	1-½	VGW		LO	LO	ET		
	FW-A-112	2	H-2	B	4	HCV	MCB	C	M	Q		
	FW-A-212	2	H-4	B	4	HCV	MCB	C	M	Q		
	FW-A-312	2	H-6	B	4	HCV	MCB	C	M	Q		
	FW-F-107	2	H-2	B	12	FCV	MCB	M	C	CS	V-47	
	FW-F-207	2	H-4	B	12	FCV	MCB	M	C	CS	V-47	
	FW-F-307	2	H-6	B	12	FCV	MCB	M	C	CS	V-47	
	FW-131	2	J-2	C	14	VCW		O	C	CS	V-48	
	FW-231	2	J-4	C	14	VCW		O	C	CS	V-48	

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	FW-331	2	J-6	C	14	VDW		O	C	CS	V-48	
	AFW-104	2	I-7	C	14	VCW		C	O	CS	V-44	
	AFW-204	2	I-7	C	14	VCW		C	O	CS	V-44	
	AFW-304	2	I-7	C	14	VCW		C	O	CS	V-44	
	AFW-4	3	B-8	E	4	VGW		LC	LC	ET		
	AFW-26	3	C-7	E	1	VOS		LO	LO	ET		
	AFW-307	3	E-8	E	6	VGW		LO	LO	ET		
	AFW-311	3	F-8	E	1	VOS		LO	LO	ET		
	AFW-312	3	F-8	E	1	VOS		LO	LO	ET		
	AFW-21	3	F-7	E	3	VOS		LO	LO	ET		
R	AFW-103	3	H-7	E, B	3	VGW		LC	LC	ET, LT[e]		
R	AFW-203	3	H-7	E, B	3	VGW		LC	LC	ET, LT[e]		
R	AFW-303	3	H-7	E, B	3	VGW		LC	LC	ET, LT[e]		
R	AFW-105	2	I-8	B,E	3/4	VOS		LC	LC	ET, LT[e]		
R	AFW-205	2	I-8	B,E	3/4	VOS		LC	LC	ET, LT[e]		
R	AFW-305	2	I-8	B,E	3/4	VOS		LC	LC	ET, LT[e]		
R	FW-M-104	2	G-2	B	14	VGW	MCB	O	C	CS, LT[e]	V-11	
R	FW-M-204	2	G-4	B	14	VGW	MCB	O	C	CS, LT[e]	V-11	
R	FW-M-304	2	G-6	B	14	VGW	MCB	O	C	CS, LT[e]	V-11	

SYSTEM NAME: SECONDARY COMPONENT COOLING FM DRAWING NO. 17A, 78A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
SCC-2	3	J-7	E	16	VVI		LO	LO	ET		
SCC-7	3	H-7	C	16	VCW		C	0	Q		
SCC-8	3	H-7	E	16	VVI		LO	LO	ET		
SCC-9	3	J-9	E	16	VVI		LO	LO	ET		
SCC-14	3	H-8	C	16	VCW		C	0	Q		
SCC-15	3	H-8	E	16	VVI		0		ET		
SCC-T-23	3	H-7	B	14	ICV		M	M	Q		
SCC-T-24	3	H-7	B	16	ICV		M	M	Q		
SCC-62	3 3 3	B-4	E	1-½	VGS		LO	LO	ET		
SCC-162	3	D-4	E	14	VCW		LO	LO	ET		
SCC-M-165	3	D-4	B	14	VCW	RAS	C	0	Q		
SCC-T-227	3	G-5	B E	8	VCW	CSAS	0	C	CS	V-42	

