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SUBJECT: Forwards Revs 4 & 7 to "Inservice Insp & Testing Program Plan 1st 10-Yr Insp Interval Diablo Canyon Units 1 & 2."

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Pacific Gas and Electric Company

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James D. Shiffer
Vice President
Nuclear Power Generation

June 23, 1989

PG&E Letter No. DCL-89-171

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Re: Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2
Revisions to Inservice Inspection and Testing Program Plans

Gentlemen:

Enclosed are revisions 7 and 4 of the Inservice Inspection and Testing Program Plans for Diablo Canyon Unit 1 and Unit 2, respectively. These Program Plans supersede the previous revisions in their entirety. The Program Plans incorporate changes described in PG&E letter DCL-89-070, dated March 21, 1989, in response to open items contained in the NRC Staff's SERs dated December 14 and 22, 1988.

The enclosed Program Plan revisions contain a number of relief requests that have revised, added or deleted. The status of these relief requests is summarized below.

Inservice Inspection (ISI) Program Relief Requests

Table 1 provides a status summary of Unit 1 and Unit 2 ISI relief requests which were granted conditional approval or denied in the NRC Staff's SER dated December 14, 1988. PG&E has modified or deleted these relief requests as appropriate.

Table 2 provides a status summary of Unit 1 and Unit 2 ISI relief requests not evaluated in the NRC Staff's SER because of their recent additions to the ISI program.

In summary, PG&E requests that the NRC grant unconditional approval, prior to the next refueling outage, of Unit 1/Unit 2 ISI relief request nos. NDE-006/NDE-007, NDE-008/NDE-009, NDE-012/NDE-015, and system pressure test relief request nos. 8 and 9. The next refueling outages for Units 1 and 2 are the last scheduled outages within the first 3 1/3 year inspection period (plus one year allowable extension) within the first 10 year inspection interval. Hence, NRC approval of these five ISI relief requests is requested by September 1, 1989. All other ISI relief requests not listed in Tables 1 and 2 were previously granted in the Staff's SER.

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Inservice Testing (IST) Program Relief Requests

Table 3 provides a status summary of Units 1 and 2 IST relief requests added, deleted, or revised in the IST Program in response to the Staff's SER dated December 22, 1988 and NRC Generic Letter 89-04, "Guidance on Developing Acceptance Inservice Testing Programs," dated April 3, 1989. Pump relief request nos. 4 and 8 and valve relief request no. 17 have been deleted to address SER concerns. Valve relief request nos. 1, 10, 12, 16, and 18 have been revised and no. 20 has been added to ensure consistency with the Staff's SER and with position 2 of Attachment 1 to Generic Letter 89-04 regarding check valve disassembly/inspection requirements. Generic Letter 89-04 states that "Approval is granted provided the programs are consistent with the positions taken in Attachment 1 . . .," thereby allowing PG&E to implement these added/revised relief requests without further NRC review. All other IST relief requests not listed in Table 3 were previously granted in the Staff's SER.

Kindly acknowledge receipt of this material on the enclosed copy of this letter and return it in the enclosed addressed envelope.

Sincerely,

J. D. Shiffer

cc w/encs: B. Brown, EG&G Idaho
J. B. Martin
P. P. Narbut
H. Rood
G. D. Horn, State of California
H. Rockhold, EG&G Idaho
C. Tahnk, Regional Manager, Hartford Steam Boiler

cc w/o encs: M. M. Mendonca
B. H. Vogler
CPUC
Diablo Distribution

Enclosures

2722S/0069K/JHA/469

ENCLOSURE 2

DIABLO CANYON UNIT 2
INSERVICE INSPECTION AND TESTING PROGRAM PLAN
REVISION 4

NUCLEAR PLANT OPERATIONS
Diablo Canyon Power Plant
ISI/NDE Department
420.9

Change to Diablo Canyon Unit 2
Inspection and Testing
Program Plan

Date: June 23, 1989

Diablo Canyon Unit 2 ISI and IST Program Plan Receipt Acknowledgement

M Document Control Desk

You have been issued a Controlled Copy of the Diablo Canyon ISI and IST Program Plan. Here is the next sequential revision to the Plan. Please revise your controlled copy as follows:

CHANGE INSTRUCTIONS

Remove all pages from the Program Plan binder and replace with Revision 4, with the exception of certain ISI boundary drawing pages (section 2.0 of Program Plan). This revision is a complete reissue and supersedes all previous revisions.

For questions or assistance please phone the Document Control office, PG&E extension 691-4500, Pacific Bell phone (805) 595-4500.

After revising your copy of the Program Plan in accordance with these instructions, place the attached change description in the front of the manual behind the controlled copy numbered title page.

Please acknowledge receipt of this revision by signing below and returning this form to:

Pacific Gas and Electric Co.
Nuclear Regulatory Affairs
77 Beale St./333 Market Room A6093
San Francisco, CA 94106

Date:_____ Receipt of Controlled Copy N/A Revision # 4 of the Diablo Canyon Unit 2 ISI and IST Program Plan is hereby acknowledged.

_____
RECIPIENT SIGNATURE

DCPP UNIT 2 ISI/IST PROGRAM PLAN
CHANGE DESCRIPTION
REVISION 4

COPYHOLDERS:

Revision 4 of the DCPP Unit 2 Inservice Inspection and Testing Program Plan is issued as a controlled document in accordance with PG&E procedure AP E-4S7. Revision 4 is a complete reissue, with the exception of certain ISI boundary drawing pages (section 2.0), and supersedes all previous revisions. All changed pages (except tabs) should be removed from the Program Plan binder and replaced with Revision 4.

The following technical changes are incorporated in Revision 4 and are identified by revision bars.

INSERVICE INSPECTION (ISI)

CHANGE	DESCRIPTION	JUSTIFICATION
Section 1.0, p. 3	Adoption of ASME Code Case N-356.	NRC letter to PG&E dated March 24, 1988.
Section 1.0, p. 5. Table 2.4, p. 1 of 1 Various tables.	Snubbers removed from program exam schedule.	Visual exam of all snubbers is required each outage by Technical Specifications.
Section 2.0, sheets 1, 3, 6, 9, 12, 14, 17, 18, 36, 49 and 50 of 50	Incorporate revised ISI boundary drawings (104628) up to Revision 19.	Updated to reflect plant design.
Table 1.1, p. 4 of 9	RV outlet (loops 1 and 2) nozzles inspections schedule change from period three to period one. Loops 3 and 4 deferred to period 3.	Inner radius inspections of outlet nozzles loop 1 and loop 2 completed during period one. Loops 3 and 4 rescheduled as allowed by Code.
Table 1.4, p. 15 of 51	Three welds gained during valve replacement on Loop 1 spray line, 2 welds gained on Loop 2.	Transition pipe pieces added during valve replacement.
Table 1.4, p. 2 of 51	UT of loop 3 and 4 outlet nozzle safe end welds deferred to period 3.	Rescheduled as allowed by Code.
Table 1.4, p. 23 of 51	WIB-913 inspected instead of WIB-500.	Scheduling substitution, ALARA.
Table 1.4, p. 32 thru 51 of 51 Table 2.2, p. 18 thru 31 of 31 Table 3.2, p. 1 thru 7 of 7	Updated numbers of hangers; snubbers removed from schedule.	Plant design requirements, including snubber reduction program; visual exam of all snubbers is required each outage by Technical Specifications.

INSERVICE INSPECTION (ISI)

CHANGE	DESCRIPTION	JUSTIFICATION
Table 1.5, p. 5 of 5 Section 1.0, p. 5	Inspection schedule for RCP flywheels is added to program.	Augmented inspection.
Table 2.1, p. 1 of 16	SG girth weld W1-2 is examined concurrently with channel head to tubesheet weld.	Concurrent scheduling for ALARA and efficiency.
Table 2.1, p. 9, 13 of 16 Table 3.4, p. 10 of 17	PT and UT required for RHR heat exchanger nozzles welds and excess letdown heat exchangers girth welds per relief request NDE-007.	NRC SER dated December 14, 1988; PG&E letter DCL-89-070 dated March 21, 1989.
Table 2.3, p. 2 of 5	SI pump serial number change.	SI pump replaced during refueling outage.
Appendix B, p. 1 thru 4 of 4	Several welds are added to relief request NDE-009.	Welds determined to have limited accessibility to NDE. PG&E letter DCL-89-070, dated March 21, 1989.
Table 5.2, p. 8, 9 of 13, Table 5.3, p. 2 of 4, Table 5.4, p. 1 of 4	Deleted system pressure test relief request No. 2.	PG&E will attempt to perform hydrostatic test of CCW system in accordance with Code requirements. See PG&E letter DCL-89-070 dated March 21, 1989 in response to NRC SER dated December 14, 1988.
Table 5.2, p. 4, 5, 7 of 13	Required test pressure was revised to indicate INSERVICE/FUNCTIONAL.	Code requires functional test.
Table 4.1.1, p. 1 of 3, Table 4.2.1, p. 1 of 51	Boundary drawing revision change.	Updated to reflect plant design.

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.1.1, p. 2, 3 of 3, Table 4.1.2, p. 3 of 3	Deleted pump relief requests #'s 4 and 8 for reciprocating charging pump. Note has been revised to clarify basis for this pump being included in the IST program.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989.
Table 4.2.1, p. 11, 12 of 51	Decreased the limiting value of full-stroke time for steam dump valves PCV-19, 20, 21, and 22 from 120 seconds to 60 sec. in accordance with change to STP V-3R1. Also, the valve is tested in both the open and close direction.	More conservative stroke time limiting value is based on actual test data obtained during previous STP V-3R1 tests.
Table 4.2.1, p. 15 of 51	Increased the limiting value of full-stroke time for the pressurizer PORV's (PCV-455C, PCV-456, and PCV-474) from 2.0 sec. to 3.5 sec. in accordance with change to STP V-3J2.	3.0 second limiting value of full-stroke time is reasonable deviation from the 2.0 second reference stroke time, in accordance with NRC Generic Letter 89-04, Position 5 of Attachment 1, and is the safety analysis limit as calculated by Westinghouse.
Table 4.2.1, p. 23, 24 of 51, Table 4.2.2, p. 13, 17 of 19	Valve relief request #20 added to program to require verification of full-stroke exercising of RHR check valves 8818 A through D on a refueling outage frequency in accordance with NRC Staff position on check valve disassembly/inspection. Deleted cold shutdown testing Statement No. 16.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.2.1, p. 27, 30 of 51, Table 4.2.2, p. 7, 8, 11 of 19	The alternate testing method specified for valve relief requests #10 and #16 have been revised to require verification of full-stroke exercising of check valves 8948A through D and 8740A and B on a refueling outage frequency in accordance with the NRC Staff position on valve disassembly/inspection.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.
Table 4.2.1, p. 10 of 51	Revised to accurately identify valve FCV-151.	Typographical error.
Table 4.2.1, p. 7, 8, 9, 10, 11, and 12 of 51	STP V-2U has been divided by Steam Generator number.	System Engineering enhancement.
Table 4.2.1, p. 34 of 51, Table 4.2.2, p. 11, 19 of 19	Valve relief request #17 has been deleted from the IST Program Plan. Cold shutdown testing statement No. 30 has been added to provide justification for not exercising valves 9002A and 9002B during power operation because system alignment for testing would require containment entry to manually valve out the containment spray headers. Table 4.2.1 has been revised to reflect a cold shutdown testing frequency for these valves.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989.
Table 4.2.2, p. 1, 9, 12 of 19	The basis for valve relief request #'s 1, 12, and 18 have been expanded and clarified to ensure that check valves FW-349, FW-353, 8956A through D, and 9011A and B are inspected in accordance with NRC Staff position on check valve disassembly/inspection.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070, dated March 23, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.2.2, p. 2, 11, 14, 16, 19 of 19	Valve relief request #3 and cold shutdown testing statement No.27 have been revised to accurately identify valve VAC-252. Cold shutdown testing statement No.2 has been revised to accurately identify valve FW-352. Cold shutdown testing statement No.12 has been revised to accurately identify valve 8152. Valve relief request No. 16 has been revised to accurately identify valves 8740A and 8740B as being Category A, C.	Typographical errors. NRC SER dated December 22, 1988. PG&E letter DCL-89-070, dated March 23, 1989.

REVISION 4
MAY 1989

INSERVICE INSPECTION AND TESTING

PROGRAM PLAN

FIRST TEN-YEAR INSPECTION INTERVAL

DIABLO CANYON POWER PLANT

UNIT 2

USNRC DOCKET NO. 50-323

FACILITY OPERATING LICENSE NO. DPR-82

COMMERCIAL OPERATION DATA: MARCH 13, 1986

ISI Prepared by: _____
J. E. Hill — ISI Lead Specialist

IST Prepared by: _____
T. W. Pellisero — Senior Power Production Engineer

Reviewed by: _____
O. K. Franks — Supervisor of ISI/NDE

Approved by: PSRC Date June 12, 1989

Approved: _____
J. D. Townsend Plant Manager

CONTROLLED COPY NO. N/A

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REVISION 4
MAY 1989

DIABLO CANYON POWER PLANT
UNIT 2

INSERVICE INSPECTION AND TESTING PROGRAM PLAN
(FIRST 10-YEAR INTERVAL)

TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

INSERVICE INSPECTION AND TESTING PROGRAM PLAN
FIRST TEN-YEAR INTERVAL

INTRODUCTION

This volume describes the Inservice Inspection and Testing Program Plan for the Diablo Canyon Power Plant Unit 2 pressure retaining components (including supports) which are classified ASME Code Class 1, Class 2, and Class 3.

This ISI Program Plan complies with the requirements of 10CFR Part 50.55a(b) (2) and Part 50.55a(g), effective November 1, 1980 and uses the ASME Boiler and Pressure Vessel Code Section XI, 1977 Edition through and including the Summer 1978 Addenda[1] as the basis for the inservice examinations and tests to be conducted during the initial 120-month inspection interval. The initial inspection interval began March 13, 1986, when the Unit was placed in commercial operation.

Where conformance with certain code requirements is impractical, requests for relief[2] are included in the appropriate section with supporting information and proposed alternatives.

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[1] For Code Class 1 pipe welds only, the extent and frequency of examination has been determined by Tables IWB-2500 and IWB-2600, Category B-J, of the 1974 Edition through Summer 1975 Addenda of Section XI(10CFR50.55a(b)(2)(ii)). For Code Class 2 pipe welds only, the extent and frequency of examination has been determined by Paragraph IWC-2411 and Table IWC-2520, Category C-F and C-G of the 1974 Edition through Summer 1975 Addenda of Section XI (10CFR50.55a(b)(2)(iv)(B)). The distribution among multiple streams in Paragraph IWC-2411 (S'75) has not been used, rather the 'single stream' philosophy of the summer 1978 Addenda is followed throughout. In all cases the lowest numbered line is used as representative for the multiple streams. These exceptions to the use of the 1977 Edition through Summer 1978 Addenda only affect the Code Class 1 and Class 2 piping system welds extent and frequency of examination. Examination techniques for the pipe welds and all other components requirements conform to the 1977 Edition through Summer 1978 Addenda of Section XI.

[2] Reference 10CFR50.55a(g)(5)(iii)

Preservice examinations, where required, have been completed and are summarized under separate cover. All preservice examination data will be available for review at the plant site.

Should the examinations described in this volume reveal flaw conditions which require repair by welding, such repairs shall be made to approved procedures AP C-755 and AP C-756 that are in accordance with the requirements of Article IWA-4000 of Section XI.

ASME SECTION XI CODE BOUNDARY DRAWINGS

Section 2.0 contains the ASME Code Classification Boundary Drawings, PG&E Number 104628. Regulatory Guide 1.26[3] was used as the governing document in setting up the ISI boundary. The drawings show the Code Class 1,2, and 3 systems and components subject to inservice inspection and testing requirements. Systems and components are identified by Code Class and are color coded as applicable to indicate exemptions from various code requirements[4]. These drawings are extracted from the piping schematics (P&ID's) for the Plant that are contained in Volume V of the FSAR (Section 3.2). All ASME Code Class 1,2, and 3 lines subject to Inservice Inspection and Testing are shown on the drawings. To emphasize the Section XI Code Boundaries, pages containing lines other than ASME Code Piping have been omitted and non-ASME lines have been ghosted on the pages included. An explanation of the color coding system will be found at the end of the drawings.

Revisions to these drawings may occur from time to time but will not be distributed to this Program Plan as they are issued. Current drawings are maintained by the Plant Document Control Department and may be incorporated to this Program Plan with other changes as necessary. In all cases, the latest approved drawing shall apply.

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[3] Regulatory Guide 1.26, "Quality Classifications and Standards for Water-Steam-,and Radioactive-Waste-Containing Components of Nuclear Power Plants.

[4] As allowed by Paragraphs IWB-1220, IWC-1220, IWC-1230 and Table IWD-2500-1 of Section XI.

INSERVICE INSPECTION (ISI) PROGRAM
Nondestructive Examination of Components

Sections 3.1, 3.2, 3.3, and 3.4 set forth the Nondestructive Examination Program Plan for Diablo Canyon Unit 2. It describes the ASME Code Class 1, 2, and 3 components subject to surface, volumetric, and visual (VT-1, VT-3, VT-4) examination as required by Section XI during the first ten-year inspection interval. PG&E has adopted ASME Code Case N-356 which allows NDE Level III Examiners up to five years of certification to coincide with their ASNT certifications.

Construction permits for Diablo Canyon were issued prior to development of ASME Code requirements for piping systems[5]. The piping was designed and built to the requirements of ASA B31.1, USAS B31.1.0 and USAS B31.7 which did not require stress analysis calculations. In 1972, the ASME Code incorporated piping requirements which included stress analysis calculations. Plants designed or built before the new rules became effective were exempted from the requirements. The Summer 1978 Addenda to Section XI, on which this ISI Program Plan is based, requires Class 1 and Class 2 pipe welds to be selected for examination based on the stress analysis data. In recognition of the fact that no stress analysis data was computed for older plants, 10CFR50.55a[6] allows use of the Summer 1975 Addenda for pipe weld scheduling. The Summer 1975 Addenda does not require stress analysis calculations, but instead requires welds to be chosen at structural discontinuities (these are presumed to be the highest stress areas). The extent and frequency of examination for pipe welds in this ISI Program Plan therefore conforms to the Summer 1975 Addenda.

Sections 3.1, 3.2, and 3.3 cover ASME Code Class 1, 2, and 3 components. Section 3.4 covers requests for relief for each Code Class where it has been determined that a Code requirement is impractical. In Sections 3.1 and 3.2 the tables identify the Code Class, Code Category and Item Number, name of the component or system, and general identification. The general identification

[5] April 23, 1968 for Unit 1 (CPPR-39); December 9, 1970 (CPPR-69) for Unit 2

[6] 10CFR50.55a(b)(2)(ii) and 10CFR50.55a(b)(2)(iv)(B)

includes as applicable the serial number, the reference drawing number or ISI drawing (isometric) by page number, component number, and line number. Also given are the total number of items in the system, the required NDE methods, the amount of items to be examined and extent of examination, the examination period in which the examination will be conducted[7], percent to date (which accumulates the percentage of total number of code-required items through the given time period[8]), and applicable remarks or references to requests for relief that appear in Section 3.4.

In Section 3.3 each Class 3 component and system is identified, along with its coordinates on drawing 104628 and the reference drawings or seismic drawing number. The examination methods and total number of supports for each component or system is then given.

In Section 3.4, requests for NDE relief are presented. The tables identify the component or item, Code Class, program table (reference Sections 3.1, 3.2, and 3.3), Code Category and Code Item Number. The code requirement that is deemed impractical is then stated and the basis for the request for relief, alternate examination proposal, and schedule for implementation of the alternate examination are given.

System Pressure Tests

Section 3.5 sets forth the System Pressure Test Program Plan for Diablo Canyon Unit 2. Pressure retaining components within each system boundary are subjected to appropriate system pressure tests to verify their structural integrity and to assure they remain leak tight for continued and safe operation. During all pressure tests, visual examination (VT-2 per IWA-2212 and IWA-5240 of Section XI) will be conducted on the pressure retaining boundary of all applicable components and systems.

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[7] Each 3 1/3 year examination period will be further subdivided by refueling outages. Items scheduled for each refueling outage will be listed on an ISI Examination Schedule which will be issued prior to the outage.

[8] The sum of "percent to date" shall equal or exceed the percentage of total items required to be examined by the Code.

The Pressure Test section consists of four tables: pressure tests for Code Class 1, 2 and 3 systems and the request for relief where pressure test is impractical. It shows the component or piping system description, the drawing sheet number of the Code classification drawing (Dwg. 104628), the applicable Section XI pressure test requirement, the required test pressure, the test frequency and any amplifying remarks for the pressure test. Each system Code class has its own tab.

Augmented Examinations

Augmented examinations, if required by NRC[9], are normally included as provisions in the plant Technical Specifications. Examples include examinations required for the steam generator tubes and the mechanical and hydraulic snubbers.

- Eddy current examination of steam generators' tubing, although mentioned for completeness in the ISI Program Plan tables and performed in accordance with Section XI recommendations, are scheduled and conducted in accordance with Plant Technical Specifications and separate regulatory commitments.

- Visual inspection and functional testing of all safety related snubbers, as required by Plant Technical specifications, is scheduled separately. All snubbers in the ISI boundary are visually examined (VT-3, VT-4) each refueling outage.

For convenience, the following augmented inspections are scheduled in this ISI Program Plan:

- Ultrasonic examination of 7½ percent of Containment Spray System welds, as required by the NRC, are scheduled here.

- Reactor coolant pump flywheels are inspected by ultrasonic and magnetic particle methods in accordance with Regulatory Position C.4.b of Regulatory Guide 1.14, Rev. 1, August 1975.

[9] Pursuant to 10CFR 50.55 a (g)(6)(ii)

Calibration Blocks and Standards

Calibration blocks and standards are controlled by PG&E procedure ISI D-851.

INSERVICE TESTING OF PUMPS AND VALVES

The pump and valve testing program demonstrates the operational readiness of Code Class 1, 2, and 3 pumps and valves which are required to perform a specific function in shutting down the reactor or in mitigating the consequences of an accident. This program is presented in Sections 4.1 and 4.2 in a tabular format with line entries for each pump and valve.

Table 4.1.1 (Pump IST Program) includes the pump name and number, the Code class, applicable surveillance test procedure and the test parameters, i.e., pump speed, pump inlet pressure, pump differential pressure, flow rate, pump vibration, pump lubrication (observe level or pressure), and pump lubrication temperature. Requests for relief from Code requirements are provided in Table 4.1.2.

Table 4.2.1 (Valve IST Program) includes the valve number, valve description, P&ID Coordinates, Code class, IWV-2200 valve category, valve size, type (ball, butterfly, check, diaphragm, gate, globe, plug, or relief valve), actuator type (air operated, electric motor, electrohydraulic, manual, or solenoid-operated), normal valve position, test requirement, the test frequency, applicable stroke time, procedure number, and remarks. Requests for relief from Code requirements are provided in Table 4.2.2.