SYSTEM NAME: COMPRESSOR AIR & CONTAINMENT LEAKAGE FM DRAWING NO. 20B, 81B

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
IA-A-98	2	E-6	A	1	VGS	CIS	O	C	Q, LT		
IA-A-101	2	C-6	A	1	VGS	CIS	O	C	Q, LT		
IA-A-107	2	E-6	A	½	VOS	CIS	O	C	Q, LT		
IA-109	2	D-6	A,C	1	VCT		O	C	LT	V-13	
IA-135	2	E-5	A,E	1-½	VOT		LC	LC	ET, LT		
IA-137	2	D-5	A,C	1-½	VCT		C		LT	V-15	
SA-180	2	A-7	A,E	8	VGW		LC	LC	ET, LT		
SA-A-138	2	D-4	A	3	VGT	CIS	C	C	Q, LT		
SA-139	2	D-4	A,C	3	VCW		C	C	CS, LT	V-16	
IM-A-55	2	D-2	A	3/8	VO	MCB	O	C	Q, LT		
IM-A-56	2	D-2	A	3/8	VO	MCB	O	C	Q, LT		
IM-A-57	2	D-3	A	3/8	VO	MCB	O	C	Q, LT		
IM-A-58	2	D-3	A	3/8	VO	MCB	O	C	Q, LT		
IM-A-43	2	G-2	A	3/8	IV	CIS	O	C	Q, LT		
IM-A-45	2	G-2	A	3/8	IV	CIS	O	C	Q, LT		

SYSTEM NAME: CHEMICAL FEED & SECONDARY SAMPLING FM DRAWING NO. 22A, 83A

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
R	CF-29	2	C-1	B,E	3/4	GS		LC	LC	ET, LTe		Containment Boundary Valve Exempt from Leak Testing
R	CF-31	2	C-2	B,E	3/4	GS		LC	LC	ET, LTe		" "
R	CF-33	2	C-3	B,E	3/4	GS		LC	LC	ET, LTe		" "

SYSTEM NAME: SECONDARY H.P. DRAIN PIPING FM DRAWING NO. 26A, 87A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
HPD-A-96	2	J-6	B	2	VOS	CIS	O	C	Q		
HPD-A-17	2	L-6	B	2	VOS	CIS	O	C	Q		
TR-23	2	K-7	B	1			M	M	LTe		FM-26A and 87 A

SYSTEM NAME: STEAM GENERATOR BLOWDOWN PIPING FM DRAWING NO. 26B, 87B

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
R	BD-T-12	2	H-7	B	2	VOS	CIS	O	C	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
R	BD-T-22	2	H-5	B	2	VOS	CIS	O	C	Q, LTe		" "
R	BD-T-32	2	H-3	B	2	VOS	CIS	O	C	Q, LTe		" "
R	BD-59	2	I-7	B,E	3	VGW		LC	LC	ET, LTe		" "

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	RC-17	1	I-5	E	3	VCW		LO	LO	ET		
	RC-27	1	F-2	E	3	VCW		LO	LO	ET		
	RC-37	1	H-2	E	3	VCW		LO	LO	ET		
	HSI-16	1	H-6	E	10	VGW		LO	LO	ET		
	HSI-26	1	F-4	E	10	VGW		LO	LO	ET		
	HSI-36	1	H-4	E	10	VGW		LO	LO	ET		
	HSI-17	1	H-6	C	14	VCW		C		CSp, R	V-1	
	HSI-27	1	F-4	C	14	VCW		C		CSp, R	V-1	
	HSI-37	1	H-4	C	14	VCW		C		CSp, R	V-1	
	PR-S-11	1	E-7	C	3	SV		C	O	SRV		
	PR-S-12	1	E-7	C	3	SV		C	O	SRV		
	PR-S-13	1	E-7	C	3	SV		C	O	SRV		
	PR-S-14	1	G-7	C	2-½	PCV		C	O	SRV		
	PR-S-15	1	G-7	C	2-½	PCV		C	O	SRV		
	PR-M-16	1	G-7	B	2-½	VGW	MCB	O	C	Q		
	PR-M-17	1	G-7	B	2-½	VGW	MCB	O	C	Q		
	PR-A-40	2	B-6	A	2	VCS	CIS	O	C	Q, LT		
	PR-A-41	2	A-6	A	2	VCS	CIS	O	C	Q, LT		
	PW-A-78	2	A-7	A	2	VCS	CIS	C	C	Q, LT		
	PW-80	2	A-7	A,C	2	VCS		O	C	R, LT	V-18	
R	RC-M-54	1	D-4	B	1		MCB	C	O	Q		
R	RC-M-56	1	D-4	B	1		MCB	C	O	Q		

SYSTEM NAME: CHEMICAL & VOLUME CONTROL, HIGH PRESSURE SAFETY INJECTION

FM DRAWING NO. 31A/91A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
CH-65	2	F-7	A,E	2	VOS		LC	LC	ET, LT		
CH-66	3	F-7	A,E	2	VOS		LC	LC	ET, LT		
CH-72	1	E-4	C	2	VCS		C	O	CS	V-4	
CH-73	1	B-4	A,E	1	VOS		LC	LC	ET, LT		
CH-85	2	E-4	A,E	2	VOS		LC	LC	ET, LT		
CH-A-32	2	F-7	A	3	VOW	SIAS	O	C	Q, LT		
CH-A-33	2	F-7	A	3	VOW	SIAS	O	C	Q, LT		
CH-F-38	2	F-4	B	2	VOS	SIAS	M	C	Qp, CS	V-10	
CH-F-70	2	F-4	B	1	VOS	SIAS	C	C	Q		
CH-M-1	2	I-6	B	4	VGW	SIAS	O	C	Qp, CS	V-19	
CH-M-44	1	B-2	A	3	HCV		O		Q, LT		
CH-M-49	1	A-3	A	3	HCV		O		Q, LT		
CH-M-52	1	B-3	A	2	HCV		C		CS, LT		
CH-M-75	1	B-4	A	2	HCV	MCB	C	C	Q, LT		
CH-M-87	2	I-7	B	4	VGW	SIAS	O		Q P, R	V-19	
CH-S-47	1	B-2	A,C	1	VCS				LT	V-20	
LD-M-2	1	B-1	A	2-½	VGW	SIAS	O	C	CS, LT	V-2	
LD-T-5	1	E-2	A	2	VOS	SIAS	O	C	CS, LT	V-3	
RC-M-15	1	C-4	A	2	HCV	MCB	O	C	Q, LT		
RC-M-25	1	D-4	A	2	HCV	MCB	O	C	Q, LT		
RC-M-35	1	E-4	A	2	HCV	MCB	O	C	Q, LT		
SI-9	2	D-8	A,E	1	VOS		LC	LC	ET, LT		
SI-15	2	E-9	A,E	1	VOS		LC	LC	ET, LT		
SI-A-53	2	F-6	A	3	VOW	CIS	O	C	CS, LT	V-23	
SI-M-29	2	B-6	A	1-½	VOS	CIS	O	C	CS, LT	V-23	
SI-M-40	2	C-7	A	1-½	VOS	CIS	O	C	CS, LT	V-23	
SI-M-51	2	E-7	A	1-½	VOS	CIS	O	C	CS, LT	V-23	
SI-P-3	2	D-8	A	2	VOS	SIAS	M	C	CS, LT	V-24	