ASME CODE BOUND. FOR ISITP

UNIT 1 & 2

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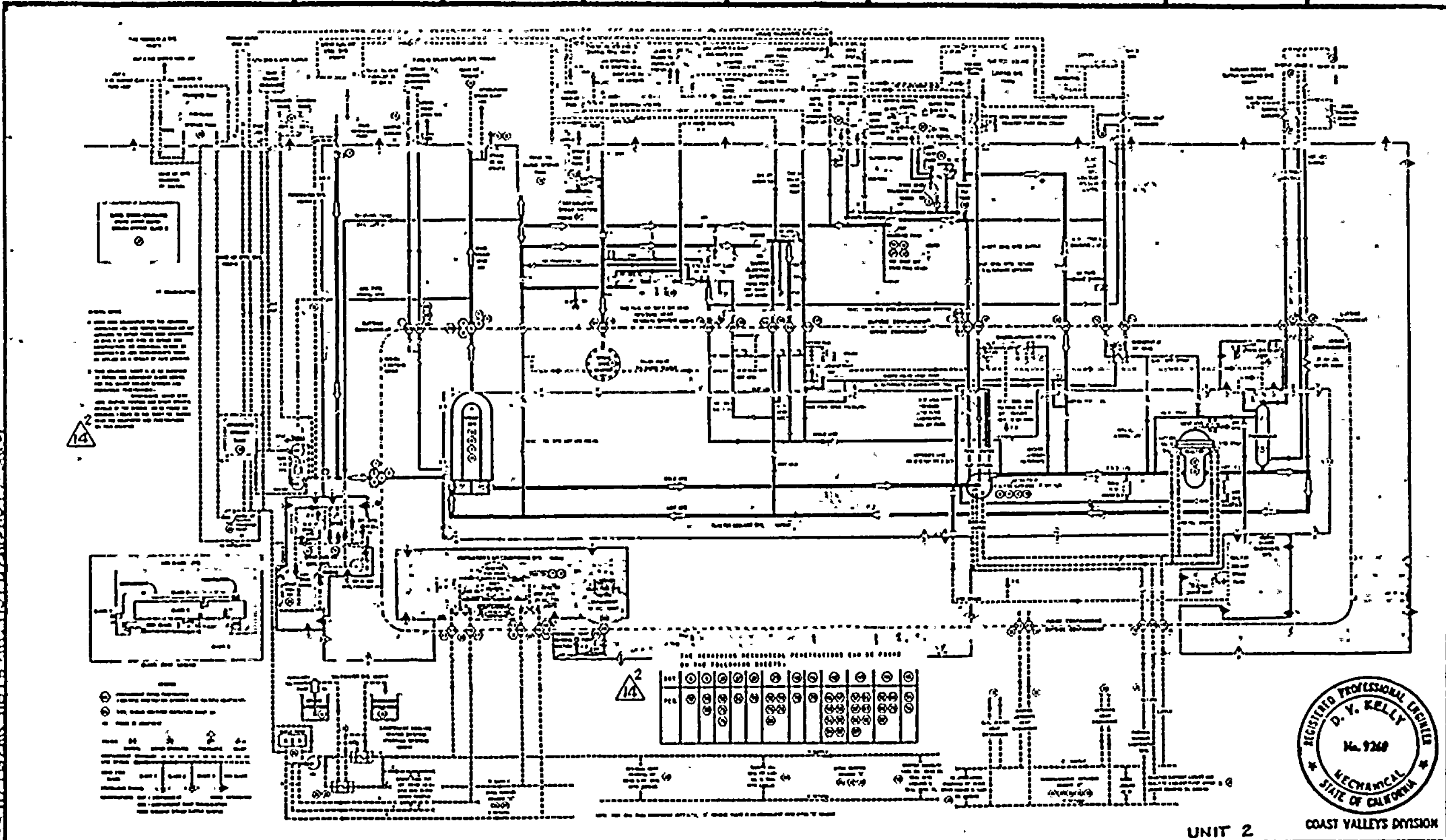

UNIT 2

COAST VALLEYS DIVISION

REGISTERED PROFESSIONAL ENGINEER D. V. KELLY No. 9260 MECHANICAL STATE OF CALIFORNIA

NO.	DATE	DESCRIPTION	GM	SUPV.	CH.	APRD.
16	10-20-87	REV'D SH.3,6&9 PER DCNs&FCTs; DET. ON 49	169972	[illegible]	LIT	[illegible]
15	8-28-87	REV'D SH.24 PER DCN; DETAILS ON SH.49	169972	[illegible]	LIT	[illegible]
19	9-27-88	REV'D PER DCN; DETAILS ON SH. 50	169972	[illegible]	LIT	[illegible]
18	1-29-88	SEE TABLE OF CHANGES SHEET 49	169972	[illegible]	LIT	[illegible]
17	12-15-87	REV'D PER FCT & DCN; DETAILS ON SH.49	169972	[illegible]	LIT	[illegible]
1	9-18-79	APPROVED FOR CONSTRUCTION	169972	[illegible]	CMV	[illegible]

TABLE OF CHANGES

APPROVED BY

GM 169972

CH. CMV

DATE 9-10-79

SCALE NONE

ASME CODE BOUNDARIES FOR INSERVICE INSPECTION AND TESTING PROGRAM-ISITP

DIABLO CANYON

DEPARTMENT OF ENGINEERING

PACIFIC GAS AND ELECTRIC COMPANY

SAN FRANCISCO, CALIFORNIA

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104628 CHANGE 19

PARTIAL ISSUE

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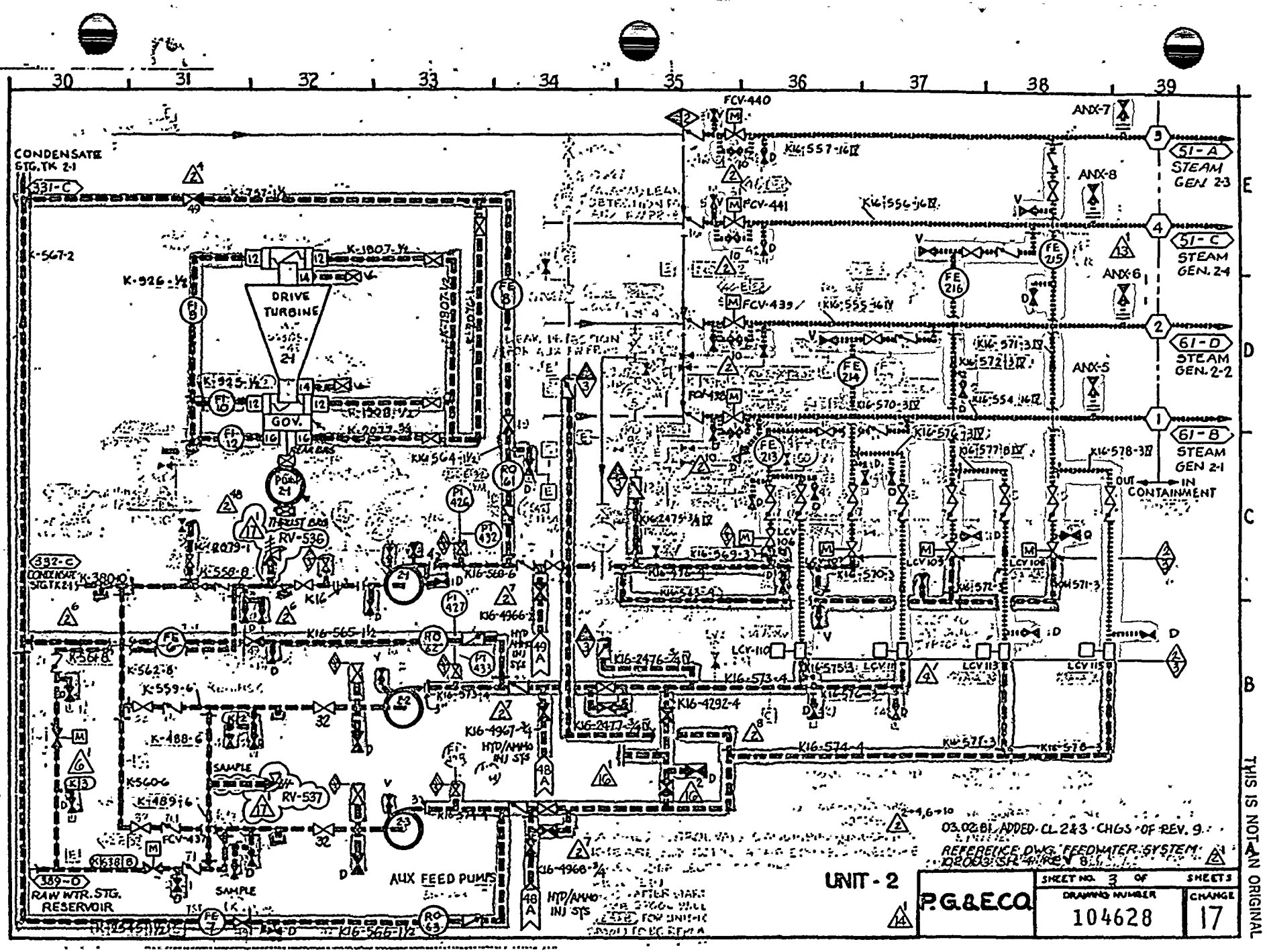
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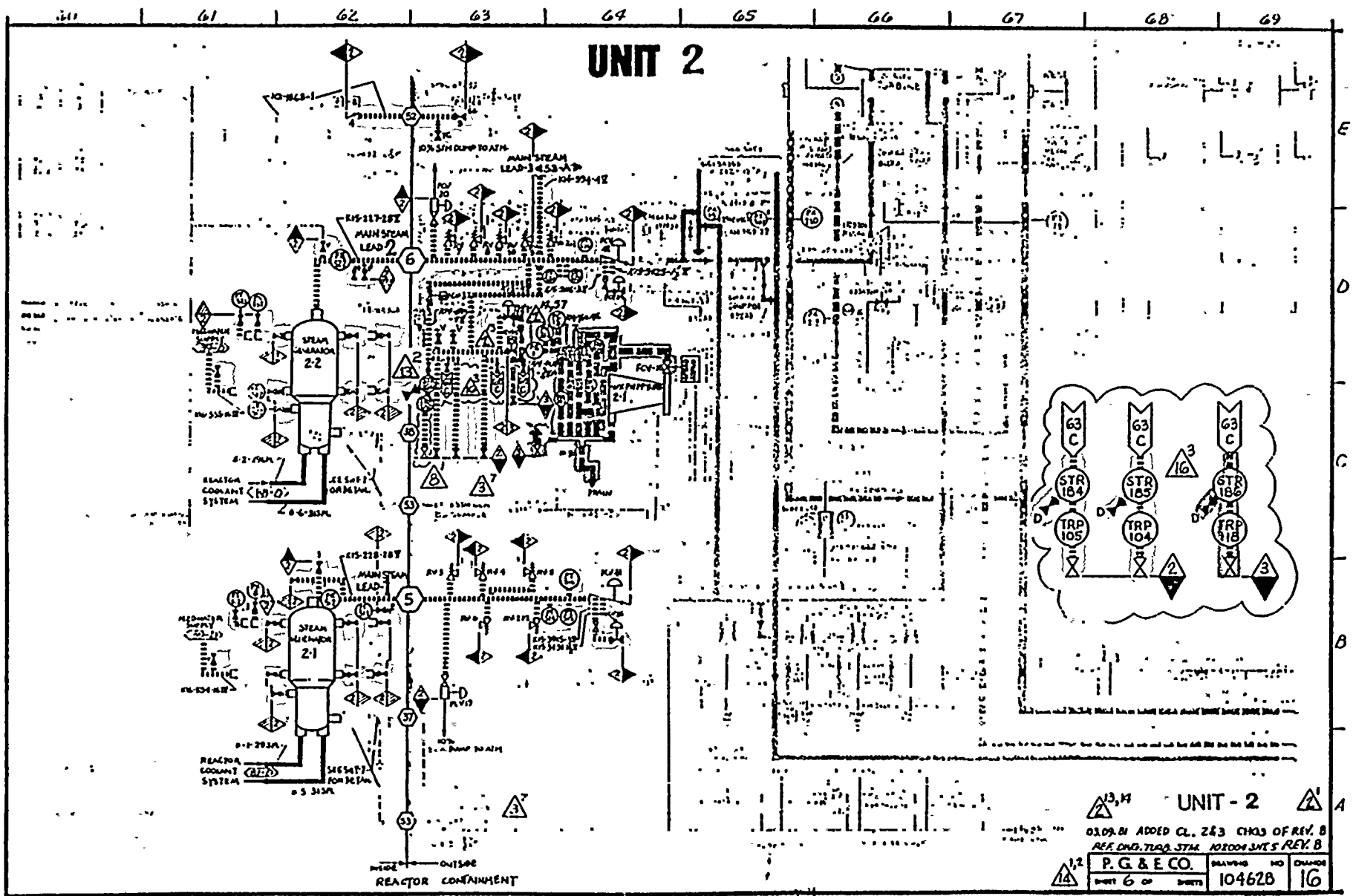
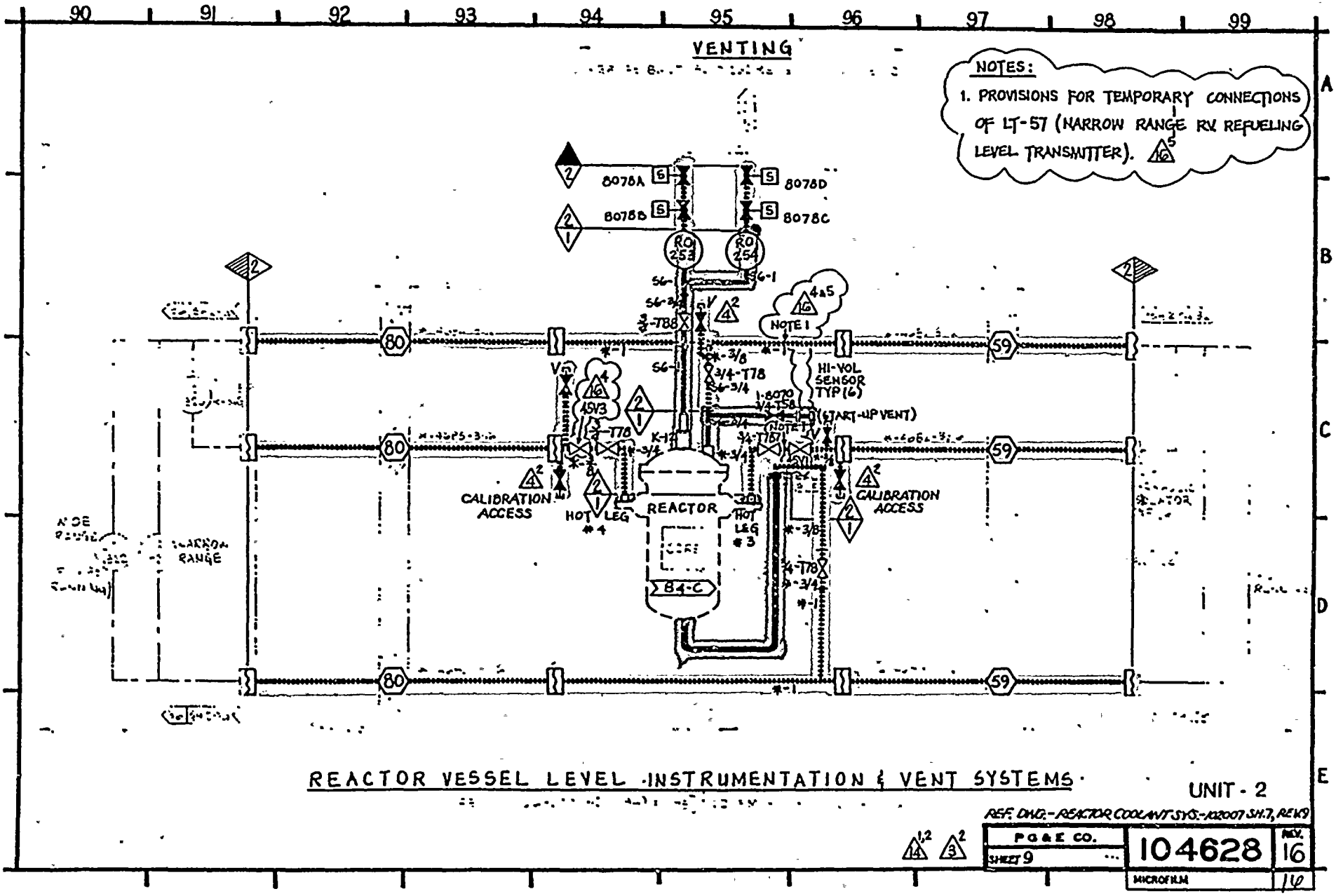
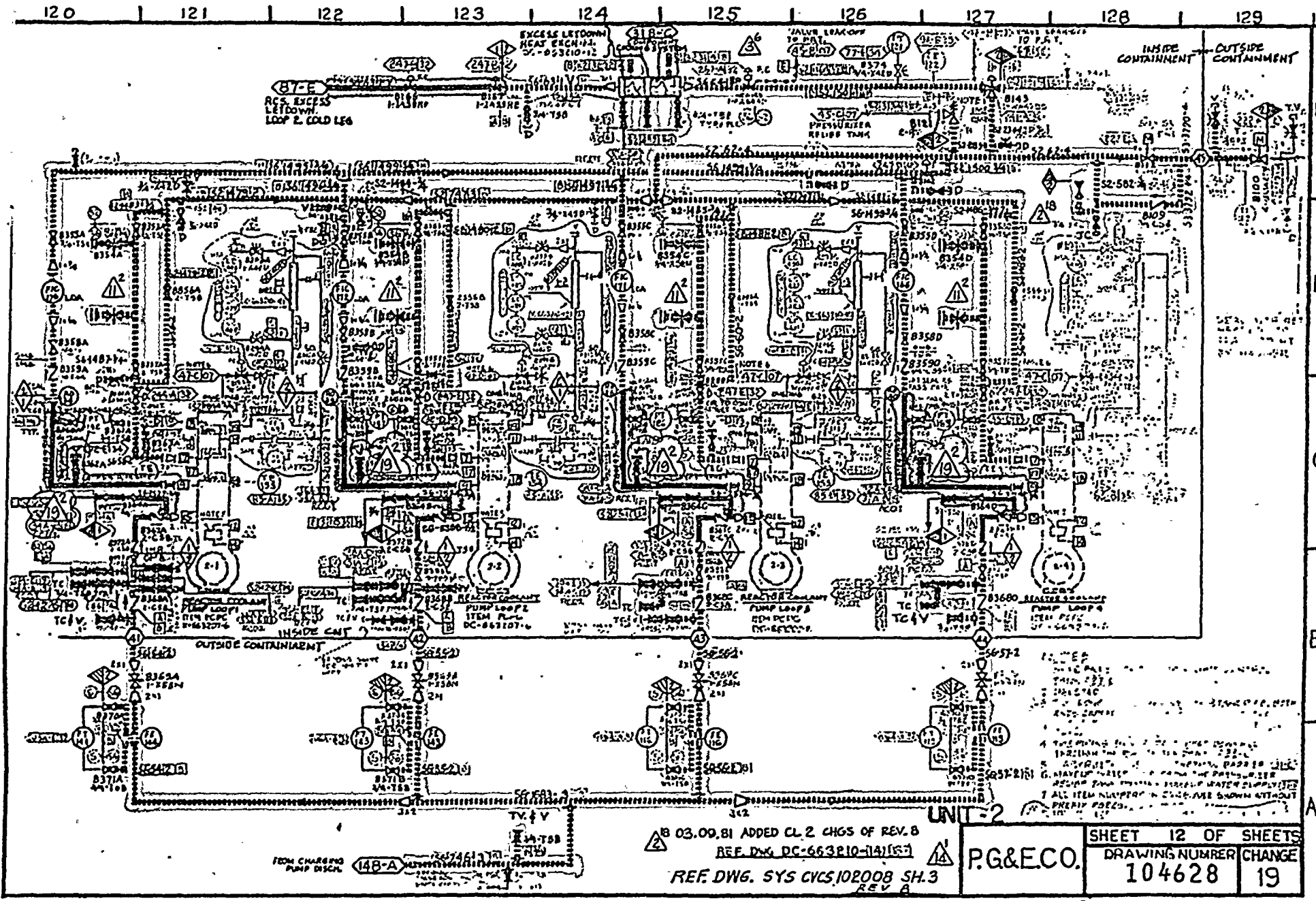
LCV 111
LCV 113
LCV 115
HTD/AMMO INJ STA
LEAK DETECTION FOR AUX FWPP
03.02.81 ADDED CL 2&3 CHGS OF REV. 9
REFERENCE DWG. FEEDWATER SYSTEM: 102003 SH. 4 REV. 8
UNIT - 2
P.G.&E.CO.
SHEET NO. 3 OF SHEETS
DRAWING NUMBER 104628
CHANGE 17
RM INDEX REV. 17
35 MM NEG 1/2
THIS IS NOT AN ORIGINAL

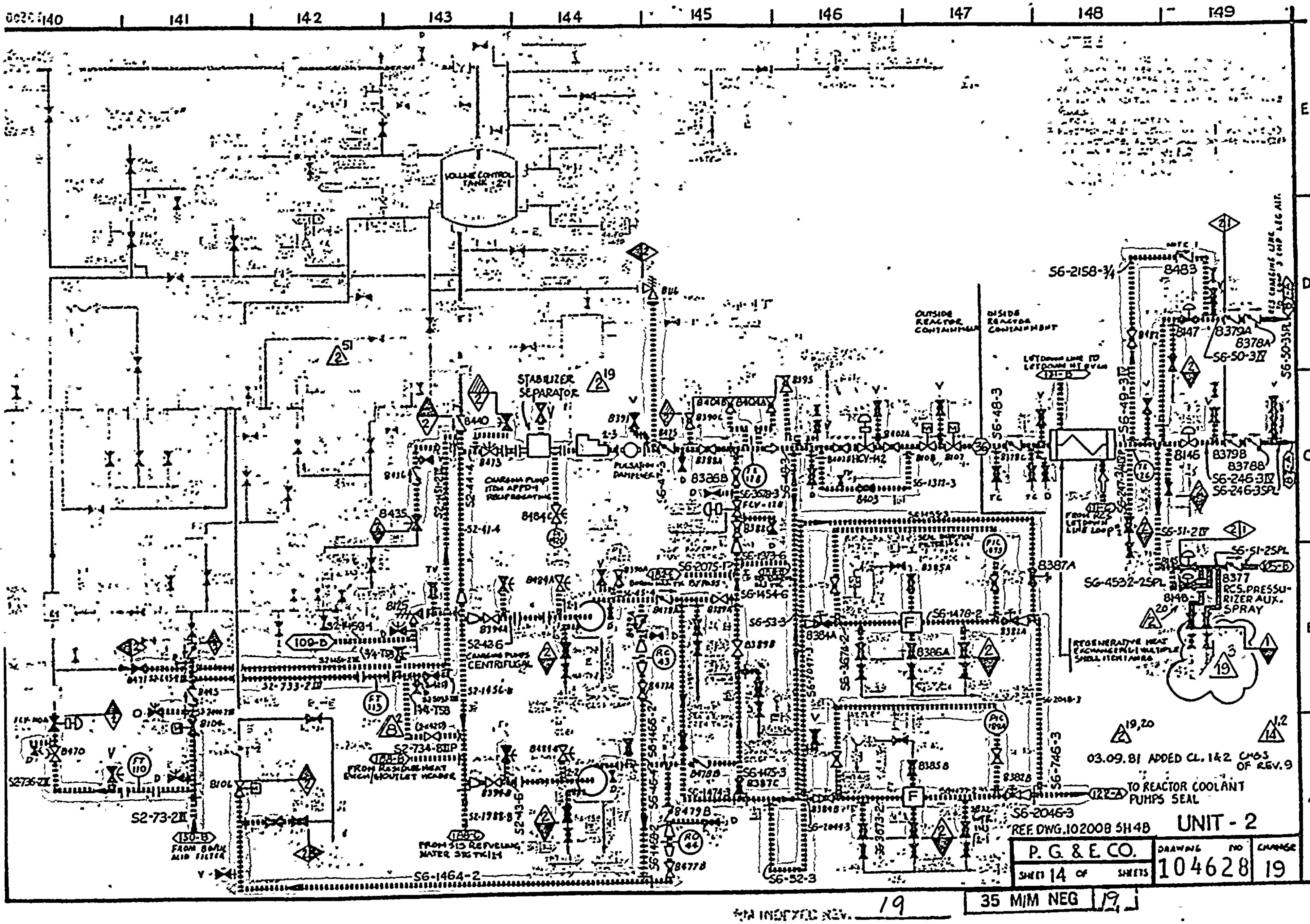


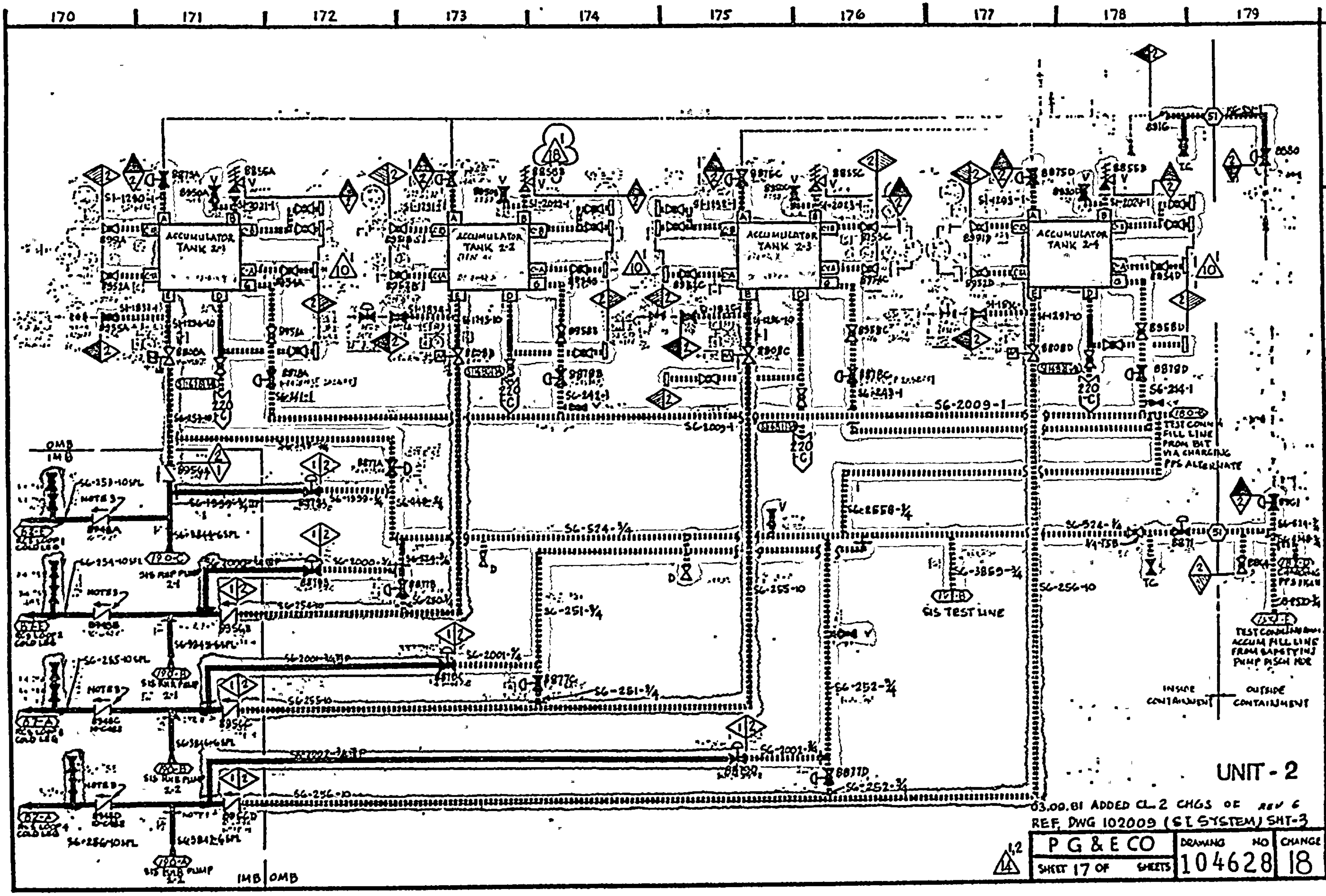
35 MM NEG 16

RM INDEXED REV. 16


90
91
92
93
94
95
96
97
98
99
A
B
C
D
E
VENTING
NOTES:
1. PROVISIONS FOR TEMPORARY CONNECTIONS OF LT-57 (NARROW RANGE RV REFUELING LEVEL TRANSMITTER). 16 5
8078A
8078D
8078B
8078C
RO 253
RO 254
56
56-1
56-3/4
3/4-T78
NOTE 1
4&5
HI-VOL SENSOR TYP (6)
3/4-T58
(START-UP VENT)
K-1
CALIBRATION ACCESS
HOT LEG #4
REACTOR
HOT LEG #3
CALIBRATION ACCESS
84-C
80
59
NARROW RANGE
REACTOR VESSEL LEVEL INSTRUMENTATION & VENT SYSTEMS
UNIT - 2
REF. DWG.- REACTOR COOLANT SYS.-102007 SH.7, REV.9
PG&E CO.
SHEET 9
104628
REV. 16
MICROFILM
16