SYSTEM NAME: H.P. SAFETY INJECTION & CHEMICAL & VOLUME CONTROL

FM DRAWING NO. 31B/91B

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	CH-7	2	I-4	E	10	VGW		L	L	ET		
	CH-8	2	I-3	E	10	VGW		L	L	ET		
	CH-10	2	H-5	C	4	VCW		O	O	Qp, R	V-50	
	CH-11	2	G-5	E	4	VGW		LO	LO	ET		
	CH-14	2	I-5	E	6	VGW		LO	LO	ET		
	CH-16	2	I-3	E	6	VGW		LO	LO	ET		
	CH-19	2	H-3	C	4	VCW		O	O	Qp, R	V-50	
	CH-20	2	G-3	E	4	VGW		LO	LO	ET		
	CH-23	2	I-2	E	6	VGW		LO	LO	ET		
	CH-26	2	H-2	C	3	VCW		O	O	Qp, R	V-50	
	CH-27	2	G-2	E	4	VGW		LO	LO	ET		
	CH-30	2	G-4	E	4	VGW		L	L	ET		
	CH-31	2	G-3	E	4	VGW		L	L	ET		
	CH-M-86	2	I-2	E	2	VCS		LO	LO	ET		
	CH-149	2	I-2	C				C	O	CSp, R	V-26	
	CH-150	2	I-4	C	3	VCW		C	O	CSp, R	V-26	
R	HSI-M-11	2	E-3	B	3	VCW	SIAS	C	O	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
R	HSI-M-12	2	E-3	B	3	VCW	SIAS	C	O	Q, LTe		" "
R	HSI-15	1	D-3	C	4	VCW		C	O	CSp, R, LTe	V-8	" "
R	HSI-M-21	2	E-5	B	3	VCW	SIAS	C	O	Q, LTe		" "
R	HSI-M-22	2	E-5	B	3	VCW	SIAS	C	O	Q, LTe		" "
R	HSI-25	1	D-6	C	4	VCW		C	O	CSp, R, LTe	V-8	" "
R	HSI-M-31	2	E-7	B	3	VCW	SIAS	C	O	Q, LTe		" "
R	HSI-M-32	2	E-7	B	3	VCW	SIAS	C	O	Q, LTe		" "
R	HSI-35	1	D-8	C	4	VCW		C	O	CSp, R, LTe	V-8	" "
	HSI-M-40	2	H-7	B	4	VCW		C		Q		
	HSI-M-41	2	H-7	B	4	VCW	SIAS	C	O	Q		
	HSI-M-42	2	H-8	B	4	VCW	SIAS	C	O	Q		
	HSI-M-43	2	H-8	B	4	VCW	SIAS	C	O	Q		

SYSTEM NAME: HIGH PRESSURE SAFETY INJECTION & CHEMICAL VOLUME CONTROL

FM DRAWING NO. 31B, 91B

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	HSI-48	2	G-7	E	2	VOS		LC	LC	ET		
	HSI-49	2	G-7	E	2	VOS		LC	LC	ET		
	HSI-M-50	2	J-5	B	10	VGW		C	O	Q		
	HSI-M-51	2	J-2	B	10	VGW		C	O	Q		
	HSI-52	2	J-5	C	10	VCW		O		CSp, R	V-26	
	HSI-53	2	J-2	C	10	VCW		O		CSp, R	V-26	
	HSI-M-54	2	J-4	B	6	VGW	RAS	C	O	Q		
	HSI-M-55	2	J-2	B	6	VGW	RAS	C	O	Q		
	HSI-56	2	J-4	C	6	VCW		C	O	CSp, R	V-26	
	HSI-57	2	J-2	C	6	VCW		C	O	CSp, R	V-26	
R	ISI-M-11	2	E-3	B	8	VGW	SIAS	C	O	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
	ISI-12	1	D-4	C,A	10	VCW		C	O	R, LT	V-5	
R	ISI-M-21	2	E-6	B	8	VGW	SIAS	C	O	Q, LTe		" "
	ISI-22	1	D-6	C,A	10	VCW		C	O	R, LT	V-5	
R	ISI-M-31	2	E-8	B	8	VGW	SIAS	C	O	Q, LTe		" "
R	ISI-32	1	D-8	C,A	10	VCW		C	O	R, LT	V-5	
	SIA-A-12	1	B-3	B	1	VOS	SIAS	C	C	Q		
	SIA-A-22	1	B-5	B	1	VOS	SIAS	C	C	Q		
	SIA-A-32	1	B-7	B	1	VOS	SIAS	C	C	Q		
R	HSI-61	1	A-4	C,A	10	VCW		C	C	R, LT		
R	HSI-62	1	A-6	C,A	10	VCW		C	C	R, LT		
R	HSI-63	1	A-6	C,A	10	VCW		C	C	R, LT		

SYSTEM NAME: RESIDUAL HEAT REMOVAL, CONTAINMENT SPRAY & L.P. SAFETY INJECTION SYSTEM

FM DRAWING NO. 32A, 92A

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	CPU-16	2	H-7	E	6	VGW		LC	LC	ET		
	CPU-23	2	F-3	E	4	VBW		LO	LO	ET		
	ISI-M-40	2	K-3	B	18	VGW	RAS	O		Q		
	ISI-M-41	2	K-3	B	18	VGW	RAS	O		Q		
	ISI-42	2	K-4	C	16	VCW		C	O	Qp, CS	V-27	
	ISI-43	2	K-4	C	16	VCW		C	O	Qp, CS	V-27	
	ISI-45	2	K-7	C	16	VCW		C	O	Qp, CS	V-27	
	ISI-50	2	I-7	C	10	VCW		C	O	CS	V-28	
	ISI-51	2	I-6	C	10	VCW		C	O	CS	V-28	
	ISI-56	2	I-7	C	3	VCW		C	O	Q		
	ISI-57	2	I-6	C	3	VCW		C	O	Q		
	ISI-F-59	2	F-7	E	12	VGW		LO	LO	ET		
	ISI-44	2	K-7	C	16	VCW		C	O	Qp, R	V-27	
R	CS-M-1	2	D-2	B	10	VGW	CSAS	C	O	Q, LTe		Containment Boundary Valve Exempt from Leak Testing
R	CS-M-2	2	F-3	B	10	VGW	CSAS	C	O	Q, LTe		" "
R	CS-4	2	D-2	C	10	VCW		C	O	CSp, R, LTe	V-36	" "
R	CS-3	2	D-2	C	10	VCW		C	O	CSp, R, LTe	V-36	" "
	CS-25	2	I-4	C	10	VCW		C	O	CS	V-30	
	CS-26	2	I-6	C	10	VCW		C	O	CS	V-30	
	CS-29	2	H-4	C	10	VCW		C	O	CS	V-30	
	CS-30	2	H-6	C	10	VCW		C	O	CS	V-30	
	CS-33	2	I-4	C	3	VCW		C	O	Q		
	CS-34	2	I-5	C	3	VCW		C	O	Q		
	CS-53	2	F-2	C	6	VCW		C	O			
R	CS-A-55	2	D-3	B	3	PCW		C		Q, LTe		Containment Boundary Valve Exempt from Leak Testing
R	CS-A-56	2	D-3	B	3	PCW		O		Q, LTe		" "
	CS-68	2	I-3	E	8	VGW		LO	LO	ET		
	CS-5	2	C-2	E	10	VGW		LO	LO	ET		
	CS-6	2	C-2	E	10	VGW		LO	LO	ET		

SYSTEM NAME: RESIDUAL HEAT REMOVAL, CONTAINMENT SPRAY & L.P. SAFETY INJECTION SYSTEM

FM DRAWING NO. 32A/92A

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	CS-14	2	E-6	E	10	MOV		LO	LO	ET		
	CS-17	2	J-4	E	10	MOV		LO	LO	ET		
	CS-18	2	J-6	E	14	MOV		LO	LO	ET		
	CS-21	2	J-6	E	2	MOS		LO	LO	ET		
	CS-22	2	K-5	E	2	MOS		LO	LO	ET		
	CS-27	2	I-4	E	10	MOV		LO	LO	ET		
	CS-28	2	I-6	E	10	MOV		LO	LO	ET		
	CS-31	2	G-4	E	10	MOV		LO	LO	ET		
	CS-32	2	G-6	E	10	MOV		LO	LO	ET		
	CS-35	2	I-4	E	3	MOV		LO	LO	ET		
	CS-36	2	I-5	E	3	MOV		LO	LO	ET		
	CS-37	2	I-4	E	10	MOV		LC	LC	ET		
	CS-38	2	I-5	E	10	MOV		LC	LC	ET		
	CS-41	2	J-5	E	14	MOV		L	L	ET		
	CS-42	2	J-5	E	14	MOV		L	L	ET		
	CS-44	2	J-5	E	2	MOS		LO	LO	ET		
	CS-46	2	I-5	C	3	MOV		C	O	Q		
	CS-47	2	I-4	E	3	MOV		LO	LO	ET		
	CS-48	2	I-5	C	10	MOV		C	O	CS	V-30	
	CS-49	2	I-5	E	10	MOV		L	L	ET		
	CS-50	2	I-5	E	10	MOV		L	L	ET		
	CS-51	2	I-5	C	10	MOV		C	O	CS	V-30	
	CS-52	2	I-5	E	10	MOV		LC	LC	ET		
R	CS-54	2	C-3	C	2	MOS		C		Q, LTe		Containment Boundary Valve Exempt from Leak Testing
	CS-93	2	I-8	C	16	MOV		C	O	R	V-37	
	CS-94	2	I-8	C	16	MOV		C	O	R	V-37	
	CS-95	2	K-5	E	2	MBS		LO		ET		
	CS-M-66	2	I-3	B	8	MOV	CSAS	C	O	Q		
	CS-M-71	2	I-3	B	8	MOV	CSAS	C	O	Q,		