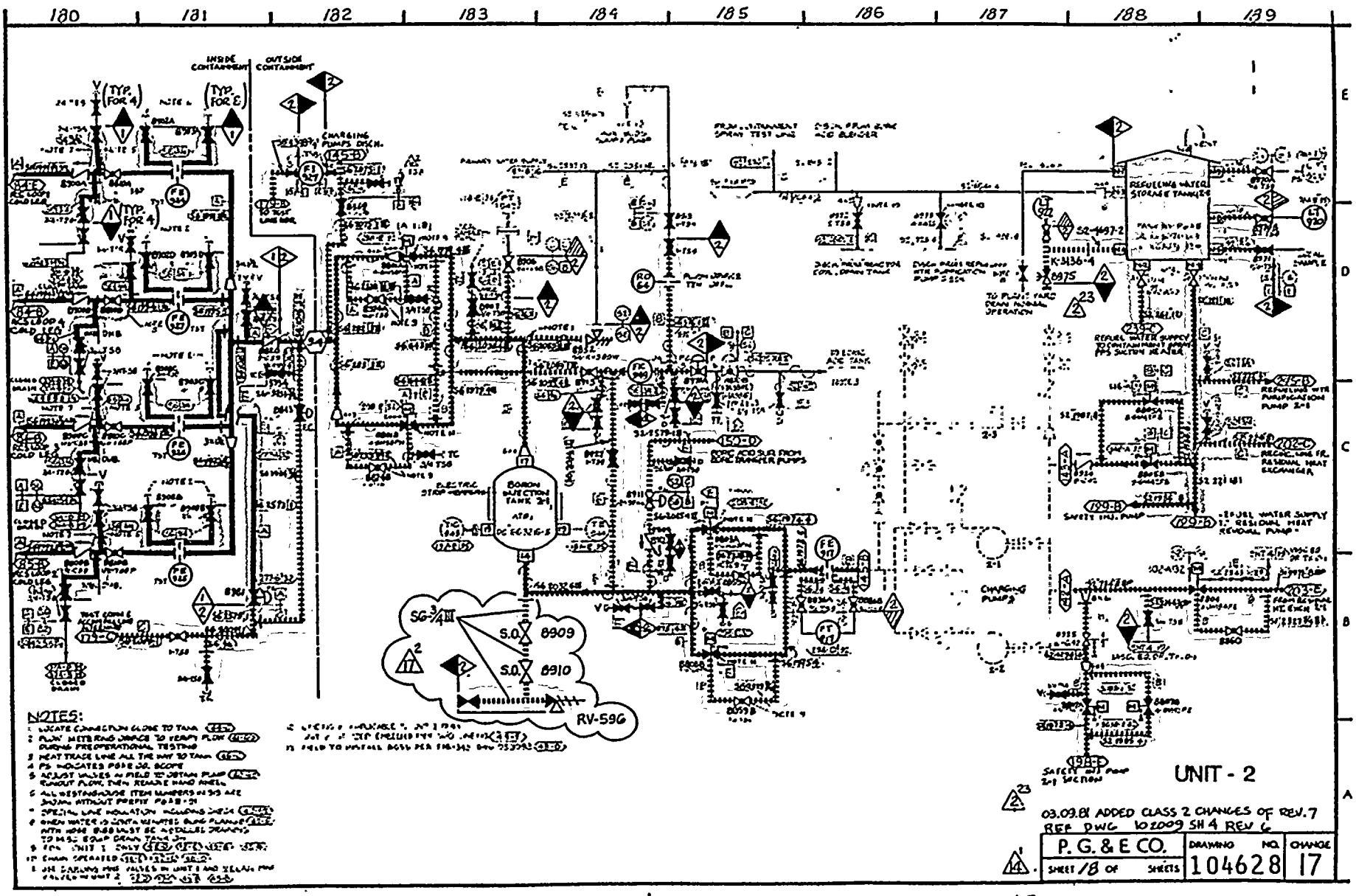

120
121
122
123
124
125
126
127
128
129
E
D
C
B
A
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
87-E
RCS. EXCESS LETDOWN LOOP 2. COLD LEG
PRESSURIZER RELIEF TANK
INSIDE CNT
OUTSIDE CONTAINMENT
148-A
FROM CHARGING PUMP DISCH.
UNIT-2
2 03.09.81 ADDED CL 2 CHGS OF REV. 8
1 REF. DWG. DC-663210-114
REF. DWG. SYS CVCS 102008 SH. 3 REV 8
P.G&E.CO.
SHEET 12 OF SHEETS
DRAWING NUMBER 104628
CHANGE 19
INDEXED REV 19


140
141
142
143
144
145
146
147
148
149
E
D
C
B
A
VOLUME CONTROL TANK 2-1
STABILIZER SEPARATOR
PULSATION DAMPENER
CHARGING PUMPS CENTRIFUGAL
OUTSIDE REACTOR CONTAINMENT
INSIDE REACTOR CONTAINMENT
REGENERATIVE HEAT EXCHANGER
RCS PRESSURIZER AUX. SPRAY
TO REACTOR COOLANT PUMPS SEAL
FROM BORIC ACID FILTER
FROM RESIDUAL HEAT EXCH. OUTLET HEADER
FROM 515 REFUELING WATER STORAGE TANK
S6-2158-3/4
8483
8379A
8378A
S6-50-3
8147
8146
8379B
8378B
S6-246-3
S6-246-3SPL
S6-51-2
S6-51-2SPL
S6-4532-2SPL
8377
8148
8387A
S6-1478-2
8386A
8385B
8382B
S6-746-3
S6-2046-3
122-A
S6-48-3
S6-49-3
HCV-142
8403
S6-1311-3
8440
8473
8484
8435
8391
8386B
FCV-128
S6-2075-1
S6-1454-6
S6-53-3
8384A
S6-52-3
8387C
8479B
8477B
8471A
S2-414
S2-436
S2-734-8
S2-733-2
109-D
130-B
S2-73-2
S2-736-2
8470
8106
8104
8105
S6-1464-2
FT 110
FT 113
RC 45
RC 46
PIC 135
TO REACTOR COOLANT PUMPS SEAL
03.09.81 ADDED CL. 1&2 CHGS OF REV. 9
REF DWG. 102008 SH 4B
UNIT - 2
P. G. & E. CO.
SHEET 14 OF SHEETS
DRAWING NO 104628
CHANGE 19
35 M/M NEG 19
INDEXED REV. 19

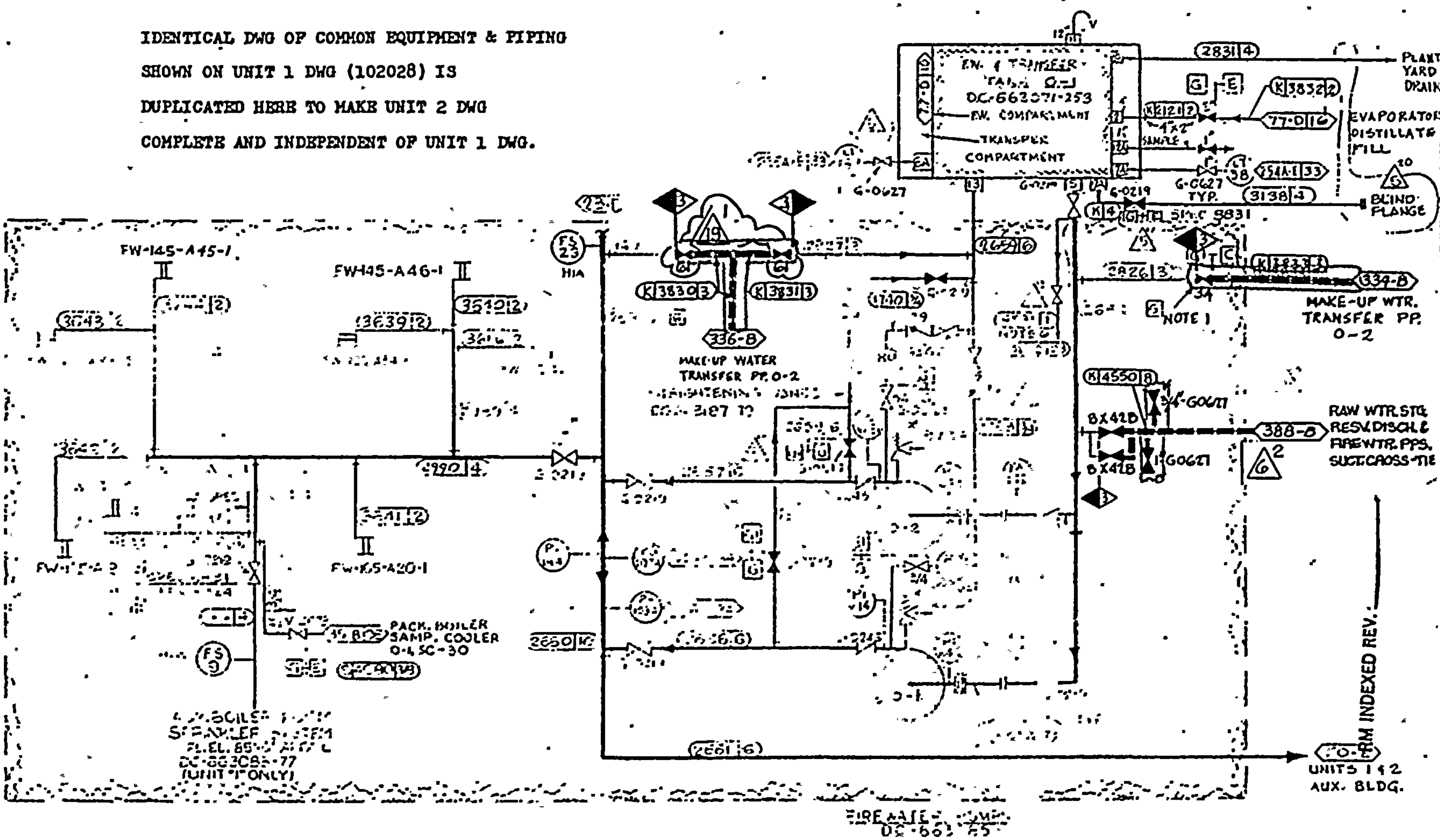


RM INDEXED REV. 18

35 M/M NEG 18


180
181
182
183
184
185
186
187
188
189
INSIDE CONTAINMENT
OUTSIDE CONTAINMENT
CHARGING PUMPS DISCH.
REFUELING WATER STORAGE TANKS
BORON INJECTION TANK 2-1
SG 3
S.O. 8909
S.O. 8910
RV-596
CHARGING PUMPS
SAFETY INJ. PUMP
UNIT - 2
NOTES:
03.09.81 ADDED CLASS 2 CHANGES OF REV. 7
REF DWG 102009 SH 4 REV 6
P. G. & E CO.
DRAWING NO. 104628
CHANGE 17
SHEET 18 OF SHEETS
RM INDEXED REV. 17
35 M/M NEG 17
THIS IS NOT AN ORIGINAL

IDENTICAL DWG OF COMMON EQUIPMENT & PIPING SHOWN ON UNIT 1 DWG (102028) IS DUPLICATED HERE TO MAKE UNIT 2 DWG COMPLETE AND INDEPENDENT OF UNIT 1 DWG.



UNIT I FUEL HANDLING BLDG.

UNIT - 2

NOTES:

7. THIS SPOOL SHALL BE REPLACED BY EXPANSION JOINT (BELLOWS)

REF. DWG - FIRE PROTECTION 102018 REV. 5 SHT. 3

P.G.&E.CO.	SHEET NO. 36 OF SHEETS	
	DRAWING NUMBER 104628	CHANGE 19

35 M/M Neg. 19

RM INDEX REV. 19

RM INDEXED REV.

IS NOT AN ORIGINAL

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES
	CHANGE 14 - MARCH 3, 1987 **BY:J.BYCZYNSKI, T.ORTUA, W.ELLIS**	
MISCELLANEOUS	REVISED - SHEETS 1,2,3,5,6,8,9,10,11,12,14, 15,17,18,19,20,23,24,25,27,28,29, 30,31,32,33 AND FORMER SHEET 40 (NOW 46) TO CORRECT, UPDATE AND IMPROVE ISI PROGRAM DEFINITION. (PER DC2-EM-34779 OF 2-13-86)	14-1
	REVISED - SHEETS 1,6,9,10,14,17,19,22,23,24, 27,29,31,32 AND ADDED - NEW SHEETS 40,41,42,43,44,45 TO INCLUDE ALL MECHANICAL PENETRATIONS IN ISI PROGRAM. (PER DC2-EM-36271 OF 4-23-86)	14-2
SAFETY INJECTION PUMPS	REVISED - PI-938, PI-939, PX-411 AND PX-412 CONNECTIONS FROM PROCESS LINES (PUMP SUCTION AND DISCHARGE) TO DRAIN LINES. (PER AS-BUILT DWG. 108009, SH.5 REV. 9)	197-D/E 14-3
LEGEND FOR NDE EXEMPTION COLOR CODING AND TABLE OF CHANGES	REVISED - SHEET NUMBERING AS FOLLOWS: OLD 40 41 42 NEW 46 47 48	14-4
	ADDED - NEW TABLE OF CHANGES SHEET 49.	14-5
	CHANGE 15 - AUGUST 28, 1987 **BY: J.BYCZYNSKI, L.TIONGSON, W.ELLIS**	
SPENT FUEL PIT	DELETED - LINES S2-1069-4 & S2-1070-4 ADDED - NEW PUMP 2-2,PIPING, VALVES AND ASSOCIATED INSTRUMENTS. REVISED - LINE S2-1068-3 TO DOWNSTREAM OF LINE S2-156-3, - LINE S2-156-3 TO DOWNSTREAM OF VALVE 8762 AND - LINE S2-1071-3 TO UPSTREAM OF NEW LINE S2-5634-10. ADDED - RO-423 AND CHECK VALVE UPSTREAM OF RELOCATED VALVE 8762. (PER DC2-EM-34785 OF 9-26-86, FCT-H-7905 OF 2-27-87 AND FCT-H-7906 OF 3-03-87)	244/246-C/E 15-1
	19	

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES
	CHANGE 16 - OCT. 20, 1987 **BY: J.BYCZYNSKI, T. ORTUA, W. ELLIS**	
AUX FEED PUMPS 2 & 3 DISCH LINE CROSS TIE	ADDED - BLIND FLANGED CONNECTION FOR S.G. RAPID DRAIN IN LINE K16-4292-4. (PER DC2-EM-36027 OF 7-16-86)	35-B 16-1
	ADDED - DRAIN VALVE OFF LINE K16-4292-4. (REF. FCT-5772 OF 12-7-84)	35-A 16-2
AFW PUMP TURBINE MAIN STEAM SUPPLY	ADDED - STRAINERS AND DRAIN CONNECTIONS TO STEAM TRAPS TRP-104,105 & 118. (PER DC2-EM-36029 OF 12-24-86 AND FCT-0-1213 OF 6-29-87)	63-C 67/69-C 16-3
R.V. LEVEL INSTR & VENT SYSTEMS	ADDED - SECOND ISOL. VALVES (45V3 ON HOT LEG NO. 4 AND 45V1 ON HOT LEG NO.3) IN UPPER RANGE LEVEL TRANSMITTER SENSING LINES. (PER FCT-0-1130A OF 5-19-87)	94-C 96-C 16-4
	ADDED - NOTE 1 (PER DC2-SM-38841 OF 4-29-87 AND DC2-SJ-38841 OF 4-30-87)	97-A 96-C 16-5
	CHANGE 17 - DEC. 15, 1987 **BY: J. BYCZYNSKI, L.TIONGSON, W.ELLIS**	
AUX FEED WTR PUMPS	ADDED - PRESSURE RELIEF VALVES RV-536 & RV-537 TO THE SUCTION PIPING. (PER DC2-EM-4037 OF 10-30-85)	31/32 - A/C 17-1
BORON INJECTION TANK	ADDED - PRESSURE RELIEF VALVE RV-596, ASSOCIATED VALVES AND PIPING TO TANK DRAIN LINE S6-3/4. (PER DC2-EM-40247 OF 10-7-87 AND FCT-0-1360 OF 10-12-87)	183/184 - B 17-2
	CHANGE 18 - JANUARY 29, 1988 **BY: J. BYCZYNSKI,L.I.TIONGSON,W.ELLIS**	
ACCUMULATOR TANK 2-2	REVISED - RELIEF VALVE ID NO. TO 8855B (WAS 8853B) (PER DC2-EM-34620 OF 1-13-86) NOTE: OTHER REVISIONS REQUESTED BY ABOVE DCN WERE INCORPORATED PREVIOUSLY PER DC2-EM-34779 (SEE 14-1)	174-E 18-1

UNIT - 2

RM INDEX REV. 19

14-5

PG&E CO. SHEET 49 OF SHEETS

104628 REV. 19

MICROFILM 19

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES	
	CHANGE 19 - SEPTEMBER 27, 1988		
	BY: J.BYCZYNSKI,L.I.TIONGSON, W. ELLIS		
UNIT 1 FUEL HANDLING BLDG	REVISED - ISOLATION VALVES IN LINES 3830 AND 3831 TO ITEM 61 (WERE V-0269) (PER DCO-EM-23700R1 OF 5-15-87)	365-D	19 [1]
RCP WATER SEAL 1 BYPASS	REVISED - VENT LINES OFF LINES 1495 THRU 1498 TO CLASS 1 (WERE CLASS 2) (PER FCT-0-1704B OF 8-8-88)	120-C 122-C 124-C 127-C	19 [2]
PRESSURIZER SPRAY LINE 51	DELETED - PRESSURIZER SPRAY LINE 51 DRAIN TO RCDT SECOND ISOLATION VALVES FROM ISITP SCOPE (WERE CLASS 1) (PER FCT-0-1704B OF 8-8-88)	149-B	19 [3]
TABLE OF CHANGES	ADDED - NEW TABLE OF CHANGES SHEET 50		19 [4]

EQUIPMENT OR SYSTEM	DESCRIPTION	COORDINATES

PRINTING INSTRUCTION

FRONT	1	2	4	6	7	9	10	11	12	14	16	18	19	21	22	23	24	26	28	30	32	34	35	36	37	39	40	42	44
BACK	-	3	5	-	8	-	-	-	13	15	17	-	20	-	-	-	25	27	29	31	33	-	-	-	38	-	41	43	45

FRONT	46	47	49	50
BACK	-	48	-	-

UNIT-2 19 [4]

PG&E CO. SHEET 50 OF 50 SHEETS

104628 REV. 19

MICROFILM

RM INDEX REV. 19

THIS IS NOT AN ORIGINAL

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 1 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reactor Vessel	* [1.1-1]							[*] ISI DWG Page Nos.
		Serial No. C.E. 68101 DWG. Ref. CE234-152-6			Exam area meets or exceeds req'ts. of fig. IWB-2500-1 and fig. IWB-2500-2				
B-A	Pressure Retaining Welds	DC663201-76							
B1.10	Shell Welds								
B1.11	-Circumferential-	Weld No.		(3)	(Length)				Thickness 10.75"
	Upper Course (to) Intermediate (to)	8-201	UT	1	543.5"	100%	Three	100	T = 8.6" (TO)
	Lower Course (to)	9-201	UT	1	543.5"	100%	Three	100	T = 8.6" (TO)
	Bottom Head	10-201	UT	1	As Access-ible	100%	Three	100	T = 5.3" Relief No. 001
B1.12	-Longitudinal-								
	Upper Course	Weld No.		(3)					
		1-201A	UT		99.5"	100%	Three	100	T = 10.75"
		1-201B	UT		99.5"	100%	Three	100	
		1-201C	UT		99.5"	100%	Three	100	
	Intermediate Course	Weld No.		(3)					
		2-201A	UT		108.8"	100%	Three	100	T = 8.6"
		2-201B	UT		108.8"	100%	Three	100	
		2-201C	UT		108.8"	100%	Three	100	
	Lower Course	Welds No.		(3)					
		3-201A	UT		106.5"	100%	Three	100	T = 8.6"
		3-201B	UT		106.5"	100%	Three	100	
		3-201C	UT		106.5"	100%	Three	100	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-A	Reactor Vessel - Cont'd	[1.1-1]			Exam'n area meets or exceeds req't of figure IWB-2500-3				
B1.20	Head Welds	Top Head							Serial No. C.E. 68201
B1.21	- Circumferential -	Weld No.							Relief No.002
	Bottom Head	4-202		1	Not Accessible		-	-	T = 5.3"
	Closure Head	6-205B		1	Not Accessible		-	-	T = 7.0"
B1.22	- Meridional Welds -	Weld No.					-	-	Relief No.002
	Bottom Head	1-202A	UT	1		100%[1]	Three	100	T = 5.3"
		1-202B	UT	1		100%[1]	Three	100	[1]Portion of welds examined is dependent on examination vendor selected, and capability of their equipment.
		1-202C	UT	1		100%[1]	Three	100	
		1-202D	UT	1		100%[1]	Three	100	
		1-202E	UT	1		100%[1]	Three	100	
		1-202F	UT	1		100%[1]	Three	100	
	Closure Head @Stud	Weld No.			[2]As Accessible				Relief No.002
	#5-6	1-205A	UT	2	38"	100%	One	16	T = 7.0"
	#14-15	1-205B	UT		38"	100%	One	33	
	#23-24	1-205C	UT	2	38"	100%	Two	50	[2] Below CRD vent shroud
	#33-34	1-205D	UT		38"	100%	Two	66	
	#41-42	1-205E	UT	2	38"	100%	Three	83	
	#50-51	1-205F	UT		38"	100%	Three	100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 3 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-A	Reactor Vessel - Cont'd	[1.1-1]			Exam'n area meets Req'ts of figure IWB-2500-4				
B1.30	Shell To Flange Weld	Weld No.	UT		As Accessible				T = 10.75"
		7-201 (From Flange)		1	182"	34%	One	33	0°
					182"	34%	Two	66	Exam. From
					182"	34%	Three	100	Flange Face
					Exam'n area meets Req'ts of figure IWB-2500-5				
B1.40	Head To Flange Weld	Weld No.	UT		As Accessible				Relief No. 003
		6-205A		1	182"	34%	One	33	T = 7.0"
					182"	34%	Two	66	
					182"	34%	Three	100	
B1.50	Repair Welds								
B1.51	Beltline Region (Vessel Base Metal)								No known repair in base metal in core region. One weld repair each in welds 2-201B and 2-201C are the only known repair areas.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 4 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd	[1.1-1]			Exam'n area meets Req'ts of figure IWB-2500-7				
B-D	Full Penetration Welds of Nozzles in Vessels								
B3.90	Nozzle To Vessel Welds				As Accessible				Relief No. 004 Code Case 1647 (N-73)
B3.100	Nozzle inside radius section								
		Weld No's							
B3.90	Outlet Nozzle Loop 1	2*1-29SPL	UT	1	360°	100%	One	13	From Bore
B3.90		@ 202°	UT				Three	13	From Shell
B3.100			UT				One	13	Inner Radius
	Outlet Nozzle Loop 2	2*2-29SPL	UT	1	360°	100%	One	25	From Bore
		@ 158°	UT				Three	25	From Shell
			UT				One	25	Inner Radius
	Outlet Nozzle Loop 3	2*3-29SPL	UT	1	360°	100%	Three	38	From Bore
		@ 22°	UT				Three	38	From Shell
			UT				Three	38	Inner Radius
	Outlet Nozzle Loop 4	2*4-29SPL	UT	1	360°	100%	Three	50	From Bore
		@ 338°	UT				Three	50	From Shell
			UT				Three	50	Inner Radius
	Inlet Nozzle Loop 1	2*9-27.5SPL	UT	1	360°	100%	Three	63	From Bore
		@ 247°	UT				Three	63	From Shell
			UT				Three	63	Inner Radius
	Inlet Nozzle Loop 2	2*10-27.5SPL	UT	1	360°	100%	Three	75	From Bore
		@ 113°	UT				Three	75	From Shell
			UT				Three	75	Inner Radius

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 5 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-D	Reactor Vessel - Cont'd [1.1-1]								
B3.90	Inlet Nozzle Loop 3	2*11-27.5SPL @ 63°	UT	1	360°	100%	Three	88	From Bore
B3.90			UT				Three	88	From Shell
B3.100			UT				Three	88	Inner Radius
	Inlet Nozzle Loop 4	2*12-27.5SPL @ 293°	UT	1	360°	100%	Three	100	From Bore
			UT				Three	100	From Shell
			UT				Three	100	Inner Radius

NOTE: Code Category B-E references pressure test, see Table 5.1.

B-F Pressure Retaining Dissimilar Metal Welds

B5.10 Nozzle Safe Ends Welds

See Table 1.4, page 2.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 6 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-G-1	Reactor Vessel - Cont'd Pressure Retaining Bolting (Larger Than 2 in. dia.)	[1.1-1]						
B6.10	Closure Head Nuts	RPV Stud Nuts No. 1 (to) No. 54	MT or PT	54	18 Nuts 100% 18 " 18 " Exams area meets req'ts of figure IWB-2500-12	One Two Three	33 66 100	OD=10.56" HT=7.94" OD=6.8" L=57.7"
B6.20	Closure Studs (In Place)	RPV Studs No. 1 (to) No. 54	UT	54		-	-	It is anticipated that studs will be removed as scheduled. Should that not be possible, studs will be examined in place as scheduled for removed studs. Interval end deferral is not anticipated.
B6.30	Closure Studs (When Removed)	RPV Studs No. 1 (to) No. 54	UT PT or MT	54	18 Studs 100% 18 " 18 " Exam area meets or exceeds req'ts of figure IWB-2500-4	One Two Three	33 66 100	
B6.40	Flange Ligaments (Between Stud Holes)	RPV Ligaments No. 1 (to) No. 54	UT	54	18 Ligaments 100% 18 " 18 "	One Two Three	33 66 100	
	Stud Holes in Flange	Threads	VT-1	54	18 Holes 100% 18 " 18 "	One Two Three	33 66 100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1
PAGE 7 of 9

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd	[1.1-1]							
B6.50	Closure Washers (and Bushing*)	RPV Stud Washer Pair No.1 (to) No. 54	VT-1	54 (Pair)	18 Pair 18 Pair 18 Pair	100%	One Two Three	33 66 100	*Bushings not applicable
B-G-2	Pressure Retaining Bolting (2 in. Dia. and Less)								
B.7.10	Marmon Clamps	Conoseal Bolts (For) In-Core Thermocouples Total of five assemblies, three bolts each	VT-1	15 (Bolts)	15 bolts 15 bolts 15 bolts	100% 100% 100%	One Two Three	33 66 100	NOTE: All clamps and bolts examined once each inspection period during a scheduled refueling outage.
B-H	Vessel Supports								
B8.10	Integrally Welded Attachments		-	-	-		-	-	B8.10 Item not applicable - vessel is supported by integral cast nozzle pads.

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Reactor Vessel
TABLE: 1.1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd [1.1-1]							
B-N-1	Interior of Reactor Vessel							
B13.10	Vessel Interior	Upper and Lower Internals Thermal Shield Drive Rods	VT-3	-	100% of surface area made accessible by removal of components during normal refueling outages	One Two Three	100 100 100	At first scheduled refueling outage and two subsequent outages at approximately three year increments.
B-N-3	Removable Core Support Structure							
B13.30	Core Support Structure	- RPV - (Core Barrel Area)	VT-3	-	100% of welds and surface area made accessible by removal of core barrel and supporting structure	Three	100	Includes core support welds and attachment lugs
		Core Barrel	VT-3	-	100% of core barrel welds and surface areas made accessible by core barrel's removable from vessel	Three	100	Examine to extent practical

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reactor Vessel - Cont'd [1.1-1]							
B-O	Pressure Retaining Welds in Control Rod Housing				Exam. area meets or exceeds req'ts fig. IWB-2500-18			
B14.10	Welds in CRD Housing	CRDM	PT	73	3 Welds 360° NOTE: There are twenty-four peripheral CRD Housing Welds	Three	10	Surface exam elected to be performed

END OF TABLE 1.1

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Pressurizer
TABLE: 1.2
PAGE 1 of 4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Pressurizer Vessel	Serial No. W 1171 DWG. Ref. DC663208-15-1			Exam'n area meets or exceeds req'ts of Figure IWB-2500-1 and Figure IWB-2500-2				
B-B	Pressure Retaining Welds in Vessels Other Than Reactor								
									[*] ISI DWG Page No. of Figure
B2.10	Pressurizer Vessel Shell to Head Welds								
B2.11	- Circumferential -	* [1.2-1]			(Length)				T = 4.2" L = 291"
	Bottom Head to Lower Course	Weld No. Girth 1	UT	1	97"	100%	One	33	
					97"		Two	66	
					97"		Three	100	
									Note remarks for B2.12
	Upper Course to Top Head	Weld No. Girth 5	UT	1	97"	100%	One	33	T = 4.2"
					97"		Two	66	L = 291"
					97"		Three	100	
B2.12	-Longitudinal- Lower Course @ Bottom Head	Weld No. Long'l 6	UT	1	12"	9%[1]	One	9	Schedule exam area for first and second period to enable coincident examination of circumferential and longitudinal welds
	Upper Course @ Top Head	Weld No. Long'l 9	UT	1	12"	9%[1]	Two	9	[1] equals 100% of Code req't

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Pressurizer
TABLE: 1.2
PAGE 2 of 4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-B	Pressurizer Vessel-Cont'd	[1.2-1]							
B2.20	Head Welds								B2.20 items are not applicable upper and lower heads are cast carbon steel
B2.21	- Circumferential								
B2.22	- Meridional								
B-D	Full Penetration Welds of Nozzles in Vessels				Exam area meets req'ts of Fig. IWB-2500-7 as accessible				
B3.110	Nozzle to Vessel Welds								
B3.120	Nozzle Inside Radius Section (Upper Head)								Relief No. 005
	Surge Line Nozzle @ Line 2*16-16-SPL	WIB-439 N/S Inner Radius	UT	1	1	100% as accessible	1	100	Bottom Head
	Spray Line Nozzle @ Line 2S6-15.4SPL	WIB-346 N/S Inner Radius	UT	1	1	100%	2	100	Center of top head
	Relief Line Nozzle @ Line 2S6-730-6SPL	WIB-379 N/S Inner Radius	UT	1	1	100%	3	100	81° C.W. from manway C.L.
	Safety Nozzle @ Line 2S6-729-6SPL	WIB-368 N/S Inner Radius	UT	1	1	100%	1	33	147° C.W. from manway C.L.
	Safety Nozzle @ Line 2S6-728-6SPL	WIB-422A N/S Inner Radius	UT	1	1	100%	2	66	213° C.W. from manway C.L.
	Safety Nozzle @ Line 2S6-727-6SPL	WIB-358 N/S Inner Radius	UT	1	1	100%	3	100	279° C.W. from manway C.L.

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-D	Pressurizer Vessel - Cont'd							
B3.120	Nozzle Inside Radius Section, Cont'd							
	Lower Head	Surge Noz. @ Loop 2 *16-14SPL		1	Not Accessible			Relief No. 005

NOTE: Code Category B-E references pressure test, See Table 5.1

B-F	Pressure Retaining Dissimilar Metal Welds							
B5.20	Nozzle to Safe-End Welds							
	See Table 1.4, page 4							

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

REV. 4

MAJOR ITEM: Pressurizer
TABLE: 1.2
PAGE 4 of 4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Pressurizer Vessel- Cont'd	[1.2-1]							
B-G-1	Pressure Retaining Bolting (Larger Than 2 In. Dia.)								
B6.60 B6.70	Bolts & Studs, (In place) Bolts & Studs, (When Removed)								B6.60 & B6.70 Item not applicable
B-G-2	Pressure Retaining Bolting (2 in. dia. and less)								
B7.20	Upper Head	Manway Bolting	(VT-1)	16	5 Bolts 5 " 6 "	100%	One Two Three	31 62 100	Bolting may be examined in place, or when removed. (accessible surfaces)
B-H B8.20	Vessel Supports Integrally Welded Attachments (Support)								Exam area meets or exceeds req'ts of Fig. IWB-2500-14
	Support Skirt	Weld No. Girth 10	(UT)	1	97" 97" 97"	100%	One Two Three	33 66 100	T = 1.5" L = 291"

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1

REV. 4

MAJOR ITEM: Steam Generators
TABLE: 1.3
PAGE 1 of 5

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION		NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators	DWG. REF. DC-663206-77-1 * [1.3-1]				Exam'n area meets or exceeds req'ts of Figure IWB-2500-6(B)				[*] ISI DWG Page No.
B-B	Pressure Retaining Welds in Vessels Other Than Reactor Steam Generators - Primary Side -									See section 2.1 for secondary side
B2.30	Head Welds									
B2.31 B2.32	Circumferential and Meridional Welds									B2.31 & B2.32 Items not applicable, channel heads are cast carbon steel
B2.40	Tubesheet to Head Welds	Weld No.								
	Steam Generator 2-1 (Serial No. 1161)	Channel W	1-1	UT	1	12'	100%	One	33	T = 5.16"
						12'		Two	66	L = 36'
						12'		Three	100	
	Steam Generator 2-2 (Serial No. 1162)	Channel W	2-1	UT	1	12'	100%	One	33	
						12'		Two	66	
						12'		Three	100	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION		NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-B	Steam Generators - Cont'd	[1.3-1]								
		Weld No.								
	Steam Generator 2-3 (Serial No. 1163)	Channel W	3-1	UT	1	12'	100%	One	33	T = 5.16"
						12'		Two	66	L = 36'
						12'		Three	100	
	Steam Generator 2-4 (Serial No. 1164)	Channel W	4-1	UT	1	12'	100%	One	33	
						12'		Two	66	
						12'		Three	100	
B-D	Full Penetration Welds of Nozzles									
B3.130	Nozzle to Vessel Welds									B3.130 Weld Examination Not Applicable - Nozzles are integrally cast to channel head
B3.140	Nozzle Inside Radius Section (Channel Head)									
		Channel Hd								
	Steam Generator 2-1	Inlet *1-29SPL								See Relief Request No. 015 for inner radius
		Outlet *5-31SPL								
	Steam Generator 2-2	Inlet *2-29SPL								
		Outlet *6-31SPL								

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators - Cont'd	[1.3-1]						
B-D	Full Penetration Welds of Nozzles in Vessels							
	Steam Generator 2-3	Inlet *3-29SPL						Relief No. 015
		Outlet #7-31SPL						
	Steam Generator 2-4	Inlet *4-29SPL						
		Outlet #8-31SPL						
NOTE:	Code Category B-E Not Applicable to Stm. Gen.'s							
B-F	Pressure Retaining Dissimilar Metal Welds							
B5.30	Nozzle to Safe-End Welds							
	(Channel Head)							
	See Table 1.4, page 2							

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators - Cont'd	[1.3-1]							
B-G-1	Pressure Retaining Bolting (Larger Than 2 in. dia.)								B-G-1 Items Not Applicable
B-G-2	Pressure Retaining Bolting (2 in. dia. and Less)								
B7.30	Bolts, Studs, and Nuts	Channel Hd Manway Bolting		128	(Total)				
	Steam Generator 2-1	No. 1(to)No. 16	VT-1	16	16 Studs	100%	One	12	Inlet
		"	VT-1	16	16 Studs and Nuts		One	25	Outlet
	Steam Generator 2-2	No. 1(to)No. 16	VT-1	16	16 Studs	100%	Two	37	Inlet
		"	VT-1	16	16 Studs and Nuts		Two	50	Outlet
	Steam Generator 2-3	No. 1(to)No. 16	VT-1	16	16 Studs	100%	Three	62	Inlet
		"	VT-1	16	16 Studs and Nuts		Three	75	Outlet
	Steam Generator 2-4	No. 1(to)No. 16	VT-1	16	16 Studs	100%	Three	87	Inlet
		"	VT-1	16	16 Studs and Nuts		Three	100	Outlet
B-H	Vessel Supports								
B8.30	Integrally Welded Attachments								B8.30 Item Not applicable. Vessel is supported by integrally cast pads.

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators - Cont'd	[1.3-1]						
B-Q	Steam Generator Tubing							
B16.10	Straight Tube Design							B16.10 Item Not Applicable
B16.20	U-Tube Design Steam Generator							
		Tube Map		Tubes				
		Gen 2-1	ET	3,388	102 (*)		3%	*10CFR50 Requires Program to be Based on the Plant's Approved Technical Specification (3/4.4.5) Ref: 10CFR50.55a(b)(2)(iii)
		Gen 2-2	ET	3,388	102 (*)		3%	
		Gen 2-3	ET	3,388	102 (*)		3%	
		Gen 2-4	ET	3,388	102 (*)		3%	

End of Table 1.3

ASME SECTION XI CODE CLASS 1 PIPING SYSTEM WELDS

The extent and frequency of examination for pipe welds scheduled in the following table conforms to Tables IWB-2500 and IWB-2600, Category B-J, in the 1974 Edition of Section XI through Summer 1975 Addenda. This requires all of the area of 25% of the circumferential joints, including the adjoining 1-foot section of longitudinal joints, and 25% of the pipe branch connection joints to be examined each inspection interval. Weld selection distribution has been made to assure a representative sampling from all Code Class 1 lines in the Plant.

NOTE: An internal inconsistency in the Summer 1978 Addenda required branch connection welds between two and four inches nominal branch size to receive volumetric examination, while pipe welds require volumetric examination only if they are four inch nominal pipe size or greater. This condition was corrected in the Winter 1980 Addenda (referenced in 10CFR50.55a) to require volumetric examination of those branch connections greater in than or equal to four inch diameter. As a result, branch connections four inches and greater in nominal diameter are scheduled for volumetric and surface examination, while those less than four inch in nominal diameter are scheduled for surface examination only.

Occasional portions of certain pipe welds are inaccessible for examination. See request for relief #NDE-009. Any inaccessible portions will be fully documented and the remaining weld area examined to the fullest extent possible as scheduled. An estimate of the percentage of the code - required examination that can be completed for welds having limited accessibility is provided in Appendix B, as discussed in NDE-009.

Ref. 10CFR50.55 a (b)(2)(ii)

CATEGORY ITEM	COMPONENT OR SYSTEM		GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-F	Pressure Retaining Dissimilar Metal Welds		Reactor Vessel Piping "Pup" is 316 stainless welded directly to RPV clad buttering. "Pup" to pipe is not considered a bi-metallic weld joint.			Volumetric exam scheduled coincident with vessel nozzle exam. per Section XI See Appendix A for piping schedule/cal. std. Exam area meets or exceeds req'ts of Fig. IWB-2500-8				Welds are those referenced in Cat'y B-F, B5.10, Table 1.1, Page 4 of 9
B5.10	Piping-Safe End Welds		Note B9.10 for system schedule continuation							[ ] ISI DWG. Page No. ( ) Construction Dwg.Page No.
			Weld No. & Line No.							
	Outlet Nozzle (RC2-1)	Loop 1 [1.4-1]	WIB-RC-1-1SE 2*1-29SPL	PT UT	1	360°	100%	One One		
	Outlet Nozzle (RC2-2)	Loop 2 [1.4-2]	WIB-RC-2-1SE 2*2-29SPL	PT UT	1	360°	100%	One One	25 (Vol)	
	Outlet Nozzle (RC2-3)	Loop 3 [1.4-3]	WIB-RC-3-1SE 2*3-29SPL	PT UT	1	360°	100%	Three Three	38 (Sur)	Two safe ends will be volumetrically examined the first inspection period. Remaining nozzles volumetric examination may be deferred until the end of the inspections interval (Category B-F, Footnote 2)
	Outlet Nozzle (RC2-4)	Loop 4 [1.4-4]	WIB-RC-4-1SE 2*4-29SPL	PT UT	1	360°	100%	Two Three		
	Inlet Nozzle (RC2-1)	Loop 1 [1.4-1]	WIB-RC-1-16SE 2*9-27.5SPL	PT UT	1	360°	100%	Two Three	63 (Sur)	
	Inlet Nozzle (RC2-2)	Loop 2 [1.4-2]	WIB-RC-2-16SE 2*10-27.5SPL	PT UT	1	360°	100%	Three Three		
	Inlet Nozzle (RC2-3)	Loop 3 [1.4-3]	WIB-RC-3-16SE 2*11-27.5SPL	PT UT	1 1	360°	100%	Three Three		
	Inlet Nozzle (RC2-4)	Loop 4 [1.4-4]	WIB-RC-4-16SE 2*12-27.5SPL	PT UT	1	360°	100%	Three Three	100 (Sur, Vol)	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-F	Pressure Retaining Dissimilar Metal Welds - Cont'd	Nozzle end reducer sections are 316 SS welded directly to nozzle. Reducer to pipe is not considered a Bi-metallic weld joint.			Exam area meets or exceeds req'ts of fig. IWB-2500-8				Welds are those referenced in Cat'y B-F, B5.20, Table 1.2, Page 3 of 4
B5.20	Piping-Safe Ends, Cont'd	Note B9.10 for system schedule continuation							
	Pressurizer	Weld No. & Line No.		6	(Total)				(Pzr=Pressurizer)
	Pzr 2RV-8010A, Inlet (2-7-17) [1.4-19]	WIB-369SE 2S6-729-6SPL	PT UT	1	21"	360°	One	17	(Upper Head)
	Pzr 2RV-8010B, Inlet (2-7-19) [1.4-20]	WIB-423SE 2S6-728-6SPL	PT UT	1	21"	360°	One	33	
	Pzr 2RV-8010C, Inlet (2-7-18) [1.4-21]	WIB-359SE 2S6-727-6SPL	PT UT	1	21"	360°	Two	50	
	Pzr Power RV, Inlet (2-7-20 [1.4-22]	WIB-380SE 2S6-730-6SPL	PT UT	1	21"	360°	Two	66	
	Pzr Spray Line (2-7-24) [1.4-26]	WIB-345SE 2S6-15-4SPL	PT UT	1	14"	360°	Three	83	
	Pzr Surge Line (P445893) [1.4-5]	WIB-439SE 2*16-14SPL	PT UT	1	44"	360°	Three	100	(Lower Head)
B5.30	Piping - Safe Ends (Cont'd)								
	Steam Generator								
	Steam Generator 2-1 Reactor Coolant Out Loop 1 (RC2-1) [1.4-1]	WIB-RC-1-5SE 2*1-29SPL	PT UT	1	92"	360°	One	13	Inlet

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-F	Pressure Retaining Dissimilar Metal Welds - Cont'd	NOTE: Stainless steel piping is welded directly to Nozzle but treated as "safe ends"			Exam area meets or exceeds req'ts of Fig. IWB-2500-8				Welds are those referenced in, Cat'y B-F, B5.30, Table 1.3, Page 3 of 5
B5.30	Piping - Safe Ends, Cont'd	Note B9.10 for system schedule continuation							
	Steam Generator	Welds No. & Line No.		8	Total				
	Reactor Coolant Pp Suct Loop 1 (RC2-1) [1.4-1]	WIB-RC-1-6SE 2*5-31SPL	PT UT	1	98"	360°	One	25	Outlet
	Steam Generator 2-2 Reactor Coolant Out Loop 2 (RC2-2) [1.4-2]	WIB-RC-2-5SE 2*2-29SPL	PT UT	1	92"	360°	Two	38	Inlet
	Reactor Coolant Pp Suct Loop 2 (RC2-2) [1.4-2]	WIB-RC-2-6SE 2*6-31SPL	PT UT	1	98"	360°	Two	50	Outlet
	Steam Generator 2-3 Reactor Coolant Out Loop 3 (RC2-3) [1.4-3]	WIB-RC-3-5SE 2*3-29SPL	PT UT	1	92"	360°	Three	63	Inlet
	Reactor Coolant Pp Suct Loop 3 (RC2-3) [1.4-3]	WIB-RC-3-6SE 2*7-31SPL	PT UT	1	98"	360°	Three	75	Outlet
	Steam Generator 2-4 Reactor Coolant Out Loop 4 (RC2-4) [1.4-4]	WIB-RC-4-5SE 2*4-29SPL	PT UT	1	92"	360°	Three	88	Inlet
	Reactor Coolant Pp Suct Loop 4 (RC2-4) [1.4-4]	WIB-RC-4-6SE 2*8-31SPL	PT UT	1	98"	360°	Three	100	Outlet

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-G	Piping - Cont'd								
B-G-1	Pressure Retaining Bolting (Larger than 2 Inch dia.)								B-G-1 Items not applicable.
B-G-2	Pressure Retaining Bolting (2 Inch dia. & Less)								
B7.50	Bolts, Studs and Nuts								
	3 Inch Diameter Pipe	Line No. & Flange No.			Flange Bolting Percentage by System Amount				
	Loop 1 RTD Manifold Rtn Hdr (2-7-13) [1.4-27]	2S6-1141-3SPL 2-FE-499A	VT-1	8 16	8 Studs 16 Nuts	100%	One	25	FE = Flow Element
	Loop 2 RTD Manifold Rtn Hdr (2-7-25) [1.4-28]	2S6-1147-3SPL 2-FE-499B	VT-1	8 16	8 Studs 16 Nuts	100%	Two	50	
	Loop 3 RTD Manifold Rtn Hdr (2-7-15) [1.4-29]	2S6-1153-3SPL 2-FE-499C	VT-1	8 16	8 Studs 16 Nuts	100%	Three	75	
	Loop 4 RTD Manifold Rtn Hdr (2-7-16) [1.4-30]	2S6-1158-3SPL 2-FE-499D	VT-1	8 16	8 Studs 16 Nuts	100%	Three	100	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-G-2 B7.50	Piping - Cont'd Bolting - Cont'd								
	2 Inch Diameter Pipe	Line No. & Flange No.			Flange Bolting Percentage by System Amount				Flange Between Welds Number - Below
	Loop 1 Cold Leg RTD Con Con (7-441) [1.4-55]	2S6-1140-2SPL	VT-1	8 16	8 Studs 16 Nuts	100%	One	25	WIB-981/WIB-982
	Loop 2 Cold Leg RTD Con (7-452) [1.4-56]	2S6-1146-2SPL	VT-1	8 16	8 Studs 16 Nuts	100%	Two	50	WIB-1003/WIB-1004
	Loop 3 Cold Leg RTD Con (7-447) [1.4-57]	2S6-1152-2SPL	VT-1	8 16	8 Studs 16 Nuts	100%	Three	75	WIB-1022/WIB-1023
	Loop 4 Cold Leg RTD Con (7-446) [1.4-58]	2S6-1159-2SPL	VT-1	8 16	8 Studs 16 Nuts	100%	Three	100	WIB-1035/WIB-1036
	1.5 Inch Diameter Pipe	After 2x1.5" Reducer							Welds Number - Below
	Reac Cool Pp 1 Seal Wtr In (8-599) [1.4-40]	2S6-54-1.5	VT-1	4 8	4 Studs 8 Nuts	100%	One	20	WIB-842/WIB-843
	Reac Cool Pp 2 Seal Wtr In (8-602) [1.4-41]	2S6-5398-1.5* Two Flanges	VT-1	8 16	8 Studs 16 Nuts	100%	Two	60	Two Flanges WIB-857/WIB-858 WIB-858S/WIB-858T * Formerly Line 2-55
	Reac Cool Pp 3 Seal Wtr In (8-597) [1.4-42]	2S6-56-1.5	VT-1	4 8	4 Studs 8 Nuts	100%	Three	80	WIB-869/WIB-870
	Reac Cool Pp 4 Seal Wtr In (8-598) [1.4-43]	2S6-57-1.5	VT-1	4 8	4 Studs 8 Nuts	100%	Three	100	WIB-882/WIB-883

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-G-2	Piping - Cont'd								
B7.50	Bolting - Cont'd								
	1.5 Inch Diameter Pipe	Line No. & Flange No.			Flange Bolting Percentage by System Amount				FE = Flow Element
	Boron Inj Tk Out Loop 1 C.L. (9-436) [1.4-59]	2S6-1991-1.5 2-FE-924	VT-1	4 8	4 Studs 8 Nuts	100%	One	25	
	Boron Inj Tk Out Loop 2 C.L. (9-431) [1.4-61]	2S6-1992-1.5 2-FE-925	VT-1	4 8	4 Studs 8 Nuts	100%	Two	50	
	Boron Inj Tk Out Loop 3 C.L. (9-437) [1.4-63]	2S6-1993-1.5 2-FE-926	VT-1	4 8	4 Studs 8 Nuts	100%	Three	75	
	Boron Inj Tk Out Loop 4 C.L. (9-439) [1.4-65]	2S6-1994-1.5 2-FE-927	VT-1	4 8	4 Studs 8 Nuts	100%	Three	100	

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MAJOR ITEM: Piping Welds (B-J)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Pressure Retaining Welds in Piping							
B9.10	Nominal Pipe size 4 in. and Greater				Exam'n area meets or exceeds req'ts of figure IWB-2500-8			
	B-J Items are identified by System Under Applicable Code Item*							*Schedule in accordance with discussion on page 1, this table.
B9.11	Circumferential Welds (Including Intersecting Longitudinal Welds)							One foot of each longitudinal weld will be done at the intersection with the circumferential weld.
B9.12	Longitudinal Welds							
	Longitudinal welds are scheduled together with the intersecting circumferential welds. See B9.11 items.							Longitudinal seam welds "composite" 60% See B9.11

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								( ) Construction Dwg. No.
B9.10	Nominal Pipe Size 4 In. & Greater				Exam'n area meets or exceeds req'ts of Figure IWB-2500-8				
B9.11	31 Inch Nom. Diameter	Line No. & ISI DWG No.							6 Sch'd
B9.12	Reactor Coolant Pp Suct Loop 1 *(RC2-1)	2*5-31SPL [1.4-1]	PT & UT	5	1 Weld	360°	One	5	WIB-RC-1-11 and one foot of upper and lower seam
	Reactor Coolant Pp Suct Loop 2 (RC2-2)	2*6-31SPL [1.4-2]	PT & UT	5	1 Weld 2 Welds	360° 360°	One Two	10 20	WIB-RC-2-11 and one foot of upper and lower seams WIB-RC-2-8 and one foot of upper and lower seams WIB-RC-2-9 and one foot of upper and lower seams T = 2.495

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MAJOR ITEM: Piping Welds (B-J)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.10	(4 In. & Greater)								
B9.11	Circ. and								
B9.12	Long'l Welds Cont'd								
	31 In. Nom. Dia. Cont'd	Line No. & ISI DWG No.							
	Reactor Coolant Pp Suct Loop 3 (RC2-3)	2*7-31SPL [1.4-3]	PT & UT	5	1 Weld	360°	Three	25	WIB-RC-3-11 and one foot of upper and lower seams
	Reactor Coolant Pp Suct Loop 4 (RC2-4)	2*8-31SPL [1.4-4]	PT & UT	5	1 Weld	360°	Three	30	WIB-RC-4-11 and one foot of upper and lower seams
									RC Pipe "Composite" 25%
B9.11	Circumferential welds								1 Sch'd
	29 Inch Nom. Diameter[2]								
	Reactor Coolant Out Loop 1 (RC2-1)	2*1-29 SPL [1.4-1]		3					[2]29" dia. welds are not considered to be highest stress loaded
	Reactor Coolant Out Loop 2 (RC2-2)	2*2-29 SPL [1.4-2]	PT & UT	3	1 Weld		Two	8	WIB-RC-2-4
	Reactor Coolant Out Loop 3 (RC2-3)	2*3-29 SPL [1.4-3]		3					T = 2.335
	Reactor Coolant Out Loop 4 (RC2-4)	2*4-29 SPL [1.4-4]		3					Choice of listed welds will be made to equal scheduled percentage for each size throughout

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.10	Piping - Circ'l Cont'd (4 In. & greater)								
B9.11	27.5 inch Nom. Diameter	Line No. & ISI DWG. No.							5 Sch'd
	Reactor Coolant Pump Disch Loop 1 (RC2-1)	2*9-27.5SPL [1.4-1]	PT & UT	4	1 Weld	360°	One	6	WIB-RC-1-12
	Reactor Coolant Pump Disch Loop 2 (RC2-2)	2*10-27.5SPL [1.4-2]	PT & UT	4	2 Welds	360°	Two	18	WIB-RC-2-12 WIB-RC-2-15
	Reactor Coolant Pump Disch Loop 3 (RC2-3)	2*11-27.5SPL [1.4-3]	PT & UT	4	1 Weld	360°	Three	25	WIB-RC-3-12
	Reactor Coolant Pump Disch Loop 4 (RC2-4)	2*12-27.5SPL [1.4-4]	PT & UT	4	1 Weld	360°	Three	31	WIB-RC-4-12
									T = 2.215

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.10	Piping - Circ'l Cont'd (4 In & Greater)	Specific weld identification number will be listed on ISI Exam. Schedules to be issued prior to each Refueling Outage						for each pipe sys.	
B9.11	14 Inch Nom. Diameter	Line No. & ISI DWG No.							7 Sch'd 14 In. "Composite" 25%
	Pressurizer Surge Line (P445893)	2*16-14SPL [1.4-5]	PT & UT	9	1 Weld 1 Weld	360°	One Two	11 22	
	Hot Leg Recirc Before 2V-8702 (2-10-21,22)	2S6-109-14SPL [1.4-10]	PT & UT	12	1 Weld 2 Welds	360°	One Two	8 25	
	Loop 4 Hot Leg Before 2V-8701 (2-10-21,22)	2S6-1665-14SPL [1.4-10]	PT & UT	7	2 Welds	360°	Three	28	
B9.11	10 Inch Nom. Diameter								9 Sch'd 10 In. "Composite" 25%
	Accumulator Injection Loop 1 (2-9-11)	2S6-253-10SPL [1.4-6]	PT & UT	10	1 Weld 1 Weld	360°	One Two	10 20	
	Accumulator Injection Loop 2 (2-9-12)	2S6-254-10SPL [1.4-7]	PT & UT	10	1 Weld 1 Weld	360°	One Two	10 20	
	Accumulator Injection Loop 3 (2-9-13)	2S6-255-10SPL [1.4-8]	PT & UT	6	1 Weld 1 Weld	360°	One Two	17 33	
	Accumulator Injection Loop 4 (2-9-14)	2S6-256-10SPL [1.4-9]	PT & UT	10	1 Weld 1 Weld 1 Weld	360°	One Two Three	10 20 30	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.10	Piping - Circ'l Cont'd (4 In. & Greater)								
B9.11	8 Inch Nom. Diameter	Line No. & ISI DWG No.							3 Sch'd 8 In. "Composite" 27%
	SIS to RCS Loop 1 Hot Leg (2-9-31A/449)	2S6-2575-8 [1.4-11]	PT & UT	5	1 Weld	360°	One	20	
	SIS to RCS Loop 2 Hot Leg (2-9-31B/450)	2S6-2576-8 [1.4-12]	PT & UT	6	1 Weld 1 Weld	360°	Two Three	17 33	
B9.11	6 Inch Nom. Diameter								29 Sch'd 6 In. "Composite" 25%
	Safety Inj. Loop 1 Hot Leg (2-9-31A/449)	2S6-235-6SPL+ [1.4-11]	PT & UT	10	1 Weld 1 Weld 1 Weld	360°	One Two Three	10 20 30	SI (to) 2*1-29SPL
	Safety Inj Loop 2 Hot Leg (2-9-31B/450)	2S6-236-6SPL+ [1.4-12]	PT & UT	12	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 17 25	SI (to) 2*2-29SPL
	Safety Inj Loop 3 Hot Leg (2-9-35)	2S-237-6 SPL+ [1.4-13]	PT & UT	11	1 Weld 1 Weld	360°	One Two	9 18	SI (to) 2*3-29SPL
	Safety Inj Loop 4 Hot Leg (2-9-36)	2S6-238-6SPL [1.4-14]	PT & UT	8	1 Weld 1 Weld	360°	One Three	13 25	SI (to) RHR 2S6-109-14SPL