SYSTEM NAME: RESIDUAL HEAT REMOVAL, CONTAINMENT SPRAY & L.P. SAFETY INJECTION SYSTEM

FM DRAWING NO. 32A/92A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
CS-M-91	2	H-8	A	16	WI	RAS	C	O	Q	V-12	
CS-M-92	2	H-8	A	16	WI	RAS	C	O	Q	V-12	
ISI-46	2	K-7	E	16	GW		LO	LO	ET		
ISI-47	2	K-7	E	16	GW		LO	LO	ET		
ISI-52	2	I-6	E	10	GW		LO	LO	ET		
ISI-53	2	I-7	E	10	GW		LO	LO	ET		
ISI-54	2	I-6	E	3	GW		LO	LO	ET		
ISI-55	2	I-6	E	3	GW		LO	LO	ET		
ISI-67	2	J-6	E	2	GS		LO	LO	ET		
ISI-68	2	J-7	E	2	GS		LO	LO	ET		
SIA-10	2	B-4	C	14	CW		C	O	RP	V-29	
SIA-20	2	B-6	C	14	CW		C	O	RP	V-29	
SIA-30	2	B-8	C	14	CW		C	O	RP	V-29	
SIA-56	2	J-2	E	6	GW		LO	LO	ET		
RHI-M-2	1	A-6	B	12	GW		C	O	LT e	V-14	Containment Boundary Valve Exempt from Leak Testing
SIA-A-47	2	D-1	A	2	OS	CIS	C	C	Q, LT		
SIA-A-49	2	D-1	A	2	OS	CIS	C	C	Q, LT		
SIA-A-53	2	F-1	B	6	GW	RAS	O	C	Q		
SIA-A-54	2	F-1	B	6	GW	RAS	O	C	Q		
SIA-S-110	2	B-2	C	1	SV		C	O	SRV		
SIA-S-220	2	B-4	C	1	SV		C	O	SRV		
SIA-S-330	2	B-6	C	1	SV		C	O	SRV		
RHI-4	1	A-6	B,E	12	OS		LC	LC	ET, LT e		Containment Boundary Valve Exempt from Leak Testing
RHI-6	2	J-7	B,E	14	GW		LC	LC	ET, LT e		" "
RHI-7	2	J-7	B,E	14	GW		LC	LC	ET, LT e		" "
CS-72	2	I-3	E	8	GW		LO	LO	ET		
CS-67	2	I-3	E	8	GW		LO	LO	ET		
CS-65	2	H-3	E	8	GW		LO	LO	ET		

SYSTEM NAME: RESIDUAL HEAT REMOVAL, CONTAINMENT SPRAY & L.P. SAFETY INJECTION SYSTEM

FM DRAWING NO. 32A/92A

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
CS-15	2	F-4	E	6	VGW		LC	LC	ET		
CS-16	2	F-4	E	6	VGW		LC	LC	ET		
CS-13	2	E-4	E	10	VGW		LO	LO	ET		
RH-10	2	E-6	E	10	VGW		LC	LC	ET		
RH-11	2	E-6	E	10	VGW		LC	LC	ET		
CVO-19	2	F-7	E	6	VGW		LC	LC	ET		
CS-63	2	I-3	E	8	VGW		LO	LO	ET		
CS-73	2	I-3	E	8	VGW		LO	LO	ET		