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.10 B9.11	Piping - Circ'l Cont'd (4 In. & Greater) 6 In. Nom. Diameter, Cont'd	Line No. & ISI DWG. No.							
	RHR Pp 2-1 Inj Cold Leg 1 (2-9-33/412)	2S6-3844-6SPL [1.4-15]	PT & UT	8	1 Weld 1 Weld	360°	Two Three	13 25	
	RHR Pp 2-1 Inj Cold Leg 2(2-9-32/413)	2S6-3845-6SPL [1.4-16]	PT & UT	10	1 Weld 1 Weld 1 Weld	360°	One Two Three	10 20 30	
	RHR Pp 2-2 Inj Cold Leg 3 (2-9-34/446)	2S6-3846-6SPL [1.4-17]	PT & UT	8	1 Weld 1 Weld	360°	One Two	13 25	
	RHR Pp 2-2 Inj Cold Leg 4 (2-9-21/34)	2S6-3847-6SPL [1.4-18]	PT & UT	12	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 17 25	
	Pressurizer Inlet 2RV-8010A (2-7-17)	2S6-729-6SPL+ [1.4-19]	PT & UT	8	1 Weld 1 Weld	360°	One Two	13 25	
	Pressurizer Inlet 2RV-8010B (2-7-19)	2S6-728-6SPL+ [1.4-20]	PT & UT	8	1 Weld 1 Weld	360°	One Two	13 25	
	Pressurizer Inlet 2RV-8010C (2-7-18)	2S6-727-6SPL [1.4-21]	PT & UT	8	1 Weld 1 Weld	360°	One Two	13 25	

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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.10 B9.11	Piping - Circ'l Cont'd (4 In. & Greater) 6 in. Nom. Dia. Cont'd	Line No. & ISI DWG No.							
	Pressurizer Power R.V. (2-7-20)	S6-730-6SPL [1.4-22]	PT & UT	11	1 Weld 1 Weld 1 Weld	360°	One Two Three	9 18 27	
B9.11	4 Inch Nom. Diameter								22 Sch'd 4 In. "Composite" 25%
	Pressurizer RV 2PCV-455C (Inlet) (2-7-20)	2S6-4081-4SPL [1.4-22]	PT & UT	4	1 Weld	360°	One	25	
	Loop 1 Spray Line (2-7-12,10)	2S6-13-4SPL [1.4-23] [1.4-24]	PT & UT	30	2 Welds 3 Welds 3 Welds	360°	One Two Three	6 16 26	Spray to Pzr via 2S6-15-4 from 2*9-27.5 Loop 1
	Loop 2 Spray Line (2-7-10,11)	2S6-14-4SPL [1.4-24] [1.4-25]	PT & UT	27	2 Welds 2 Welds 2 Welds	360°	One Two Three	8 16 24	Spray to Pzr via 2S6-15-4 from 2*10-27.5 Loop 2
	Pressurizer Spray Line (2-7-24)	2S6-15-4SPL [1.4-26]	PT & UT	27	2 Welds 2 Welds 3 Welds	360°	One Two Three	7 15 26	Spray to Pzr from 2S6-13-4 and 2S6-14-4

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.20	Piping - Circ'l Cont'd (Less Than 4 In. Dia).				Exam'n area meets or exceeds req'ts Figure IWB-2500-8				
B9.21	Circumferential Welds 3 Inch Nom Diameter	Line No. & ISI DWG. No.							3 In. "Composite" 25% 42 Sch'd
	Loop 1 Hot Leg RTD Conn (2-7-13)	2S6-3488-3SPL [1.4-27]	PT	6	1 Weld 1 Weld	360°	Two Three	16 33	@V2-8073A To Junction 2S6-1141-3SPL
	Loop 1 Cold Leg RTD Conn (2-7-13)	2S6-3798-3SPL [1.4-27]	PT	2					@V2-8075A To Junction 2S6-1141-3SPL
	Loop 1 RTD Manifold Ret Hdr (2-7-13)	2S6-1141-3SPL [1.4-27]	PT	13	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 15 23	To Crossover From Junction 2-3488/2-3798
	Loop 2 Hot Leg RTD Conn (2-7-25)	S6-3489-3SPL [1.4-28]	PT	8	1 Weld 1 Weld	360°	Two Three	13 25	@V-8073B To Junction 2S6-1147-3SPL
	Loop 2 Cold Leg RTD Conn (2-7-25)	2S6-3799-3SPL [1.4-28]	PT	2					@V2-8075B To Junction 2S6-1147-3SPL
	Loop 2 RTD Manifold Ret Hdr (2-7-25)	2S6-1147-3SPL [1.4-28]	PT	9	1 Weld 1 Weld	360°	One Three	11 22	To Crossover From Junction 2-3489/2-3799

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.20	Piping - Circ'l Cont'd (Less Than 4 Inch Diameter)								
B9.21	3 Inch Nom. Diameter-Cont'd	Line No. & ISI DWG. No.							
	Loop 3 Hot Leg RTD Conn (2-7-15)	2S6-3495-3SPL [1.4-29]	PT	11	1 Weld 1 Weld 1 Weld	360°	One Two Three	9 18 27	@V2-8073C To Junction 2S6-1153-3SPL
	Loop 3 Cold Leg RTD Conn (2-7-15)	2S6-3800-3SPL [1.4-29]	PT	3	1 Weld	360°	One	33	@V2-8075C To Junction 2S6-1153-3SPL
	Loop 3 RTD Manifold Ret Hdr (2-7-15)	2S6-1153-3SPL [1.4-29]	PT	12	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 16 25	To Crossover From Junction 2-3495/2-3800
	Loop 4 Hot Leg RTD Conn (2-7-16)	2S6-3496-3SPL [1.4-30]	PT	7	1 Weld 1 Weld	360°	One Two	14 29	@V2-8073D To Junction 2S6-1158-3SPL
	Loop 4 Cold Leg RTD Conn (2-7-16)	2S6-3801-3SPL [1.4-30]	PT	2	1 Weld	360°	Two	50	@V2-8075D To Junction 2S6-1158-3SPL
	Loop 4 RTD Manifold Ret Hdr (2-7-16)	2S6-1158-3SPL [1.4-30]	PT	15	1 Weld 1 Weld 2 Welds	360°	One Two Three	7 13 27	To Crossover From Junction 2-3496/2-3801
	Charging Line Loop 4 (2-8-64)	2S6-246-3SPL [1.4-31]	PT	7	1 Weld 1 Weld	360°	One Three	14 29	CVCS Normal Charging

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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.20 B9.21	Piping - Circ'l Cont'd (Less Than 4 Inch Dia) 3 Inch Nom. Diameter Cont'd	Line No. & ISI DWG. No.							
	Charging Line Loop 3 (2-8-64)	2S6-50-3SPL [1.4-31]	PT	8	1 Weld 1 Weld	360°	Two Three	13 25	CVCS Alternate Charging
	Boron Inj Cold Leg Hdr (2-9-19)	2S6-1016-3SPL 2S6-1995-3SPL [1.4-32]	PT PT	4 8	1 Weld 1 Weld 1 Weld	360°	One Two Three	8 17 25	
	Letdown Line Loop 2 (2-7-8)	2S6-24-3SPL [1.4-33]	PT	21	2 Welds 1 Weld 2 Welds	360°	One Two Three	9 14 24	See p. 27 for socket welds @ 2 LCV-459
	Pressurizer Pwr RV* 2PCV-474 (2-7-22)	2S6-1171-3SPL [1.4-34]	PT	9	2 Welds	360°	One	22	*Combined Pzr Pwr RV Lines.
	Pressurizer Pwr RV* 2PCV-455C (2-7-21)	2S6-1172-3SPL [1.4-35]	PT	9	2 Welds	360°	Two	22	
	Pressurizer Pwr RV* 2PCV-456 (2-7-23)	2S6-1195-3SPL [1.4-36]	PT	11	3 Welds	360°	Three	27	

See item B9.40, socket welds this section Table No. 1.4, Pages 27 thru 31 for small bore circumferential welds (1.5 in dia.)

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.20	Piping - Circ'l (Cont'd) (Less Than 4 Inch Diameter)							
B9.22	Longitudinal Welds							B9.22 Not Applicable There are no seamed pipes or fittings NOTE: 2 Inch line fittings are forged type 304 Stainless

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.30	Piping - Cont'd Branch Pipe Connection Welds	Volumetric Exam'n to extent possible complies with the basic requirements of Appendix III and Supplement 7			Code figure IWB-2500-10 is essentially the weld (Branch) design for all systems identified under this Code Category Sub-item. Reference: WNES SPEC G676343				
B9.31	Nominal Pipe Size Greater Than 2 In.								
	14 Inch Nom. Diameter	Line No. & Branch Weld*							1 Sch'd 14 in. "Composite" 50%
	Pressurizer Surge Line (RC2-2) [1.4-2] (P445893) [1.4-5]	2*16-14SPL WIB-432	PT UT	1	1 Branch	360°	Two	50	
	Hot Leg Recirc Before V-8702 (RC2-4) [1.4-10] [1.4-4] (2-10-21,22)	2S6-109-14SPL WIB-243	PT UT	1					
	10 Inch Nom. Diameter								
	Accumulator Injection Loop 1 (2-9-11) [1.4-1] [1.4-6]	2S6-253-10SPL WIB-37	PT UT	1	1 Branch	360°	One	25	1 Sch'd 10 In. "Composite" 25%
	Accumulator Injection Loop 2 (2-9-12) [1.4-2] [1.4-7]	2S6-254-10SPL WIB-163	PT UT	1				25	
	Accumulator Injection Loop 3 (2-9-13) [1.4-3] [1.4-8]	2S6-255-10SPL WIB-192	PT UT	1				25	
	Accumulator Injection Loop 4 (2-9-14) [1.4-4] [1.4-9]	2S6-256-10SPL WIB-289	PT UT	1				25	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd							
B9.30	Branch Pipe Connection Welds							
B9.31	Nominal Pipe Size Greater than 2 In.							
	6 Inch Nom. Diameter	Line No. & Branch Weld						
	Safety Inj. Loop 1 Hot Leg (2-9-31A,449) [1.4-1] [1.4-11]	2S6-235-6SPL WIB-1	PT UT	1			33	1 Sch'd 6 In. "Composite" 33%
	Safety Inj Loop 2 Hot Leg (2-9-31B,450) [1.4-2] [1.4-12]	2S6-236-6SPL WIB-105	PT UT	1	1 Branch 360°	Two	33	
	Safety Inj. Loop 3 Hot Leg (2-9-35) [1.4-3] [1.4-13]	2S6-237-6SPL WIB-232	PT UT	1			33	NOTE: Loop 4 Inj to RHR is 14X14X6" Tee, No branch conn.
	Nominal Pipe Size Greater Than 2 In. 4 Inch Nom. Diameter							
	Loop 1 Spray Line (2-7-12) [1.4-1] [1.4-23]	2S6-13-4SPL WIB-55	PT UT	1	1 Branch 360°	One	50	1 Sch'd 4 In. "Composite" 50%
	Loop 2 Spray Line (2-7-11) [1.4-2] [1.4-25]	2S6-14-4SPL WIB-104	PT UT	1				

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.30	Branch Pipe Connection Welds Nominal Pipe Size Greater than 2 IN.								*See discussion page 1 of 51, this table section for explanation of examination requirements.
B9.31	3 Inch Nom. Diameter*	Line No. & Branch Weld							2 Sch'd 3 In. "Composite" 29%
	Loop 1 RTD Manifold Ret Hdr (2-7-13) [1.4-27] [1.4-1]	2S6-1141-3SPL WIB-17	PT	1					
	Loop 2 RTD Manifold Ret Hdr (2-7-25) [1.4-2] [1.4-28]	2S6-1147-3SPL WIB-123	PT	1	1 Branch	360°	Two	14	
	Loop 3 RTD Manifold Ret Hdr (2-7-15) [1.4-3] [1.4-29]	2S6-1153-3SPL WIB-204	PT	1				14	
	Loop 4 RTD Manifold Ret Hdr (2-7-16) [1.4-4] [1.4-30]	2S6-1158-3SPL WIB-268	PT	1				14	
	Charging Line Loop 4 (2-8-64) [1.4-4] [1.4-31]	2S6-246-3SPL WIB-310	PT	1				14	
	Charging Line Loop 3 (2-8-64) [1.4-3] [1.4-31]	2S6-50-3SPL WIB-183	PT	1				14	
	Letdown Line Loop 2 (2-7-8) [1.4-2] [1.4-33]	2S6-24-3SPL WIB-142	PT	1	1 Branch	360°	Three	29	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.30	Piping - Cont'd Branch Pipe Connection Weld Nominal Pipe Size 2 In. & Less				Code figure IWB2500-10 is essentially the weld (branch) design for all systems identified under this code category Sub-Item. Reference: WNES SPEC G676343				
B9.32	2 Inch Nom. Diameter	Line No. & Branch Weld							
	Loop 1 Cold Leg Drain RCDT (7-434) [1.4-1] [1.4-44]	2S6-958-2SPL+ WIB-500	PT						4 Sch'd 2 In. "Composite" 30%
	Loop 3 Cold Leg Drain RCDT (7-424) [1.4-3] [1.4-46]	2S6-960-2SPL+ WIB-649	PT	1	1 Branch	360°	Two	8	
	Loop 4 Cold Leg Drain RCDT (7-419) [1.4-4] [1.4-47]	2S6-961-2SPL+ WIB-722	PT	1	1 Branch	360°	Three	15	NOTE: Loop 2 Drain is from letdown line, no branch conn.
	SI Pp 2-1 Inj Hot Leg Loop 1 (2-9-31A,449) [1.4-11]	2S6-3863-2 WIB-913	PT	1	1 Branch	360°	One	23	
	SI Pp 2-1 Inj Hot Leg Loop 2 (2-9-31B,450) [1.4-12]	2S6-3864-2 WIB-919	PT	1	1 Branch	360°	Three	30	

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MAJOR ITEM: Piping Welds (B-J)
TABLE: 1.4
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd							
B9.30	Branch Pipe Connection Weld Nominal Pipe Size 2 Inch & Less							
B9.32	2 Inch Nom. Dia. (Cont'd)	Line No. & Branch Weld						
	Loop 1 Cold Leg RTD Conn (7-441) [1.4-1] [1.4-55]	2S6-1140-2SPL WIB-971	PT	1			30	
	Loop 2 Cold Leg RTD Conn (7-452) [1.4-2] [1.4-56]	2S6-1146-2SPL WIB-991	PT	1			30	
	Loop 3 Cold Leg RTD Conn (7-447) [1.4-3] [1.4-57]	2S6-1152-2SPL WIB-1012	PT	1			30	
	Loop 4 Cold Leg RTD Conn (7-446) [1.4-4] [1.4-58]	2S6-1159-2SPL WIB-1026	PT	1			30	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd							
B9.30	Branch Pipe Connection Welds Nominal Pipe Size 2 Inch & Less							
B9.32	2 In. Nom. Diameter Cont'd)	Line No. & Branch Weld						
	SI Pps Cold Leg Loop 1 Recirc (2-9-33,412) [1.4-15]	2S6-3855-2SPL WIB-929	PT	1			30	
	SI Pps Cold Leg Loop 2 Recirc (2-9-32,413) [1.4-16]	2S6-3856-2SPL WIB-935	PT	1			30	
	SI Pps Cold Leg Loop 3 Recirc (2-9-34,446) [1.4-17]	2S6-3857-2SPL WIB-941	PT	1			30	
	SI Pps Cold Leg Loop 4 Recirc (9-445) [1.4-50]	2S6-3858-2SPL WIB-951	PT	1			30	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.30	Branch Pipe Connection Welds Nominal Pipe Size 2 Inch & Less								
B9.32	1.5 Inch Nom. Diameter								
	Boron Inj. Tk. Out. Loop 1 Cold Leg (RC2-1) [1.4-1] [1.4-60]	Line No. & Branch Weld 2S6-1991-1.5SPL+PT WIB-507		1					1 Sch'd 1.5 In."Composite" 25%
	Born Inj. Tk. Out. Loop 2 Cold Leg (RC2-2) [1.4-2] [1.4-62]	2S6-1992-1.5SPL+PT WIB-560		1					
	Born Inj Tk Out Loop 3 Cold Leg (RC2-3) [1.4-3] [1.4-64]	2S6-1993-1.5SPL+PT WIB-654		1					
	Boron Inj Tk Out Loop 4 Cold Leg (RC2-4) [1.4-4] [1.4-66]	2S6-1994-1.5SPL+PT WIB-732		1	1 Branch	360°	Three	25	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J B9.40	Piping- Cont'd Socket Welds	Specific weld identification numbers will be listed on ISI exam. schedules to be issued prior to each refueling outage						Scheduled in accordance with discussion page 1 of this table.
	Socket welds are identified by system.							
	2 Inch Nom. Diameter	Line No. & ISI DWG. No.						97 Sch'd 2 In. "Composite" 25%
	Letdown Line Loop 2 (2-7-8)	2S6-24-3SPL [1.4-33]	PT	2	1 Socket 360°	One	50	Reducing 3 Inch Line to 2 inch sockets for 2LCV-459 (Valve)
	Charging Line Aux Spray (8-554,595,596)	2S6-51-2SPL 2S6-4532-2SPL [1.4-37,38,39]	PT PT	49 5	5 Sockets 360° 4 5	One Two Three	9 17 26	Note comment from Pg.18 this table Item B9.21
	Reac Cool Pp 1 Seal Wtr In (8-599)	2S6-54-2 and 2S6-54-1.5 [1.4-40]	PT	15	1 Socket 360° 2 1	One Two Three	7 20 27	Includes One B9.21 Item
	Reac Cool Pp 2 Seal Wtr In (8-602)	2S6-55-2 and 2S6-5398-1.5 [1.4-41]	PT	27	2 Socket 360° 2 2	One Two Three	7 15 22	Includes One B9.21 Item
	Reac Cool Pp 3 Seal Wtr In (8-597)	2S6-56-2 and 2S6-56-1.5 [1.4-42]	PT	29	3 Socket 360° 2 2	One Two Three	10 17 24	Includes One B9.21 Item
	Reac Cool Pp 4 Seal Wtr In (8-598)	2S6-57-2 and 2S6-(57)-1.5 [1.4-43]	PT	23	2 Socket 360° 2 2	One Two Three	9 17 26	Includes One B9.21 Item

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.40	Socket Welds - Cont'd								
	2 Inch Nom. Diameter	Line No. & ISI DWG No.							
	Loop 1 Cold Leg Drain RCDT (7-434)	2S6-958-2SPL+ [1.4-44]	PT	6	1 Socket 1	360°	One Two	17 33	
	Loop 2 Cold Leg Drain RCDT (7-436)	2S6-959-2SPL+ [1.4-45]	PT	7	1 Socket 1	360°	Two Three	14 29	Drain Off Letdown Line 2S6-24-3
	Loop 3 Cold Leg Drain RCDT (7-424)	2S6-960-2SPL+ [1.4-46]	PT	4	1 Socket	360°	One	25	
	Loop 4 Cold Leg Drain RCDT (7-419)	2S6-961-2SPL+ [1.4-47]	PT	9	1 Socket 1	360°	One Two	11 22	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.40	Socket Welds - Cont'd								
	2 Inch Nom. Diameter	Line No. & ISI DWG No.							
	SI Pp 2-1 Inj Hot Leg Loop 1 (7-9-31A,449)	2S6-3863-2 [1.4-11]	PT	5	1 Socket	60°	Two	20	
	SI Pp 2-1 Inj Hot Leg Loop 2 (2-9-31B,450)	2S6-3864-2 [1.4-12]	PT	7	1 Socket 1	360°	One Two	14 29	
	Safety Inj Hot Leg Loop 3 (9-444)	2S6-1976-2 [1.4-48]	PT	8	1 Socket 1	360°	One Two	13 25	
	Safety Inj Hot Leg Loop 4 (9-442)	2S6-1990-2 [1.4-49]	PT	9	1 Socket 1	360°	One Two	11 22	
	SI Pps Cold Leg Loop 1 Recirc (2-9-33,412)	2S6-3855-2SPL [1.4-15]	PT	5	1 Socket	360°	Three	20	
	SI Pps Cold Leg Loop 2 Recirc (2-9-32,413)	2S6-3856-2SPL [1.4-16]	PT	5	1 Socket	360°	Three	20	
	SI Pps Cold Leg Loop 3 Recirc (2-9-34,446)	2S6-3857-2SPL [1.4-17]	PT	13	1 Socket 1 1	360°	One Two Three	8 15 23	
	SI Pps Cold Leg Loop 4 Recirc (9-445)	2S6-3858-2SPL [1.4-50]	PT	15	1 Socket 1 2	360°	One Two Three	6 13 26	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.40	Socket Welds - Cont'd								
	2 Inch Nom. Diameter	Line No. & ISI DWG. No.							
	Loop 1 Hot Leg	2S6-1139-2SPL	PT	19	1	Socket 360°	One	5	
	RTD Conn Hdr	[1.4-51]			2		Two	15	
	(7-422,443)				2		Three	26	
	Loop 2 Hot Leg	2S6-1145-2SPL	PT	19	1	Socket 360°	One	5	
	RTD Conn Hdr	[1.4-52]			2		Two	15	
	(7-423,448)				2		Three	26	
	Loop 3 Hot Leg	2S6-1151-2SPL	PT	19	1	Socket 360°	One	5	
	RTD Conn Hdr	[1.4-53]			2		Two	15	
	(7-425,428)				2		Three	26	
	Loop 4 Hot Leg	2S6-1157-2SPL	PT	23	2	Socket 360°	One	9	
	RTD Conn Hdr	[1.4-54]			2		Two	17	
	(7-426,427)				2		Three	26	
	Loop 1 Cold Leg	2S6-1140-2SPL	PT	13	1	Socket 360°	One	8	
	RTD Conn	[1.4-55]			1		Two	15	
	(7-441)				1		Three	23	
	Loop 2 Cold Leg	2S6-1146-2SPL	PT	15	1	Socket 360°	One	7	
	RTD Conn	[1.4-56]			1		Two	13	
	(7-452)				2		Three	27	
	Loop 3 Cold Leg	2S6-1152-2SPL	PT	17	2	Sockets 360°	One	12	
	RTD Conn	[1.4-57]			1		Two	18	
	(7-447)				1		Three	24	
	Loop 4 Cold Leg	2S6-1159-2SPL	PT	17	1	Socket 360°	One	6	
	RTD Conn	[1.4-58]			2		Two	18	
	(7-446)				1		Three	24	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
B-J	Piping - Cont'd								
B9.40	Socket Welds - Cont'd								
	1.5 In. Nom. Diameter	Line No. & ISI DWG. No.							54 Sch'd 1.5 In."Composite" 25%
	Boron Inj Tk Out Loop 1 Cold Leg (9-436,465)	2S6-1991-1.5SPL+ [1.4-59] [1.4-60]	PT	52	4 Sockets 4 5	360°	One Two Three	8 15 25	Includes Three B9.21 Items Butt Welds
	Boron Inj Tk Out Loop 2 Cold Leg (9-431,466)	2S6-1992-1.5SPL+ [1.4-61] [1.4-62]	PT	71	6 Sockets 6 6	360°	One Two Three	9 17 25	Includes Two B9.21 Items Butt Welds
	Boron Inj Tk Out Loop 3 Cold Leg (9-437,467)	2S6-1993-1.5SPL+ [1.4-63] [1.4-64]	PT	52	4 Sockets 5 4	360°	One Two Three	8 18 26	Includes Three B9.21 Items Butt Welds
	Boron Inj Tk Out Loop 4 Cold Leg (9-439,468)	2S6-1994-1.5SPL+ [1.4-65] [1.4-66]	PT	38	3 Sockets 3 4	360°	One Two Three	7 15 26	Includes Three B9.21 Items Butt Welds

Category B-K-1, welded support attachments to the pressure boundary (Items B10.10, B10.20 and B10.30) are scheduled for surface examination when the base metal thickness of the welded attachment is 5/8 inch (.625) and greater (Ref. IWB-2500-1 Footnote 3). Category B-K-2 includes all portions of all supports including welded support attachments to the pressure boundary regardless of size.

The total amount of B-K-1 applicable attachments to each system/component is noted adjacent to the line number and scheduled accordingly.

Supports for valves (B10.30 and B11.30) are scheduled together with the corresponding pipe (B10.10, B11.10) system. Supports for pumps (B10.20, B11.20) are scheduled in Table 1.5.

For clarification of the examination area of category B-K-2, see section IWF-1300 of the Winter 1980 Addenda of ASME Code Section XI.

NOTE 1: All Technical Specification snubbers are inspected each refueling outage and therefore are not apportioned to ISI periods. Nonexempt snubber totals, by line are shown in this table for information only.

NOTE 2: Numbers of hangers on each line, as shown here, are accurate at the time of this Program Plan revision, but will change with plant design requirements. Current status is maintained by the DCPP ISI Department.

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K-1	Support Members				Exam'n area meets or exceeds req'ts of figures IWB-2500-13 and IWB-2500-15				
B-K-2	Component Supports								
B-K-1	Integrally Welded Attachments (To Pressure Boundary)								Note Comments on page 32 of 51.
B10.10	Piping				Reference IWF-1300 Winter '78 Add. For Clarification of B-K-2 exam. area				
B10.20	Pumps (See Table 1.5)								
B10.30	Valves								Valve Support and Attachment, Items B10.30 and B11.30, are included in this section and scheduled in conjunction with items B10.10 and Item B11.10 (Pipe Supports)
B-K-2	Components Supports								
B11.10	Piping								
B11.20	Pumps (See Table 1.5)								
B11.30	Valves								

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MAJOR ITEM: Piping Supports (B-K-1, B-K-2)
TABLE: 1.4
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CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K-1	Support Members				NOTE: The total number of hangers on each line appears under B-K-2.					
B-K-2	Component Supports									
B10.10	Integrally Welded Attach.									
B11.10	Support Components 31 In. Nom. Dia.	Line No. & ISI DWG No.								
	Reactor Coolant Pump Suction Loop 1	2*5-31 [1.4-1]	VT-3	2	B-K-2 1 Support 1	100%	One One	B-K-2 11 25	0	
	Reactor Coolant Pump Suction Loop 2	2*6-31 [1.4-2]	VT-3	2	B-K-2 1 Support 1	100%	One Two	37 50	0	
	Reactor Coolant Pump Suction Loop 3	2*7-31 [1.4-3]	VT-3	2	B-K-2 1 Support 1	100%	Two Three	62 75	0	
	Reactor Coolant Pump Suction Loop 4	2*8-31 [1.4-4]	VT-3	2	B-K-2 1 Support 1	100%	Three Three	87 100	0	
	29,&27.5 In. Nom. Dia.									
	Reactor Coolant Out Loop 1 (RC2-1)	2*1-29SPL [1.4-1]							0	No supports in boundary.
	Reactor Coolant Out Loop 2 (RC2-2)	2*2-29SPL [1.4-2]							0	No supports in boundary.
	Reactor Coolant Out Loop 3 (RC2-3)	2*3-29SPL [1.4-3]							0	No supports in boundary.
	Reactor Coolant Out Loop 4 (RC2-4)	2*4-29SPL [1.4-4]							0	No supports in boundary.

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd				B-K-2 requirements include a visual exam. of welded attachments(VT-3), in addition to those exams required by category B-K-1.					This column identifies support # when B-K-1 exam req'ts are applicable.
B10.10	Support Attach't									
B11.10	Support Components				NOTE: VT-4 Scheduled as applicable to individual components.					
	14 Inch Nom. Diameter	Line No. & ISI DWG No.								B-K-1 Exam Requirements applicable to: Mark No.
	Pressurizer Surge Line (P445893)(Loop 2)	2*16-14SPL [1.4-5]	VT-3 (VT-4)	3	B-K-2 2 Supports	100%	One	B-K-2 100	3	
	Hot Leg Recirc Before 2V-8702 (2-10-21,22)	2S6-109-14SPL [1.4-10]	PT	2	B-K-1	100%	Two	B-K-1 100		6-6V
				3	B-K-2			B-K-2	2	72-20SL
			VT-3 (VT-4)		1 Support	100%	One	33		
					1		Two	66		
					1		Three	100		
	Loop 4 Hot Leg Before 2V-8701 (2-10-21,22)	2S6-1665-14SPL [1.4-10]	PT	1	B-K-1		One	B-K-1 100		6-5V
				3	B-K-2			B-K-2		
			VT-3 (VT-4)		2 Support(s)	100%	One	33	3	
					1		Three	66		
								100		

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports- Cont'd								B-K-1 Exam requirements Applicable To: Mark No.
B10.10	Support Attach't								
B11.10	Support Components								
	10 Inch Nom. Diameter	Line No. & ISI DWG. No.							
	Accumulator Injection Loop 1 (2-9-11)	2S6-253-10SPL+ [1.4-6]			B-K-2		B-K-2		
			VT-3	3	1 Support(s) 100%	One	33	3	
			(VT-4)		2	Three	100		
	Accumulator Injection Loop 2 (2-9-12)	S6-254-10SPL+ [1.4-7]	PT	1	B-K-1	Two	B-K-1 100		2-24V
					B-K-2		B-K-2		
			VT-3 (VT-4)	1	1 Support 100%	Two	100	2	
	Accumulator Injection Loop 3 (2-9-13)	2S6-255-10SPL+ [1.4-8]	PT	1	B-K-1	Three	B-K-1 100		7-4V
					B-K-2		B-K-2		
			VT-3 (VT-4)	1	1 Support 100%	Three	100	1	
	Accumulator Injection Loop 4 (2-19-14)	2S6-256-10SPL+ [1.4-9]	PT		B-K-1	Three	B-K-1 100		7-2V
					B-K-2		B-K-2		
			VT-3 (VT-4)	4	3 Support(s) 100%	Two	75	0	
					1	Three	100		

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports- Cont'd									B-K-1 Exam requirements Applicable To: Mark No.
B10.10	Support Attach't									
B11.10	Support Components									
	8 Inch Nom. Diameter	Line No. & ISI DWG No.								
	SIS To RCS Loop 1 Hot Leg (2-9-31A,449)	2S6-2575-8 [1.4-11]	PT	1	B-K-1		One	B-K-1 100		412-157R
				2	B-K-2			B-K-2		
			VT-3		1 Support	100%	One	50	1	
			(VT-4)		1	1	Two	100		
	SIS To RCS Loop 2 Hot Leg (2-9-31B,450)	2S6-2576-8 [1.4-12]			B-K-2			B-K-2		
			VT-3 (VT-4)	1	1 Support	100%	One	100	0	
	6 Inch Nom. Diameter									
	Safety Inj Loop 1 Hot Leg (2-9-31A,449)	2S6-235-6SPL+ [1.4-11]			B-K-2			B-K-2		
			VT-3	4	2 Supports	100%	One	50	1	
			(VT-4)		2		Three	100		
	Safety Inj Loop 2 Hot Leg (2-9-31A,450)	2S6-236-6SPL+ [1.4-12]			B-K-2			B-K-2		
			VT-3	4	2 Supports	100%	Two	50	0	
			(VT-4)		2		Three	100		

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd								B-K-1 Exam requirements applicable to Mark No.
B10.10	Support Attach't								
B11.10	Support Components								
	6 Inch Nom. Dia.- Cont'd	Line No. & ISI DWG No.							
	Safety Inj Loop 3 Hot Leg (2-9-35)	2S6-237-6SPL+ [1.4-13]	VT-3 (VT-4)	6	B-K-2 3 Supports 100% 3	One Two	B-K-2 50 100	4	
	Safety Inj Loop 4 Hot Leg (2-9-36)	2S6-238-6SPL+ [1.4-14]	VT-3 (VT-4)	4	B-K-2 2 Support(s) 100% 1 1	One Two Three	B-K-2 50 75 100	0	
	RHR Pp 2-1 Inj Cold Leg 1 (2-9-33,412)	2S6-3844-6SPL+ [1.4-15]	PT VT-3 (VT-4)	1 4	B-K-1 B-K-2 1 Support(s) 100% 2 1	Two One Two Three	B-K-1 100 B-K-2 25 75 100	0	92-41V
	RHR Pp 2-1 Inj Cold Leg 2 (2-9-32,413)	2S6-3845-6SPL+ [1.4-16]	PT VT-3 (VT-4)	1 6	B-K-1 B-K-2 2 Support(s) 100% 1 3	Three One Two Three	B-K-1 100 B-K-2 33 50 100	6	92-44V
	RHR Pp 2-2 Inj Cold Leg 3 (2-9-34,446)	2S6-3846-6SPL+ [1.4-17]	VT-3 (VT-4)	4	B-K-2 1 Support(s) 100% 1 2	One Two Three	B-K-2 25 50 100	3	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Components									
	6 Inch Nom. Diameter (Cont'd)	LINE No. & ISI DWG No.								
	RHR Pp 2-2 Inj Cold Leg 4 (2-9-21,34)	2S6-3847-6SPL+ [1.4-18]	VT-3 (VT-4)	8	B-K-2 1 Support(s) 4 3	100%	 One Two Three	B-K-2 12 62 100	0	
	Pressurizer 2RV-8010A Inlet (2-7-17)	2S6-729-6SPL+ [1.4-19]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Two	B-K-2 100	1	(Vlv;B11.30 Item)
	Pressurizer 2RV-8010B Inlet (2-7-19)	2S6-728-6SPL+ [1.4-20]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Two	B-K-2 100	1	(Vlv;B11.30 Item)
	Pressurizer 2RV-8010C Inlet (2-17-18)	2S6-727-6SPL+ [1.4-21]	VT-3 (VT-4)	0					2	No hangers in boundary.
	Pressurizer Power RV Inlet (2-7-20)	2S6-730-6SPL [1.4-22]	VT-3 (VT-4)	2	B-K-2 1 Support 1	100%	 One Two	B-K-2 50 100	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									B-K-1 Exam Requirements Applicable To: Mark No.
B10.10	Support Attach't									
B11.10	Support Components									
	4 Inch Nom. Diameter	Line No. & ISI DWG No.								
	Pressurizer RV 2PCV-455C Inlet (2-7-20)	2S6-4081-4SPL [1.4-22]	VT-3 (VT-4)						1	No hangers in boundary.
	Loop 1 Spray Line (2-7-12,10)	2S6-13-4SPL [1.4-23]	PT	2	B-K-1 B-K-2		Two	100 B-K-2		2-33R 92-71R
		[1.4-24]	VT-3 (VT-4)	21	6 Supports 8 7	100%	One Two Three	28 66 100	1	
	Loop 2 Spray Line (2-7-10,11)	2S6-14-4SPL [1.4-24]			B-K-2			B-K-2		
		[1.4-25]	VT-3 (VT-4)	9	2 Supports 3 4	100%	One Two Three	15 55 100	1	
	Pressurizer Spray Line (2-7-24)	2S6-15-4SPL [1.4-26]	PT	1	B-K-1 B-K-2		One	B-K-1 100 B-K-2		412-84SL
			VT-3 (VT-4)	9	2 Supports 3 4	100%	One Two Three	15 55 100	2	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									B-K-1 Exam Requirements Applicable To: Mark No.
B10.10 B11.10	Support Attach't Support Components	Line No. & ISI DWG No.								
	3 Inch Nom. Diameter									
	Loop 1 Hot Leg RTD Conn (2-7-13)	2S6-3488-3SPL [1.4-27]	PT	1	B-K-1 B-K-2		Three	B-K-1 100 B-K-2		96-10V
			VT-3 (VT-4)	2	1 Support 1	100%	One Three	50 100	2	
	Loop 1 Cold Leg RTD Conn (2-7-13)	2S6-3798-3SPL [1.4-27]	PT	1	B-K-1 B-K-2		One	B-K-1 100 B-K-2		96-9V
			VT-3 (VT-4)	2	1 Support 1	100%	One Three	50 100	1	
	Loop 1 RTD Manifold Ret Hdr (2-7-13)	2S6-1141-3SPL [1.4-27]	PT	2	B-K-1 B-K-2		One	B-K-1 100 B-K-2		96-6V 2-41R
			VT-3 (VT-4)	6	2 Support(s) 3 1	100%	One Two Three	33 83 100	1	
	Loop 2 Hot Leg RTD Conn (2-7-25)	2S6-3489-3SPL [1.4-28]	VT-3 (VT-4)	5	B-K-2 2 Support(s) 2 1	100%	One Two Three	B-K-2 40 80 100	3	
	Loop 2 Cold Leg RTD Conn (2-7-25)	2S6-3799-3SPL [1.4-28]	VT-3 (VT-4)	2	B-K-2 1 Support 1	100%	Two Three	B-K-2 50 100	1	
	Loop 2 RTD Manifold Ret Hdr (2-7-25)	2S6-1147-3SPL [1.4-28]	VT-3 (VT-4)	4	B-K-2 1 Support(s) 2 1	100%	One Two Three	B-K-2 25 75 100	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd								
B10.10	Support Attach't								
B11.10	Support Components								Applicable to: Mark No.
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.							
	Loop 3 Hot Leg RTD Conn (2-7-15)	2S6-3495-3SPL [1.4-29]	VT-3 (VT-4)	3	B-K-2 3 Supports	100% One	B-K-2 100	2	
	Loop 3 Cold Leg RTD Conn (2-7-15)	2S6-3800-3SPL [1.4-29]	VT-3 (VT-4)	2	B-K-2 2 Supports	100% Three	B-K-2 100	0	
	Loop 3 RTD Manifold Ret Hdr (2-7-15)	2S6-1153-3SPL [1.4-29]	VT-3 (VT-4)	7	B-K-2 3 Supports 2 2	100% One Two Three	B-K-2 42 71 100	0	
	Loop 4 Hot Leg RTD Conn (2-7-16)	2S6-3496-3SPL [1.4-30]	PT VT-3 (VT-4)	1 7	B-K-1 B-K-2 2 Supports 3 2	One 100% One Two Three	100 B-K-2 28 71 100	 0	97-8A
	Loop 4 Cold Leg RTD Conn (2-7-16)	2S6-3801-3SPL [1.4-30]	VT-3 (VT-4)	1	B-K-2 1 Support	100% Two	B-K-2 100	0	
	Loop 4 RTD Manifold Ret Hdr (2-7-16)	2S6-1158-3SPL [1.4-30]	VT-3 (VT-4)	6	B-K-2 2 Supports 4	100% One Three	B-K-2 33 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Component									
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.								
	Charging Line Loop 4 (2-8-64)	2S6-246-3SPL [1.4-31]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	One	B-K-2 100	0	
	Charging Line Loop 3 (2-8-64)	2S6-50-3SPL [1.4-31]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Three	B-K-2 100	0	
	Boron Inj Cold Leg Hdr (2-9-19)	2S6-1995-3 and 2S6-1016-3 [1.4-32]	VT-3 (VT-4)	7	B-K-2 4 Support(s) 2 1	100%	One Two Three	B-K-2 57 85 100	1	
	Letdown Line Loop 2 (2-7-8)	2S6-24-3SPL [1.4-33]	VT-3 (VT-4)	7	B-K-2 1 Support(s) 4 2	100%	One Two Three	B-K-2 14 71 100	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									B-K-1 Exam Requirements Applicable to Mark No.
B10.10	Support Attach't									
B11.10	Support Component									
	3 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG No.								
	Pressurizer Pwr RV 2PCV-474 (2-7-22)	2S6-1171-3SPL+ [1.4-34]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Three	B-K-2 100	6	
	Pressurizer Pwr Rv 2PCV-455C (2-7-21)	2S6-1172-3SPL+ [1.4-35]	PT	1	B-K-1		Two	B-K-1 100		989-29R
			VT-3 (VT-4)	3	B-K-2 1 Support(s) 2	100%	One Three	B-K-2 33 100	5	
	Pressurizer Pwr Rv 2PCV-456 (2-7-23)	2S6-1195-3SPL+ [1.4-36]	VT-3 (VT-4)	2	B-K-2 2 Supports	100%	One	B-K-2 100	4	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd								B-K-1 Exam Requirements Applicable To: Mark No.
B10.10	Support Attach't								
B11.10	Support Components								
	2 Inch Nom. Diameter	Line No. & ISI DWG. No.							
	Charging Line Aux Spray (8-554,595,596)	2S6-51-2SPL+ 2S6-4532-2SPL	PT	2	B-K-1 2 Supports B-K-2	One	B-K-1 100		409-3A 898-2
		[1.4-37]	VT-3	32	12 Supports 100%	One	B-K-2 37	0	(V1v;B11.30 Item)
		[1.4-38]	(VT-4)		13	Two	78		
		[1.4-39]			7	Three	100		
	Reac Cool Pp 1 Seal Wtr In (8-599)	2S6-54-2 (And) 1.5	VT-3	1	B-K-2 1 Support 100%	Two	B-K-2 100	1	
		[1.4-40]	(VT-4)						
	Reac Cool Pp 2 Seal Wtr In (8-602)	2S6-55-2 and 2S6-5398-1.5	VT-3	3	B-K-2 1 Support(s) 100%	One	B-K-2 33	0	
		[1.4-41]	(VT-4)		2	Three	100		
	Reac Cool Pp 3 Seal Wtr In (8-597)	2S6-56-2 (And) 1.5	VT-3	4	B-K-2 3 Support(s) 100%	One	B-K-2 75	2	
		[1.4-42]	(VT-4)		1	Two	100		
	Reac Cool Pp 4 Seal Wtr In (8-598)	2S6-57-2 (And) 1.5	VT-3	4	B-K-2 2 Supports 100%	One	B-K-2 50	1	
		[1.4-43]	(VT-4)		2	Two	100		

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd								
B10.10	Support Attach't								
B11.10	Support Component								
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.							
	Loop 1 Cold Leg Drain RCDT (7-434)	2S6-958-2SPL+ [1.4-44]	VT-3 (VT-4)	1	B-K-2 1 Support	100% Two	B-K-2 100	0	
	Loop 2 Cold Leg Drain RCDT (7-436)	2S6-959-2SPL+ [1.4-45]						0	No supports in boundary.
	Loop 3 Cold Leg Drain RCDT (7-424)	2S6-960-2SPL+ [1.4-46]	VT-3 (VT-4)	1	B-K-2 1 Support	100% Two	B-K-2 100	0	
	Loop 4 Cold Leg Drain RCDT (7-419)	2S6-961-2SPL+ [1.4-47]	VT-3 (VT-4)	2	B-K-2 2 Support(s)	100% Three	B-K-2 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd								
B10.10	Support Attach't								
B11.10	Support Components								
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.							
	SI Pp 2-1 Inj Hot Leg Loop 1 (2-9-31A,449)	2S6-3863-2 [1.4-11]						0	No supports in boundary.
	SI Pp 2-1 Inj Hot Leg Loop 2 (2-9-31B,450)	2S6-3864-2 [1.4-12]						0	No supports in boundary.
	Safety Inj Hot Leg Loop 3 (9-444)	2S6-1976-2 [1.4-48]						0	No supports in boundary.
	Safety Inj Hot Leg Loop 4 (9-442)	2S6-1990-2 [1.4-49]	VT-3 (VT-4)	1	B-K-2 1 Support	100% Two	B-K-2 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Components									
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.								
	SI Pps Cold Leg Loop 1 Recirc (2-9-33,412)	2S6-3855-2SPL+ [1.4-15]							0	No supports in boundary.
	SI Pps Cold Leg Loop 2 Recirc (2-9-32,413)	2S6-3856-2SPL+ [1.4-16]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	One	B-K-2 100	0	
	SI Pps Cold Leg Loop 3 Recirc (2-9-34,446)	2S6-3857-2SPL+ [1.4-17]	VT-3 (VT-4)	5	B-K-2 1 Support(s) 2 2	100%	 One Two Three	B-K-2 20 60 100	0	
	SI Pps Cold Leg Loop 4 Recirc (9-445)	2S6-3858-2SPL+ [1.4-50]	VT-3 (VT-4)	6	B-K-2 3 Support(s) 1 2	100%	 One Two Three	B-K-2 50 66 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Components									
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.								
	Loop 1 Hot Leg RTD Conn Hdr (7-442,443)	2S6-1139-2SPL [1.4-51]							0	No supports in boundary.
	Loop 2 Hot Leg RTD Conn Hdr (2-7-423,448)	2S6-1145-2SPL [1.4-52]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	One	B-K-2 100	0	
	Loop 3 Hot Leg RTD Conn Hdr (7-425,428)	2S6-1151-2SPL [1.4-53]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Two	B-K-2 100	1	
	Loop 4 Hot Leg RTD Conn Hdr (7-426,427)	2S6-1157-2SPL [1.4-54]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Three	B-K-2 10	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Components									
	2 Inch Nom. Diameter (Cont'd)	Line No. & ISI DWG. No.								
	Loop 1 Cold Leg RTD Conn (7-441)	2S6-1140-2SPL [1.4-55]	VT-3 (VT-4)						1	No hangers in boundary.
	Loop 2 Cold Leg RTD Conn (7-452)	2S6-1146-2SPL [1.4-56]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	Two	B-K-2 100	1	(Vlv;B11.30 Item)
	Loop 3 Cold Leg RTD Conn (7-447)	2S6-1152-2SPL [1.4-57]	VT-3 (VT-4)						2	No hangers in boundary.
	Loop 4 Cold Leg RTD Conn (7-446)	2S6-1159-2SPL [1.4-58]	VT-3 (VT-4)	1	B-K-2 1 Support	100%	One	B-K-2 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
B-K	Supports - Cont'd									
B10.10	Support Attach't									
B11.10	Support Components									
	1.5 Inch Nom. Dia.	Line No. & ISI DWG. No.								
	Boron Inj Tk Out	2S6-1991-1.5			B-K-2			B-K-2		
	Loop 1 (9-436)	[1.4-59]	VT-3	15	5 Supports	100%	One	33	0	
	Cold Leg (9-465)	[1.4-60]	(VT-4)		5		Two	66		
					5		Three	100		
	Boron Inj Tk Out	2S6-1992-1.5			B-K-2			B-K-2		
	Loop 2 (9-431)	[1.4-61]	VT-3	30	10 Supports	100%	One	33	0	
	Cold Leg (9-466)	[1.4-62]	(VT-4)		13		Two	76		
					7		Three	100		
	Boron Inj Tk Out	2S6-1993-1.5			B-K-2			B-K-2		
	Loop 3 (9-437)	[1.4-63]	VT-3	17	7 Supports	100%	One	41	1	
	Cold Leg (9-467)	[1.4-64]	(VT-4)		5		Two	70		
					5		Three	100		
	Boron Inj Tk Out	2S6-1994-1.5			B-K-2			B-K-2		
	Loop 4 (9-439)	[1.4-65]	VT-3	12	3 Supports	100%	One	25	0	
	Cold Leg (9-468)	[1.4-66]	(VT-4)		5		Two	66		
					4		Three	100		

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MAJOR ITEM: Pumps (B-G-1)
TABLE: 1.5
PAGE 1 of 5

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	PUMPS REACTOR COOLANT PUMPS	DWG. REF. DC663207-34 *[1.5-1]		Exam'n area meets or exceeds req'ts of Fig.IWB-2500-12					[*] ISI DWG. Page No.
B-G-1	Pressure Retaining Bolting Larger than 2" dia.								
	Pump 2-1 Ser. No. 711 Pump 2-2 Ser. No. 712 Pump 2-3 Ser. No. 713 Pump 2-4 Ser. No. 714	Pump chosen for examination will depend on maintenance schedule							Footnote 4 of Category B-G-1 Ref. B-L-1 which specifies one pump.
B6.180	Bolts and Studs, In Place, Pump 2-1	Pump Flange Bolts No. 1 Thru No. 24	UT 24	8 Bolts 100% 8 Bolts 8 Bolts		One Two Three	33 66 100		PUMPS IWB-2500-1 Footnote (2) requires threads in base material and ligaments to be examined when disassembled. Deferral of inspection to end of interval is allowed.
B6.190	Bolts and Studs, When Removed, Pump 2-1	Pump Flange Bolts No. 1 Thru No. 24	UT PT/MT 24	24 Bolts 100%		Three	100		(See Above)
B6.200	Bolting (Ligaments between bolt holes)		VT-1 24	Ligaments 100%		Three	100		(Threads, When Bolts are Removed)

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	PUMPS - Continued REACTOR COOLANT PUMPS							
B-G-2	Pressure Retaining Bolting (2" Dia. and Less)							
		Seal House Bolting						Accessible Surfaces
B7.60	Bolts, Studs, & Nuts Pump 2-1	Bolts No. 1 VT-1 Thru No. 12 [1.5-1]	12	4 Bolts 4 4	100%	One Two Three	33 66 100	
	Bolts, Studs, & Nuts Pump 2-2	Bolts No. 1 VT-1 Thru No. 12 [1.5-1]	12	4 Bolts 4 4	100%	One Two Three	33 66 100	
	Bolts, Studs, & Nuts Pump 2-3	Bolts No. 1 VT-1 Thru No. 12 [1.5-1]	12	4 Bolts 4 4	100%	One Two Three	33 66 100	
	Bolts, Studs, & Nuts Pump 2-4	Bolts No. 1 VT-1 Thru No. 12 [1.5-1]	12	4 Bolts 4 4	100%	One Two Three	33 66 100	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	PUMPS - Continued REACTOR COOLANT PUMPS			Exam'n Area meets or exceeds req'ts of IWB-2500-15 (Typical Design)					
B-K-1	Support Members								
	Integrally Welded Attachments (To Pressure Bound.)								
B10.20	Welded Attachments Pump 2-1	WELDS #1, #2, #3 [1.5-1]	PT	3	1 Lug 1 Lug 1 Lug	100% 100% 100%	One Two Three	33 66 100	Welded attachment required on one pump. Category B-K-1 Footnote 1 Ref. B-J which specifies 1 loop.
B-K-2	Support Components								
B11.20	Support Components Pump 2-1	Support Components	VT-3	(*)			One	25	(*) B11.20 Items include all pump support members (support lugs, bolts, & column,
	Support Components Pump 2-2	Support Components	VT-3	(*)			Two	50	
	Support Components Pump 2-3	Support Components	VT-3	(*)			Three	75	
	Support Components Pump 2-4	Support Components	VT-3	(*)			Three	100	

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MAJOR ITEM: Pumps (B-L-1, B-L-2)
TABLE: 1.5
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	PUMPS - Continued REACTOR COOLANT PUMPS			Exam'n Area meets or exceeds req'ts of Figure IWB-2500-16					
B-L-1	Pressure Retaining Welds								
	Pump Casing Welds	Pump Casing Welds Surfaces		The Exam'n method shown in IWB-2500-1 (S-78) was corrected by ERRATA (W-78) Deleting surface req't.					
B12.10	Reactor Coolant Pump 2-1, 2-2, 2-3, or 2-4, dependent on maintenance schedule.	Pump Body Girth Weld (Item 29,30, 31 or 32	RT 1	1 Pp Girth Weld		Three	100%	RT of Girth Weld as Technology allows.	
B-L-2	Pump Casing Interior								
B12.20	Reactor Coolant Pump 2-1, 2-2, 2-3 or 2-4, dependent on maintenance schedule.	Interior Surfaces (Item 25,26, 27 or 28)	VT-1 1	1 Interior Pump Surface	100%	Three	100%	Table IWB-2500-1, Footnote 1 requires exam. on one pump. Deferral of exam to end of interval is permitted. Pump will be selected on basis of maintenance schedule.	