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
PCC-M-43	3	I-2	B	14	VGW	RAS	C	O	Q		
PCC-T-20	3	H-6	B	10	ICV		M	M	Q		
PCC-T-19	3	H-6	B	10	ICV		M	M	Q		
PCC-A-53	3	G-3	B	1-½	PCV		C		Q		
PCC-6	3	F-5	C	16	VCW			O	Q		
PCC-13	3	F-6	C	16	VCW			O	Q		
PCC-9	3	E-5	E	16	VVI		LO	LO	ET		
PCC-2	3	E-6	E	16	VVI		LO	LO	ET		
PCC-14	3	G-5	E	16	VVI		LO	LO	ET		
PCC-7	3	G-6	E	16	VVI		LO	LO	ET		
PCC-44	3	I-4	E	1-½	VGS		LO	LO	ET		
PCC-49	3	H-4	E	1-½	VGS		LO	LO	ET		
PCC-51	3	H-4	E	1-½	VGS		LO	LO	ET		
PCC-50	3	H-4	E	1-½	VGS		LO	LO	ET		
PCC-52	3	H-4	E	1-½	VGS		LO	LO	ET		
PCC-55	3	H-2	E	2	VGS		LO	LO	ET		

VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
PCC-M-90	3	F-2	B	6	/GW	RAS	O	C	CS	V-57	
PCC-M-150	3	G-1	B	8	/GW	RAS	O	C	CS	V-57	

SYSTEM NAME: PRIMARY COMPONENT COOLING WATER FM DRAWING NO. 34C/94C

	VALVE NUMBER	SAFETY CLASS	COORDINATES	CATEGORY	SIZE (INCHES)	VALVE TYPE	SIGNAL TYPE	NORMAL POSITION	SAFETY POSITION	TEST FREQUENCY	RELIEF REQUESTS	REMARKS
	PCC-A-216	2	I-7	A	1-½	VGS	CIS	O	C	CS	V-39	
	PCC-A-238	2	H-8	A	8	VGW	CSAS	O	C	CS	V-39	
	PCC-A-252	2	I-7	A	6	VGW	CIS	O	C	CS	V-40	
	PCC-A-254	2	I-8	A	6	VGW	CIS	O	C	CS	V-40	
	PCC-A-268	2	A-6	A	4	VGW	MCB	O	C	CS	V-41	
	PCC-A-270	2	A-7	A	4	VGW	MCB	O	C	CS	V-41	
	PCC-A-300	2	D-7	A	4	VGW	CIS	O	C	CS	V-41	
	PCC-A-302	2	D-8	A	4	VGW	CIS	O		CS	V-41	
	PCC-222	2	F-2	A,C	8	VGW		O	C	LT, R	V-38	
	PCC-M-219	3	F-1	A	10	VGW	CIS	O	C	CS, LT	V-49	
R	PR-M-89	1	C-1	B	1			C	O	Q		
R	PR-M-90	1	C-1	B	1			C	O	Q		

PUMP RELIEF REQUEST

NUMBER: P-3

SYSTEM: Service Water

PUMP: P-29A, P-29B, P-29C, P-29D

CLASS: 3

TEST EQUIPMENT: Measure vibration, pump bearing temperature, and differential pressure.

BASIS FOR RELIEF: The service water pump bearings are inaccessible, as these are physically submerged under water. Total pump head is about 35 psig and normal fluctuations in pressure are 2 psig or more. These normal readings frequently exceed the ASME code limits. Therefore, we request relief from the code limits for differential pressure, and we will meet the requirements for alternate testing listed below.

ALTERNATE TESTING: Pump vibration and bearing temperatures shall be measured at the lower motor bearing and at the upper pump packing.

ALTERNATE RANGES FOR DIFFERENTIAL PRESSURE

Alert Range	Required Action Range
NONE	$30 > \Delta P > 40$