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MAJOR ITEM: Pumps (Flywheels)(Augmented)
TABLE: 1.5
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Aug'd Reactor Coolant Pump							
RG. 1.14	Flywheels	RCP 2-3	MT	1	100%	One	100	Proc N-MT-1
		RCP 2-2,2-3	UT	2	100%	One	100	Proc N-UT-6
		RCP 2-1,2-4	UT	2	Keyway Only	One	100	Proc N-UT-6
		RCP 2-1,2-2	MT	2	100%	Two	100	Proc N-MT-1
		RCP 2-1	UT	1	100%	Two	100	Proc N-UT-6
		RCP 2-2,2-3,2-4	UT	3	Keyway Only	Two	100	Proc N-UT-6
		RCP 2-4	MT	1	100%	Three	100	Proc N-MT-1
		RCP 2-4	UT	1	100%	Three	100	Proc N-UT-6
		RCP 2-1,2-2,2-3	UT	3	Keyway Only	Three	100	Proc N-UT-6

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Valves (B-G-1,B-G-2)
TABLE: 1.6

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves							[*] ISI DWG. Page No.
B-G-1	Pressure Retaining Bolting (Larger Than 2-Inch Dia.)							
B6.210 And B6.220 And B6.230	Bolts and Studs, in Place; Bolts and Studs, When Removed; Bolting							B6.210, B6.220 And B6.230 Items Not Applicable
B-G-2	Pressure Retaining Bolting (2-Inch Dia. and Less) Bolts, Studs & Nuts							Percentage by System and Size
B7.70	14 Inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Hot Leg Recirc Before 2V-8702 [1.4-10]* (2-10-21,22)	2S6-109-14SPL 2V-8702	VT-1	1	16 Studs and Nuts 100%	One	50	Copes-Vulcan GM-48SEZ
	Loop 4 Hot Leg Before 2V-8701 [1.4-10] (2-10-21,22)	2S6-1665-14SPL 2V-8701	VT-1	1	16 Studs and Nuts 100%	Two	100	Copes-Vulcan GM-48SEZ (Note B12.40)

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	10 Inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	Accumulator Injection Loop 1 (2-9-11) [1.4-6]	2S6-253-10SPL+							Darling
		2V-8956A	VT-1	1	16 Studs	100%	One	13	10C48Z
		2V-8948A	VT-1	1	16 Studs and Nuts	100%	Two	38	10C48Z
	Accumulator Injection Loop 2 (2-9-12) [1.4-7]	2S6-254-10SPL+							Darling
		2V-8956B	VT-1	1	16 Studs	100%	Two	50	10C48Z
		2V-8948B	VT-1	1	16 Studs and Nuts	100%	Three	75	10C48Z
	Accumulator Injection Loop 3 (2-9-13) [1.4-8]	2S6-255-10SPL+							Darling
		2V-8956C	VT-1	1	16 Studs	100%	One	25	10C48Z
		2V-8948C	VT-1	1	16 Studs and Nuts	100%	Three	88	10C48Z
	Accumulator Injection Loop 4 (2-9-14) [1.4-9]	2S6-256-10SPL+							Darling
		2V-8956D	VT-1	1	16 Studs	100%	Two	63	10C48Z
		2V-8948D	VT-1	1	16 Studs and Nuts	100%	Three	100	10C48Z

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	8-Inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	SIS to RCS Loop 1 Hot Leg (2-9-31A,449)[1.4-11]	2S6-2575-8 2V-8740A	VT-1	1	16 Studs and Nuts	100%	One	50	Darling 8C48Z
	SIS to RCS Loop 2 Hot Leg (2-9-31B,450) [1.4-12]	2S6-2576-8 2V-8740B	VT-1	1	16 Studs and Nuts	100%	Three	100	Darling 8C48Z
B7.70	6-Inch Nom. Dia.								
	Safety Inj Loop 1 Hot Leg (2-9-31A,449) [1.4-11]	2S6-235-6SPL+ 2V-8949A	VT-1	1	12 Studs and Nuts	100%	One	25	Velan 6C58
	Safety Inj Loop 2 Hot Leg (2-9-31B,450) [1.4-12]	2S6-236-6SPL+ 2V-8949B	VT-1	1	12 Studs and Nuts	100%	Two	50	Velan 6C58
	Safety Inj Loop 3 Hot Leg (2-9-35) [1.4-13]	2S6-237-6SPL+ 2V-8949C	VT-1	1	12 Studs	100%	Three	75	Velan 6C58
	Safety Inj Loop 4 Hot Leg (2-9-36) [1.4-14]	2S6-238-6SPL+ 2V-8949D	VT-1	1	12 Studs and Nuts	100%	Three	100	Velan 6C58

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	6-Inch Nom. Dia. (Cont'd)	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	RHR Pp 2-1 Inj Cold Leg 1 (2-9-33,412) [1.4-15]	2S6-3844-6SPL+ 2V-8818A	VT-1	1	12 Studs and Nuts	100%	One	25	Velan 6C58
	RHR Pp 2-1 Inj Cold Leg 2 (2-9-32,413) [1.4-18]	2S6-3845-6SPL+ 2V-8818B	VT-1	1	12 Studs and Nuts	100%	Two	50	Velan 6C58
	RHR Pp 2-2 Inj Cold Leg 3 (2-9-34,446) [1.4-17]	2S6-3846-6SPL+ 2V-8818C	VT-1	1	12 Studs and Nuts	100%	Three	75	Velan 6C58
	RHR Pp 2-2 Inj Cold Leg 4 (2-9-21,34) [1.4-18]	2S6-3847-6SPL+ 2V-8818D	VT-1	1	12 Studs and Nuts	100%	Three	100	Velan 6C58
	Pressurizer 2RV-8010A Inlet (2-7-17) [1.4-19]	2S6-729-6 2RV-8010A	VT-1	1	12 Studs and Nuts	100%	One	33	Crosby 6RV58MSB
	Pressurizer 2RV-8010B Inlet (2-7-19) [1.4-20]	2S6-728-6 2RV-8010B	VT-1	1	12 Studs and Nuts	100%	Two	66	Crosby 6RV58MSB
	Pressurizer RV-8010C Inlet (2-7-18) [1.4-21]	2S6-727-6 2RV-8010C	VT-1	1	12 Studs and Nuts	100%	Three	100	Crosby 6RV58MSB

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	4-Inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	Loop 1 Spray (2-7-12,10) [1.4-23] [1-4-24]	2S6-13-4SPL+							Velan
		2V-8033C	VT-1	1	12 Studs	100%	One	33	4G58
		2V-8033D	VT-1	1	12 Studs	100%	Two	66	4G58
		2-PCV-455B	VT-1	1	8 Studs and Nuts	100%	Three	100	Fisher Controls SS-84
	Loop 2 Spray (2-7-10,11) [1.4-24] [1.4-25]	2S6-14-4SPL+							Velan
		2V-8033A	VT-1	1	12 Studs	100%	One	33	4G58
		2V-8033B	VT-1	1	12 Studs	100%	Two	66	4G58
		2-PCV-455A	VT-1	1	8 Studs and Nuts	100%	Three	100	Fisher Controls SS-84
B7.70	3-Inch Nom. Dia.								
	Loop 1 Hot Leg RTD Conn. (2-7-24) [1.4-27]	2S6-3488-3SPL+ 2V-8073A	VT-1	1	12 Studs and Nuts	100%	One	25	Velan 3G58
	Loop 2 Hot Leg RTD Conn. (2-7-25) [1.4-2]	2S6-3489-3SPL+ 2V-8073B	VT-1	1	12 Studs and Nuts	100%	Two	50	Velan 3G58
	Loop 3 Hot Leg RTD Conn. (2-7-15) [1.4-29]	2S6-3495-3SPL+ 2V-8073C	VT-1	1	12 Studs and Nuts	100%	Three	75	Velan 3G58
	Loop 4 Hot Leg RTD Conn. (2-7-16) [1.4-30]	2S6-3496-3SPL+ 2V-8073D	VT-1	1	12 Studs and Nuts	100%	Three	100	Velan 3G58

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	3-Inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	Loop 1 RTD Manifold Ret Hdr (2-7-13) [1.4-27]	2S6-1141-3SPL+ 2V-8074A	VT-1	1	12 Studs and Nuts	100%	One	25	Velan 3G58
	Loop 2 RTD Manifold Ret Hdr (2-7-25) [1.4-28]	2S6-1147-3SPL+ 2V-8074B	VT-1	1	12 Studs and Nuts	100%	Two	50	Velan 3G58
	Loop 3 RTD Manifold Ret Hdr (2-7-15) [1.4-29]	2S6-1153-3SPL+ 2V-8074C	VT-1	1	12 Studs and Nuts	100%	Three	75	Velan 3G58
	Loop 4 RTD Manifold Ret Hdr (2-7-16) [1.4-30]	2S6-1158-3SPL+ 2V-8074D	VT-1	1	12 Studs and Nuts	100%	Three	100	Velan 3G58
	Charging Line Loop 3 (2-8-64) [1.4-31] (CVCS Alternate)	2S6-50-3SPL+ 2V-8379A 2V-8378A	VT-1 VT-1	1 1	12 Studs 12 Studs and Nuts	100% 100%	Two Three	50 100	Velan 3C58 3C58
	Charging Line Loop 4 (2-8-64) [1.4-31]	2S6-246-3SPL+ 2V-8378B 2V-8379B	VT-1 VT-1	1 1	12 Studs 12 Studs and Nuts	100% 100%	One Two	50 100	Velan 3C58 3C58

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd								
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts								
B7.70	3-Inch Nom. Dia. Cont'd	Line No. Valve No.(s)			Bonnet Bolting				Manufacturer & Style
	Boron Inj Cold Legs Hdr (2-9-19) [1.4-32]	2S6-1016-3 2V-8820	VT-1	1	12 Studs and Nuts	100%	One	100	Velan 3C58
	Letdown Line Loop 2 (2-7-8) [1.4-33]	2S6-24-3SPL+ 2V-8076 2-LCV-459(2") 2-LCV-460	VT-1 VT-1 VT-1	1 1 1	2 Studs 6 Studs 8 Studs and Nuts	100% 100% 100%	One Two Three	33 66 100	Velan 3T58 Copes-Vulcan(2") Masoneilan 3IA58RGP
	Pressurizer Power RV 2PCV-474 (2-7-22) [1.4-34]	2S6-1171-3SPL+ 2V-8000A 2-PCV-474	VT-1 VT-1	1 1	12 Studs 8 Studs and Nuts	100% 100%	Two Three	50 100	Velan 3GM58FN Masoneilan 3IA58RGP
	Pressurizer Power RV 2PCV-455C (2-7-21) [1.4-35]	2S6-1172-3SPL+ 2V-8000B 2-PCV-455C	VT-1 VT-1	1 1	12 Studs 8 Studs and Nuts	100% 100%	Two Three	50 100	Velan 3GM58FN Masoneilan 3IA58RGP
	Pressurizer Power RV 2PCV-456 (2-7-23) [1.4-36]	2S6-1195-3SPL+ 2V-8000C 2-PCV-456	VT-1 VT-1	1 1	12 Studs 8 Studs and Nuts	100% 100%	Two Three	50 100	Velan 3GM58FN Masoneilan 3IA58RGP

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd							
B-G-2	Pressure Retaining Bolting (2 In. Dia. & Less) Bolts, Studs, & Nuts							
B7.70	2-Inch Nom. Dia.	Line No. Valve No.(s)			Bonnet Bolting			Manufacturer & Style
	Charging Line Aux Spray (2-8-596) [1.4-39]	2S6-51-2SPL+ 2V-8145	VT-1	1	6 Studs and Nuts 100%	One	50	Copes-Vulcan 2IA58RE
		2S6-4532-2SPL+ 2V-8148	VT-1	1	6 Studs and Nuts 100%	Two	100	Copes-Vulcan 2IA58RE
B7.70	1.5-Inch Nom. Dia.				None - Valves have welded bonnets			

TEN YEAR EXAMINATION PROGRAM
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MAJOR ITEM: Valves (B-K-1, B-K-2)
TABLE: 1.6

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd							
B-K-1	Support Members							
B10.30	Integrally Welded Attachments (To Pressure Boundary	Attach't Welds						B10.30 Not Applicable - No Welded Attachments to Valves
B-K-2	Support Components	Supports Components						Included in Table 1.4, Scheduled with Pipe Supports.
B11.30	Component Supports							
B-M-1	Pressure Retaining Welds							
B12.30	Valve Body Welds (4-Inch or Less Nom. Dia.)							B12.30 Items not applicable. Reference fig. IWB-2500-17

NOTE: Comments on Discussion Page, 32 of 51 in Table 1.4

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 1 REV. 4

MAJOR ITEM: Valves (B-M-1, B-M-2)
TABLE: 1.6
PAGE 10 of 10

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Valves - Cont'd							
B-M-2	Pressure Retaining Welds		B12.40 Items are listed to indicate the amount and type that require inspection under category B-M-2. However, the valve selection within a series of valves performing similar function is optional and dependent on maintenance schedule. Refer to code item B7.70, Table 1.6, for complete inventory of applicable components.					B12.40 Items are selected in accordance with IWB-2500-1, footnote 3, exam'n period optional(*)
B12.40	Valve Body Welds (Greater than 4-Inch Nom. Dia.)	Line No. Valve No.(s)			Valve Interior	(*)		Manufacturer & Style
	(Internal Surfaces)							
	Loop 4 Hot Leg Before 2V-8701 (2-10-21,22) [1.4-10]	2S6-1665-14SPL 2V-8701	VT-1	1	1 Valve (surface)	Three	100	Containment Isol Copes-Vulcan GM-48SEZ
	Accumulator Injection Loop 1 (2-9-11) [1.4-6]	2S6-253-10SPL+ 2V-8956C	VT-1	1	1 Valve (surface)	Three	100	Darling, 10C48Z Check Valve
	Safety Inj Loop 1 Hot Leg (2-9-31A,449) [1.4-11]	2S6-235-6SPL+ 2V-8949A	VT-1	1	1 Valve (Surface)	Three	100	Velan 6C58 Check Valve
	Pressurizer 2RV-8010B Inlet (2-7-19) [1.4-20]	2S6-728-6SPL 2RV-8010B	VT-1	1	1 Valve (Surface)	Three	100	Crosby 6RV58 Relief Valve

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-A)
TABLE: 2.1 (STM GEN)
PAGE 1 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators	*[2.1-1] DWG. REF. DC-663206-77			Exam'n Area meets or exceeds req'ts of Fig. IWC-2520-1 (C1.10/C1.20) and IWC-2520-2 (C1.30)			[*] ISI DWG. Page No.
C-A	Pressure Retaining Welds							Steam Gen. 2-1 Ser. # 1161; 2-2 # 1162; 2-3 # 1163; 2-4 #1164
					All welds in gen. 2-1 will be examined in accordance with IWC-2500 Cat. C-A footnote (3).			Welds 1-3, 1-4, 1-5, and 1-7 have removable insulation windows.
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet to Shell							Girth Weld W1-2 is examined concurrently with channel head to tubesheet weld.
		GIRTH WELDS						
C1.30	Steam Generator 2-1	Girth W1-2 Loop 1	UT	1	Tube Sheet (to) Stub Barrel (36') 100%	One Two Three	6 12 20	T = 3.25/5.16" C = 36' (circ.)
C1.10	Steam Generator 2-1	Girth W1-3 Loop 1	UT	1	Stub Barrel (to) Lower Shell (36') 100%	One	40	T = 3.25"/2.82" C = 36' (circ.)
	Steam Generator 2-1	Girth W1-4 Loop 1	UT	1	Shell Barrel (to) Transition (36') cone 100%	Two	60	T = 2.82"/3.68" C = 36' (circ.)
	Steam Generator 2-1	Girth W1-5 Loop 1	UT	1	Transition Cone (to) Upper Barrel (46') 100%	Three	80	T = 3.68"/3.62" C = 46' (circ.)
C1.20	Steam Generator 2-1	Girth W1-7 Loop 1	UT	1	Upper Barrel (to) Upper Head (46') 100%	Three	100	T = 3.62"/3.62" C = 46' (circ.)

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam-Generators (Cont'd)				Exam'n area meets or exceeds req'ts of fig. IWC-2520-3 (and) IWC-2520-4 as applicable.			
C-B	Pressure Retaining Nozzle Welds (Pipe diameter over 4")							
C2.10	Nozzles in vessels <1/2" nominal thickness							C2.10 Items not applicable, NOTE: C2.20
C2.20	Nozzles in vessels >1/2" nominal thickness	Steam Gen. (to) Nozzles [2.1-1]			IWC-2500-1 footnote 2 requires (C-B) schedule according to selection of category C-F (NOTE REMARK) Category C-F (S-78) corresponds to category C-G (S-75) for main steam and feedwater systems.			Schedule in accordance with discussion page 1 in Table 2.2.

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators (Cont'd)	[2.1-1]						
C-B	Pressure Retaining Nozzle Welds							NOTE: SUR/VOL performed on weld joint when scheduled - VOL performed on inner radius section (Fig. IWC-2520-4) to extent possible.
C2.20	Nozzles in vessels >1/2" nominal thickness							
C2.21	Nozzle to Shell (Head)							
C2.22	Inner Radius							
	Steam Generator 2-1	Nozzle Weld	PT or MT	1	1 (see note)	Two	25	T = 3.6"/D = 16"
C2.21	Feedwater Lead 1	(to)	UT					Weld WICG-101-1
C2.22	Nozzle Weld and	Shell at						
	Inner Radius [2.1-21]	2K16-554-16IV	UT	1	1 (see note)	Two	25	Shell Nozzle Ref. [2.2-1]
	Steam Generator 2-1	Nozzle Weld	PT or MT	1	1 (see note)	Three	25	T = 3.6"/D-28"
C2.21	Main Steam Lead 1	(to)	UT					Weld WICG-1-1
C2.22	Nozzle Weld and	Shell at						
	Inner Radius [2.1-17]	2K15-228-28V	UT	1	1 (see note)	Three	25	Upper Head Nozzle
C-C	Integrally Welded Support Attachments (To Pressure Vessel)							
C3.10	Integrally Welded Support							C3.10 Items not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-E, C-D)
TABLE: 2.1 (STM GEN)
PAGE 4 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Steam Generators [2.1-1] (Cont'd)							
C-E	Support Members							
C3.20	Support Components Steam Gen. 2-1 thru 4	Snubber Attachments	VT-3	16	1 Snubber 100% Mount and 2 Attachment Areas	One Two Three	100 100 100	Examinations on one vessel per IWC-2500-1 Footnote 2.
C-D	Pressure Retaining Bolting (Greater than 2-Inch Dia.)							
C4.10	Bolts, Studs, & Nuts							C4.10 Item Not applicable

End of Steam Generators

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-A, C-B)
TABLE: 2.1 (B.I.T.)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Boron Injection Tank	DWG. REF. DC-663216-45							[*] ISI DWG. Page No.
C-A	Pressure Retaining ¢Welds in Vessels	*[2.1-2]							Struthers Wells Corp. (Ser. Number 2-70-07-30717-8)
	WELDS								
C1.10	Shell Circumferential								C1.10 & C1.30 not applicable to B.I.T.
C1.20	Head Circumferential								
C1.30	Tube Sheet to Shell								
		GIRTH WELDS							
C1.20	Boron Injection Tank 2-1	Girth W-A (Top Head)	UT	1	Top Head (to) Shell	≃40% ≃6'	Two	20	Relief No. 008 T = 2.0"/4.15" 14.75' (circ.)
		Girth W-B (Bot Head)	UT	1	Bot Head (to) Shell	≃40% ≃6'	Three	40	T = 2.0"/4.15" 14.75' (circ.)
C-B	Pressure Retaining Nozzle Welds								
C2.10	Nozzles in Vessels ≤ 1/2 In. Nominal Thickness								C2.10 Items not applicable
C2.20	Nozzles in Vessels > 1/2 In. Nominal Thickness [2.2-15]	Bottom Head to Nozzle Weld Weld #N-B	PT or MT UT	1	1		Three	100	@ Line 2-2032

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-C, C-E, C-D)
TABLE: 2.1 (B.I.T.)
PAGE 6 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	BORON INJECTION TANK Cont'd	[2.1-2]			Exam area meets Fig IWC-2520-6 Req'ts				
C-C	Integrally Welded Support Attachments (To Pressure Vessels)	CW. View DN from Manway							
C-E C3.10	Support Components Support Members	Welded Attachments							Support Leg T = .618/.350
C3.20	Support Leg	Leg-A to Vessel Support to Deck	PT or MT VT-3	1	1 Leg and support	100% 100%	One	25 25	
	Support Leg	Leg-B to Vessel Support to Deck	PT or MT VT-3	1	1 Leg and support	100% 100%	Two	50 50	
	Support Leg	Leg-C to Vessel Support to Deck	PT or MT VT-3	1	1 Leg and support	100% 100%	Three	75 75	
	Support Leg	Leg-D to Vessel Support to Deck	PT or MT VT-3	1	1 Leg and support	100% 100%	Three	100 100	
C-D	PRESSURE RETAINING BOLTING (Larger than 2" dia.)								
C4.10	Bolts, Studs, & Nuts	Manway Bolting	UT UT UT	5 5 6	5 Studs 5 Studs 6 Studs	100% 100% 100%	One Two Three	31 62 100	
	End of B.I.T.								

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-A, C-B, C-C)
TABLE: 2.1 (Filters)
PAGE 7 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	SEAL INJECTION FILTERS	DWG. REF. DC-663200-42 DC-663210-19						[*] ISI DWG. Page No.
C-A	Press. Retaining Welds	*[2.1-3]						
								Commercial Filters Corp. 2-1 Ser. 17392-1824 2-2 Ser. 17392-1835
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet To Shell							C1.30 Item not applicable
		Girth Welds						
C1.10	Seal Injection Filter 2-1	Weld Item 1 Shell-Flange		1	Flange (to) Shell			Relief No. 007
C1.20	Seal Injection Filter 2-1	Weld Item 2 (Bot Head)		1	Bot Head (to) Shell			Relief No. 007
C-B	NOZZLES IN VESSELS							
C2.10	<1/2" Nom. Thickness							C2.10 & C2.20 Items not Applicable
C2.20	>1/2" Nom. Thickness							
C-C	SUPPORT MEMBERS							
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)							C3.10 Item Not Applicable IWC-2500-1, CC Footnote (1)

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	SEAL INJECTION FILTERS (Cont'd)							
C-E	Support Members							
C3.20	Support Components							C3.20 Not Req'd IWC-2500-1(4)
C-D	PRESSURE RETAINING BOLTING (Larger than 2" dia.)							
C4.10	Bolts, Studs, and Nuts							C4.10 Item not Applicable

End of Seal Injection Filters

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	EXCESS LETDOWN HEAT EXCHANGER	DWG. REF. DC-663210-12 *[2.1-4]							[*]ISI DWG. Page No.
C-A	Pressure Retaining Welds in Vessels								Atlas Ser. # 854
	WELDS								
C1.10	Shell Circumferential								
C1.20	Head Circumferential								
C1.30	Tube Sheet To Shell								C1.30 Item Not Applicable
		GIRTH WELDS							
C1.10	Excess Letdown Heat Exchanger 2-1	Girth Weld GA (Flange)	UT & PT	1	Flange (to) Shell	As Access	One	50	Relief No. 007
C1.20	Excess Letdown Heat Exchanger 2-1	Girth Weld GB (Bot Head)	UT & PT	1	Bot Head (to) Shell	As Access	Two	100	Relief No. 007
C-B	NOZZLES IN VESSELS								
C2.10	≤1/2" Nom. Thickness								C2.10 & C2.20 Items Not Applicable
C2.20	>1/2" Nom. Thickness								
C-C	Support Members	Attach't welds							
C3.10	Integrally Welded Support Attachments (To Pressure Vessels)	Leg A	PT	1	Attach't (to) Shell	100%	Two	50	IWC-1220 (c)
		Leg B	PT	1		100%	Three	100	"

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	EXCESS LETDOWN HEAT EXCHANGER (Cont'd)							
C-E	Support Components							
C3.20	Component Supports							C3.20 Item Not Req'd; IWC-2500-1 Footnote (4)
C-D	Pressure Retaining Bolting (Larger than 2" dia.)							
4.10	Bolts, Studs, and Nuts							C4.10 Item Not Applicable

End of Excess Letdown Heat Exchanger

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	REGENERATIVE HEAT EXCHANGERS	DWG. REF. DC-663210-72 *[2.1-5]						[*] ISI DWG. Page No. Joseph Oat & Sons Serial #1831-4I, 1831-4II,1831-4III
C-A	Pressure Retaining Welds in Vessels							C1.10 Item Not Applicable Regenerative Heat Exchr's Shell 1 and 2 Not Examined IWC-2500-1 Footnote (3)
	WELDS							
C1.10	Shell Circumferential							
C1.20	Head Circumferential							
C1.30	Tube Sheet to Shell							
C1.10	Regenerative Heat Exchanger Shell No. 3 Circumferential							C1.10 Item Not Applicable
		GIRTH WELDS						*Relief No. 007
C1.20	Shell No. 3 Head-To-Shell Welds	Girth Weld Item 9	PT*	1	Head (to) Shell As Access.	One	25	T = .756"/.900" 2.5' (circ.) Relief No. 007
		Girth Weld Item 12	PT*	1	Head (to) Shell As Access.	Two	50	T = .756"/.938" 2.5' (circ.) Relief No. 007
C1.30	Shell No. 3 Tube Sheet To Shell Welds	Girth Weld Item 10	PT*	1	Shell (to) Sheet As Access.	Three	75	T = .900"/.938" 2.5' (circ.) Relief No. 007
		Girth Weld Item 11	PT*	1	Sheet (to) Shell As Access.	Three	100	T = .938"/.756" 2.5' (circ) Relief No. 007

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-B, C-E, C-D)
TABLE: 2.1 (Reg. Ht. Exc)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	REGENERATIVE HEAT EXCHANGER (Cont'd)							
C-B	Nozzles in Vessels							
C2.10	≤1/2" Nom. Thickness							C2.10 and C2.20 Items Not Applicable IWC-1220(c)
C2.20	>1/2" Nom. Thickness							
C-E	Support Components							
C3.20	Component Supports							C3.20 Item Not Req'd IWC-2500-1 Footnote (4)
C-D	Pressure Retaining Bolting (Larger than 2" dia.)							
C4.10	Bolts, Studs, and Nuts							C4.10 Item Not Applicable

End of Regenerative Heat Exchanger

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels (C-A, C-B)
TABLE: 2.1 (RHR Ht. Exc.)
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	RESIDUAL HEAT REMOVAL HEAT EXCHANGER	DWG. REF. DC-663217-4,6 *[2.1-6]							[*] ISI DWG. Page No.
									Engineers & Fabricators Co. 2-1 Ser. #15588-C 2-2 Ser. #15588-D
C-A	Pressure Retaining Welds in Vessels								
	WELDS								
C1.10	Shell Circumferential								
C1.20	Head Circumferential								
C1.30	Tube Sheet To Shell								C1.30 Items Not Applicable
		GIRTH WELDS							
C1.10	RHR Exchanger 2-1	Item 21	UT	1	Flg. (to) Shell	As Access.	Two	50	Relief No. 007
C1.20	RHR Exchanger 2-1	Item 22	UT	1	Bot Head (to) Shell	As Access.	Three	100	Relief No. 007
C-B	Nozzles in Vessels								
C2.10	≤1/2" Nominal Thickness								C2.10 Items Not Applicable
C2.20	>1/2" Nom. Thickness								
	RHR Exchanger 2-1 [2.2-8]	Nozzle Weld Item 24	UT & PT	1	1		Two	50	At 2S1-112-8 (Inlet) Relief No. 007
	RHR Exchanger 2-1 [2.2-2]	Nozzle Weld Item 23	UT & PT	1	1		Three	100	At 2S1-3551-14 (Outlet) Relief No. 007

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	RHR HEAT EXCHANGERS (Cont'd)	[2.1-6]							
C-C	Support Members Integrally Welded								
C3.10	Support Attachments (To Pressure Vessels)	Welded Attach't							Support Legs
	RHR Exchanger 2-1	Front Item 19 Rear Item 20	PT	2	2 Legs (and)	100%	Two	50	
C-E C3.20	RHR Exchanger 2-1 (Support Components)	Front & Rear	VT-3	2	2 Supports	100%	Three	100	(Exposed Areas)
C-D	Pressure Retaining Bolting (Larger than 2" dia.)								
C4.10	Bolts, Studs, and Nuts								C4.10 Item Not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels(C-A,C-B,C-C,C-D)
TABLE: 2.1 (Stab. Separator)
PAGE 15 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	STABILIZER SEPARATOR @ Recip Chg Pp 1-3	DWG REF DC-663210-180-1 [2.1-7]						General Atomics WELDS S/N E-610
C-A	Pressure Retaining Welds In Vessel							
C1.10	Shell Circumferential							C1.10 Item Not Applicable
C1.20	Head Circumferential							
	Top Head-To-Shell	Weld G-A	UT	1	360° As Accessible	Two	50	Relief No. 007
	Bottom Head-To-Shell	Weld G-B	UT	1	360° As Accessible	Three	100	Relief No. 007
C1.30	Tube Sheet-To-Shell							C1.30 Item Not Applicable
C-B	Nozzle-To-Vessel-Welds							
C2.10	≤1/2" Nom. Thickness							Not Req'd (IWC-1220-C)
C2.20	>1/2" Nom. Thickness							Not Applicable
C-C	Support Members							
C3.10	Integrally Welded Supports							Not Req'd IWC-2500-1 Footnote 1
C3.20	Component Supports	Support Skirt	VT-3	1	100%	Three	100	
C-D	Pressure Retaining Bolting (>2" Dia.)							
C4.10	Bolts, Studs, and Nuts							C4.10 Item Not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Pressure Vessels(C-A,C-B,C-C
TABLE: 2.1 (Liq. Puls. Damp) C-D,C-E)
PAGE 16 of 16

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	LIQUID PULSATION DAMPENER @ Recip Chg Pp 2-3	DWG REF DC-663210-181-1						Gen. Atomic Ser. No. E-611
C-A	Pressure Retaining Welds in Vessels							
C1.10	Shell Circumferential							Not Req'd (IWC-2500-1) Footnote 2
C1.20	Head Circumferential							C1.20 Item Not Applicable
C1.30	Tube Sheet-To-Shell							C1.30 Item Not Applicable
C-B	NOZZLE-TO-VESSEL WELDS							
C2.10	≤1/2 Nom. Thickness							C2.10 Item Not Applicable
C2.20	≥1/2 Nom. Thickness							Not Req'd (IWC-1220-C)
C-C C-E	SUPPORT MEMBERS							Category C-C and C-E Items not applicable, Vessel is supported by attached pipe.
C-D	Pressure Retaining Bolting (Larger than 2" dia.)							
C4.10	Bolts, Studs, and Nuts							C4.10 Item Not Applicable

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

MAJOR ITEM: Piping System Welds
TABLE: 2.2
PAGE 1 of 31

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS

The extent and frequency of examination for pipe welds scheduled in the following table conforms to Paragraph IWC-2411 and Table IWC-2520, Category C-F and C-G in the 1974 Edition of Section XI through Summer 1975 Addenda.[1] Instead of distributing welds over the multiple streams as described in Paragraph IWC-2411(S'75) the "single stream" philosophy of the Summer 1978 Addenda has been adopted throughout. (See Request for Relief NDE-012.) In all cases the lowest numbered line has been selected as typical for the multiple streams, and all required examinations are performed on that stream. The extent of examination per Table IWC-2520 includes the "Areas Subject To Examination" in the table. All other requirements, including "Parts Examined", conform to Table IWC-2500-1, Category C-F of the 1977 Edition through Summer 1978 Addenda of Section XI. The exemption criteria conforms to the Summer 1978 Addenda as referenced in relief request 006.

NOTE: Code category C-F or C-G appearing in the General Identification column reference 1974 edition, Summer 1975, Section XI code categories. 1974 Code category C-F lines circulate reactor coolant while category C-G lines circulate other than reactor coolant. All pipe welds are category C-F in the 1977 Edition, Summer 1978 Addenda.

Occasional portions of certain pipe welds are inaccessible for examination. See request for relief #NDE-009. Any inaccessible portions will be fully documented and the remaining weld area examined to the fullest extent possible. An estimate of the percentage of the Code-required examination that can be completed for welds having limited accessibility is provided in Appendix B, as discussed in NDE-009.

[1] Ref. 10CFR 50.55a(b)(2)(iv)(B)

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
PAGE 2 of 31

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	TABLE IWC-2500-1 SUB-ITEM OUT OF SEQUENCE INTENTIONALLY ITEMS ARE LISTED BY WALL THICKNESS, CATEGORY (C-F) or (C-G), SINGLE OR MULTIPLE STREAM AND LINE SIZE.				Exam'n area meets or exceeds req'ts of fig. IWC-2520-7				Scheduled in accordance with discussion page 1 of this table.
									[*] ISI DWG. Page No.
	Piping								
C-F	Pressure Retaining Welds in Piping				[1]Addenda S-75 Req'd Percent Over 40 Year Service Life				(**) Construction Dwg. Page No.
C5.20	Piping Welds >1/2" Nom. Wall Thickness								
					[2]S-75 Addenda Percent To Date Over 10 Year Interval				[1]Of one steam typical
C5.21	Circumferential Welds Single Stream Systems	Butt Welds Category C-F						[1]100%	
	RHR Injection To Hot Leg 1 & 2 (2-10-19)**	2S6-120-12 *[2.2-5]	PT & UT	1	1	0		[2]0	T = 1.312"
	Cent Charg Pps Disch Hdr (2-8-18)	2S6-1454-6 [2.2-15]	PT & UT	4	4	1	Two	25	T = .719"
	End Single Stream, C-F								

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ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Cont'd								
C-F	Pressure Retaining Welds in Piping - Cont'd								
C5.20	Piping Welds >½" Wall	Butt Welds Category C-F					[1]100%		[1] Of One Stream, Typical Relief No. 012
C5.21	Multiple Stream Systems								
	SIS To RCS Hot Leg Loop 1 (2-10-19), (2-9-31)	2S6-2575-8 [2.2-5]	PT & UT	1	1				T = .812" Line 2575 chosen as typical
	SIS To RCS Hot Leg Loop 2 (2-10-19), (2-9-31)	2S6-2576-8 [2.2-4]							
	End M/S Systems, C-F								
C5.21	Single Stream System	Butt Welds Category C-G						(25%)	
	Charging Pumps Disch. Emerg. (2-8-18) (2-9-37)	2S6-1973-6 [2.2-15]	PT & UT	6	3	1	Three	25	T = .719"
	Boron Injection Tank Inlet (2-9-37)	2S6-2032-6III [2.2-15]	PT & UT	14	7	2	(1)One (1)Two	6 18	Safe Ends, Bot of Boron Tank Included
	RC Pps Barrier CCW Ret Hdr (2-14-50)	K17-1357-6 [2-2-36]	MT & UT	11	6	1	One	12	T = .864
	End Single Stream, C-G								

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	EXAM EXTENT AND REQUIRED AMOUNT 10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	Piping - continued								
C-F	Pressure Retaining Welds in Piping (Cont'd)								[1]Of One Stream, Typical
C5.20	Piping Welds >1/2" Thick	Butt Welds Category C-G						[1]50%	
C5.21	Multiple Stream Systems								
	Steam Gen Steam Outlet 2-1 (MS-501013)	2K15-228-28V [2.2-17] Lead 1	PT/MT & UT	12	6	1	One	17	T = 1.002" Line 228 chosen as typical
	Steam Gen Steam Outlet 2-2 (MS-501014)	2K15-227-28V [2.2-18] Lead 2							
	Steam Gen Steam Outlet 2-3 and Main Steam Relief Vlv Hdr (MS-501015)	2K15-226-28V and 2K15-1065-24V [2.2-20] Lead 3							
	Steam Gen Steam Outlet 2-4 and Main Steam Relief Vlv Hdr (MS-501016)	2K15-225-28V and 2K15-1066-24V [2.2-19] Lead 4							

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ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	EXAM EXTENT AND REQUIRED AMOUNT 10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - continued								
C-F	Pressure Retaining Welds in Piping (Cont'd)								[1]Of One Steam Typical
C5.20	Piping Welds >1/2" Thick	Butt Welds Category C-G							
C5.21	Multiple Streams, Continued							[1]50%	
	Stm Gen Feed Wtr Supply Gen 2-1 (FW-501023)	2K16-554-16V Lead 1 [2.2-21]	PT/MT & UT	16	8	2	(1)One (1)Three	12 25	Line 554 chosen as typical T = .843"
	Steam Gen Feed Wtr Supply Gen 2-2 (FW-501023)	2K16-555-16V Lead 2 [2.2-22]							
	Steam Gen Feed Wtr Supply Gen 2-3 (FW-501023)	2K16-557-16V Lead 3 [2.2-23]							
	Steam Gen Feed Wtr Supply Gen 2-4 (FW-501023)	2K16-556-16V Lead 4 [2.2-24]							

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - continued								
C-F	Pressure Retaining Welds in Piping (Cont'd)								[1]Of One Steam Typical
C5.20	Piping Welds >1/2" Thick	Butt Welds Category C-G							
C5.21	Multiple Streams, Continued							[1]50%	
	RHR Pp Inj Cold Leg Pp 2-1 (2-9-25) (2-9-24) (2-9-23) (2-10-16)	2S6-508-8III [2.2-30] [2.2-31] [2.2-32]	PT & UT	11	6	1	One	16	Line 508 chosen as typical T = .812"
	RHR Pp Inj Cold Leg Pp 2-2 (2-9-21)	2S6-509-8III [2.2-33]							
	RHR Pp 2-1 Inj Cold Leg Loop 1 (2-9-22)	2S6-3844-6III [2.2-34]	PT & UT	4	2	1	Two	50	Line 3844 chosen as typical T = .718"
	RHR Pp 2-1 Inj Cold Leg Loop 2 (2-9-22)	2S6-3845-6III [2.2-34]							
	RHR Pp 2-2 Inj Cold Leg Loop 3 (2-9-21)	2S6-3846-6III [2.2-33]							
	RHR Pp 2-2 Inj Cold Leg Loop 4 (2-9-21)	2S6-3847-6III [2.2-33]							
	END OF ITEM C5.21								

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	EXAM EXTENT AND REQUIRED AMOUNT 10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)				Exam'n area meets or exceeds req'ts of figure IWC-2520-7				
C-F	Pressure Retaining Welds In Piping (Cont'd)								
C5.22	Longitudinal Welds Over 1/2 In. Wall Single Stream Systems Category C-F	Long'l Seams Category C-F,C-G							C5.22 Item Cat'y C-F S/S Not Applicable
	Multiple Stream Systems Category C-F								C5.22 Cat'y C-F M/S Not Applicable
	Single Stream Systems Category C-G								C5.22 Cat'y C-G S/S Not Applicable
	Multiple Stream Systems Category C-G								[1]Of One Stream, Typical.
	Steam Gen Steam Outlet 2-1 (501013)	2K15-228-28V [2.2-17] Lead 1	PT/MT & UT	1		1		[1]50%	T = 1.002" Line 228 chosen as Typical
	Steam Gen Steam Outlet 2-2 (501014)	2K15-227-28V [2.2-18] Lead 2							

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REV. 4

MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - Cont'd								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.22	Long'l Welds (Cont'd)	Long'l Seams Category C-G							
	Steam Gen Steam Outlet 2-3 (501015)	2K15-226-28V [2.2-19] Lead 3							Includes line 1065 (MSRV)
	Steam Gen Steam Outlet 2-4 (501016)	2K15-225-28V [2.2-20] Lead 4							Includes line 1066 (MSRV)
C5.30	Pipe Branch Connection	Branch Welds							
C5.31	Circumferential Welds	Category C-F							
C5.32	Longitudinal Welds	Category C-G							
	Single and Multiple Str Sys								C5.31 or C5.32 Items Cat'y C-F or C-G not applicable - No branch connection welds

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MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
C-F	PIPING (Cont'd)								
	Pressure Retaining Welds In Piping (Cont'd)				Exam'n area meets or exceeds req'ts of fig. IWC-2520-7				[1]Of One Stream Typical
C5.10	Piping Welds 1/2" or Less Nominal Wall Thickness								
C5.11	Circumferential Welds Single Stream Systems	Butt Welds Category C-F							
	Loop 4 Hot Leg To RHR Pps (2-10-21) (2-10-10)	2S1-927-14III [2.2-1]	PT	7	7	2	(1)One (1)Two	[1]100% 14 28	
	Res Ht Exchr 2 Outlet (2-10-5)	2S1-3551-14III [2.2-2]	PT	2	2	1	(1)Three	50 [1]100%	
	RHR Injection To Hot Leg 1 & 2 (2-10-15) (2-10-18) (2-10-19)	2S1-985-12IIIP [2.2-3] [2.2-4] [2.2-5]	PT	21	21	5	(2)One (2)Two (1)Three	10 19 24	One weld inaccessible at outboard containment penetration.
	Cent Charg Pps Suct Header (2-8-14)	2S2-1456-8 [2.2-7]	PT	2	2	1	(1)One	[1]100% 50	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	EXAM EXTENT AND REQUIRED AMOUNT 10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								
C5.11	Circumferential Single Stream Systems	Butt Welds Category C-F							
	RHR Exchrs Bypass Crosstie (2-10-2,3)	2S1-1663-8III [2.2-8] [2.2-9]	PT	18	14	4	(2)One (1)Two (1)Three	[1]100% 14 21 29	4 Welds Not Accessible - Wall Penetration
	Residual Ht Exchrs Bypass Hdr (2-10-4,13)	2S1-1661-8III [2.2-10]	PT	15	15	4	(1)One (1)Two (2)Three	[1]100% 6 13 26	
	RHR Exchrs Outlet Crosstie Hx 2-2 (2-10-14)	2S1-1669-8 [2.2-14]	PT	9	9	3	(1)One (1)Two (1)Three	[1]100% 11 22 33	
	RHR Exchrs Outlet Crosstie Hx 2-1 (2-10-15)	2S1-2458-8 [2.2-3]	PT	3	3	1	One	[1]100% 33	
	End S/S System - C-F								

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								
C5.11	Circumferential Multiple Stream Systems	Butt Welds Category C-F							[1]Of One Stream
	Residual Ht Rem Pp 2-1 Suction (2-10-9,10)	2S1-110-14III [2.2-25]	PT	16	16	4	(1)One (1)Two (2)Three	[1]100% 6 12 25	Typical Line 110 chosen as Typical
	Residual Ht Rem Pp 2-2 Suction (2-10-10,8)	2S1-111-14IIIP [2.2-6]							
	Residual Ht Rem Pp 2-1 Disch (10-2)	2S1-112-8III [2.2-8]	PT	16	16	4	(1)One (1)Two (2)Three	[1]100% 6 13 25	Line 112 chosen as Typical
	Residual Ht Rem Pp 2-2 Disch (10-2)	2S1-113-8III [2.2-9]							
	Residual Ht Exchr 2-1 Outlet (2-10-5,16) Hx to Line 2-2458	2S1-118-8III[2] [2.2-26]	PT	11	11	3	(1)One (1)Two (1)Three	[1]100% 9 18 27	Line 118 chosen as Typical
	Residual Ht Exchr 2-2 Outlet (2-10-12,6) Hx to Line 2-1669	2S1-119-8III[2] [2.2-27]							[2]See Category C-G, page 15 of this table for balance of lines 118 & 119.

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								[1]Of One Stream Typical
C5.11	Circumferential Welds Multiple Stream Systems	Butt Welds Category C-F							
	Cent Charg Pp Suct Pp 2-1 (2-8-13)	2S2-42-6 [2.2-35]	PT	15	15	4	(1)One (2)Two (1)Three	[1]100% 6 20 26	Line 42 chosen as Typical
	Cent Charg Pp Suct Pp 2-2 (2-8-14)	2S2-43-6 [2.2-7]							
	Single Stream Systems Category C-G								
	RWST To Res Ht Rem Pps Suct (2-10-10,8)	2S1-223-12IIIP [2.2-6]	PT	3	2			[1]50%	
	Res Ht Rem To Charg Pps Suct (2-10-5)	2S2-734-8III [2.2-2]	PT	5	3	1	One	33	
	RHR Hdr to Chg Pps Suct (2-10-5)	2S1-1971-8III [2.2-2]	PT	7	3	1	Two	33	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								[1]Of One Stream Typical
C5.11	Circumferential Welds Single Stream Systems (Cont'd)	Butt Welds Category C-G							
	RHR To SIS Pp2-2 (and) Cont Spr (2-10-11)	2S1-735-8IIIP [2.2-11]	PT	9	4	1	One	[1]50% 25	
	RHR To Safety Inject. Pp 2-2 (2-9-1,5)	2S2-1984-8III [2.2-12]	PT	12	6	2	(1)Two (1)Three	17 33	
	Safety Inj Pumps Suct. Hdr (2-9-1,4)	2S2-1986-8 [2.2-13]	PT	7	4	1	Two	25	
	Charg Pps Suction From RWST Vlv. B (2-9-3)	2S2-1988-8 [2.2-28]	PT	5*	2				*Ref. Mult. Str Page 15 of this table balance of line 2-1988.
	Residual Heat Rem. To RWST (2-10-14)	2S1-2212-8III [2.2-14]	PT	1	1				
	Crosstie Chg Pp & SI Pp Suction (2-10-5)	2S2-4296-6 [2.2-2]	PT	9	4	1	One	25	
	RHR To Safety Inject. Pump 2-1 (2-9-2,6)	2S2-6 (6") [2.2-16]	PT	8	4	1	One	25	
	End S/S Systems, C-G								

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MAJOR ITEM: Piping-Circum Welds (C-F)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
¢	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								[1]Of One Stream Typical
C5.11	Circumferential Welds Multiple Stream Systems	Butt Welds Category C-G							Material "T" SCH 60 = .406"
	Steam Gen MSRV Riser and 10% Atmos. Dump 2-1 (501013)	2K15-228-8V [2.2-17]	PT or MT	6	3	1	Two	[1]50% 33	Line 2-228 chosen as typical
	Steam Gen MSRV Riser 2-2 (501014)	2K15-227-8V [2.2-18]							
	Steam Gen MSRV Riser 2-3 (501015)	2K15-226-8V [2.2-19]							
	Steam Gen MSRV Riser 2-4 (501016)	2K15-225-8V [2.2-20]							
	Cont Sump To RHR Pps Pump 2-1 Suct (2-10-9,10)	2S1-512-14IIIP 2*2749-14 [2.2-25]	PT	8	4	1	Two	[1]50% 25	Line 2-512 chosen as typical
	Cont Sump To RHR Pps Pump 2-2 Suct (2-10-10,8)	2S1-513-14IIIP 2*2750-14 [2.2-6]							

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								
C5.10	Piping Welds ≤ 1/2" Thick								[1]Of One Steam Typical
C5.11	Circumferential Welds Multiple Stream Systems	Butt Welds Category C-G							
	Charg. Pps Suction From RWST Vlv A(2-9-3)	2S2-1987-8 [2.2-28]	PT	3	2	1	Two	[1]50% 50	
	Charg Pps Suct. From RWST Vlv.B (2-9-3)	2S2-1988-8 [2.2-28]							Ref. Single Str. Page 13 of this table
	RHR Sup To Spray Hdrs 1 & 3 (2-10-17)	2S1-279-8III [2.2-29]	PT	6	1		One	33	Line 2-279 chosen as typical
	RHR Sup To Spray Hdrs 2 & 4 (2-10-11)	2S1-280-8III [2.2-11]							
	Residual Heat Exchr 1 Outlet (2-10-5,16) (Line 2-2458 to 2V-8809A)	2S1-118-8III [2.2-26]	PT	4	2				Line 2-118 chosen as typical. See category C-F, page 11 of this table for balance of lines 2-118 and 2-119
	Residual Heat Exchr 2 Outlet (2-10-12,6) (Line 2-1669 to 2V-8809B)	2S1-119-8III [2.2-27]							

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)								
C-F	Pressure Retaining Welds in Piping (Cont'd)								[1]Of One Stream Typical
C5.10	Piping Welds ≤ 1/2" Thick								
C5.11	Multiple Stream Systems (Cont'd)	Butt Welds Category C-G							
	Safety Inj Pump Suct. Pump 2-1 (2-9-2,6)	2S2-1982-6 [2.2-16]	PT	10	6	1	Two	[1]50% 17	Line 2-1982 chosen as typical
	Safety Inj Pump Suct. Pump 2-2 (2-9-1,5)	2S2-1983-6 [2.2-12]							
	END OF ITEM C5.11								
AUG'T'D	Containment Spray Pump 2-1 Discharge Before V-9001 A	2S2-264-8	UT*			1 1	One Two	33 66	*Required by NRC letter of November 12, 1986 - 7.5% representative sample
	Containment Spray Pump 2-2 Discharge Before V-9001 B	2S2-265-8	UT*			1	Three	100	

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

MAJOR ITEM: Piping-Longit. Welds (C-F C-D)
TABLE: 2.2

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAM EXTENT AND REQUIRED AMOUNT 40 YR	10 YR	EXAM'N PERIOD (10 YR)	% 40 YR TO DATE	EXAM RELIEF'S & REMARKS
	PIPING - (Cont'd)				Exam'n area meets or exceeds req'ts of fig. IWC-2520-7				
C-F	Pressure Retaining Welds in Piping (Cont'd)								Note Discussion Page 1 of this table
C5.12	Longitudinal Welds <1/2" W.T. Single Stream Systems Category C-F	Long'l Welds							C5.12 Item Cat'y C-F S/S Not Applicable
	Multiple Stream Systems Category C-F							[1]100%	[1]Of One Stream Composite
	Residual Ht Rem Pp2-1 Discharge (2-10-2)	2S1-112-8III [2.2-8]	PT	1	1				WIC-48LS Line 2-112 chosen as typical
	Residual Ht Rem Pp2-2 Discharge (2-10-3)	2S1-113-8III [2.2-9]							
	Residual Ht Exchr 2-1 Outlet (2-10-5,16)	2S1-118-8III [2.2-26]	PT	1	1	1	Three	[1]100% 100	WIC-51LS Line 2-118 chosen as typical
	Residual Ht Exchr 2-2 Outlet (2-10-12,6)	2S1-119-8III [2.2-27]							C5.12 Item Cat'y C-G S/S Not applicable
C-D	Pressure Retaining Bolting (> 2 in. Dia.)								Category C-D Item C4.20 Not Applicable Welded Piping
C4.20	Bolts, Stud, And Nuts								
	(End Mult. Steam - C-F)								

Category C-C welded support attachments to the pressure boundary (Items C3.40, C3.70, and C3.100) are scheduled for surface examination when the base metal design thickness of the welded attachment is greater than 3/4" (.750) (Table IWC-2500-1, Footnote 1). Category C-E includes all portions of all supports including welded support attachments to the pressure boundary regardless of size.

The total amount of (C-C) applicable attachments to each system/component is noted adjacent to the line number and scheduled accordingly.

Supports for valves (C3.100 and C3.110) are scheduled together with the corresponding pipe (C3.40 and C3.50) system. Supports for pumps (C3.70 and C3.80) are scheduled in Table 2.3.

For clarification of the examination area for category C-E, see section IWF-1300 of the Winter 1980 Addenda of ASME Section XI.

NOTE 1: All Technical Specification snubbers are inspected each refueling outage and therefore are not apportioned to ISI periods. Nonexempt snubber totals, by line, are shown in this table for information only.

NOTE 2: Numbers of hangers on each line, as shown here, are accurate at the time of this Program Plan revision, but will change with plant design requirements. Current status is maintained by the DCPP ISI Department.

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
	SUPPORTS				Exam'n Area meets or exceeds req'ts of fig. IWC-2520-5				
									Note Comments on discussion page 18 of this table.
C-C	Integrally Welded Attachments (TO PRESSURE BOUNDARY)								
C3.40	Piping	(Attach't)							[1]Valve Items C3.100 and C3.110 are scheduled with piping items.
C3.70	Pumps (See Table 2.3)								
C3.100	Valves[1]								
C-E	SUPPORT COMPONENTS								
C3.50	Piping	(Supports)							NOTE: VT-4 scheduled as applicable to individual components.
C3.80	Pumps (See Table 2.3)								
C3.110	Valves[1] Component Support								
C-C,C-E	Support Members								
C3.40	Support Attach't								System Reference To S-75 Only - No Bearing on Schedule Req'ts.
C3.50	Support Components SINGLE STREAM (C-F)*	Line No. & ISI Dwg. No.							
C3.40	Res. Ht. Exchr 2-1	2S1-3551-14					0		No Supports In Boundary
C3.50	Outlet (2-10-5)	[2.2-2]							

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
	Supports - (Cont'd)								
C-C,C-E	Support Members - Cont'd								
C3.40 C3.50	Support Attach't Support Components Single Stream (C-F)*	Line No. & ISI Dwg. No.							*System Reference To S-75 Only, No Bearing On Schedule Req'ts
C3.40 C3.50	RHR Inj to Hot Leg 1&2 (2-10-19)	2S6-120-12 [2.2-5]						0	No supports in boundary
m3.40 C3.50	Loop 4 Hot Leg to RHR Pps (2-10-21,10)	2S1-927-14III [2.2-1]	VT-3 (VT-4)	5	C-E 2 Support(s) 1 2	100% One Two Three	C-E 40 60 100	1	
C3.40 C3.50	RHR Injection to Hot Leg 1 & 2 (2-10-15) (2-10-18) (2-10-19)	2S1-985-12IIIP [2.2-3] [2.2-4] [2.2-5]	VT-3 (VT-4)	16	C-E 7 Supports 5 4	100% One Two Three	C-E 43 66 100	6	
C3.40 C3.50	Cent Charg Pps Suct Header (2-8-14)	2S1-1456-8 [2.2-7]						0	No supports in boundary.
C3.40 C3.50	RHR Exchrs Bypass Crosstie (2-10-2,3)	2S1-1663-8III [2.2-8] [2.2-9]	VT-3 (VT-4)	3	C-E 1 Support 1 1	100% One Two Three	C-E 33 66 100	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								This column identifies attachment number when applicable to footnote 1 of IWC-2500-1 category C-C
C3.40 C3.50	Support Attach't Support Components Single Stream (C-F) (Cont'd)								
		Line No. & ISI DWG. No.							Applicable to: Mark No.
C3.40 C3.50	Residual Ht Exchrs Bypass Hdr (2-10-4,13)	2S1-1661-8III [2.2-10]	PT	2	C-C C-E	Two	100 C-E		24-32R 48-21V
			VT-3 (VT-4)	11	3 Supports 100% 4 4	One Two Three	30 61 100	1	
C3.40 C3.50	Cent Charg Pps Disch Hdr (2-8-18)	2S6-1454-6 [2.2-15]	PT	1	C-C C-E	One	100 C-E		23-36R
			VT-3 (VT-4)	5	2 Support(s) 100% 1 2	One Two Three	40 60 100	0	
	Multiple Stream (C-F)								
C3.40 C3.50	Residual Ht Rem Pp 2-1 Suction (2-10-9) (2-10-10)	2S1-110-14IIIP [2.2-25]	VT-3 (VT-4)	8	C-E 2 Supports 100% 3 3	One Two Three	C-E 25 62 100	2	
	Residual Ht Rem Pp 2-2 Suction (2-10-10) (2-10-8)	2S1-111-14IIIP [2.2-6]	PT	1	C-C C-E	One	100 C-E		47-143A
			VT-3 (VT-4)	6	2 Supports 100% 2 2	One Two Three	33 66 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-F)								
		Line No. & ISI DWG. No.			C-E		C-E		
C3.40 C3.50	Residual Ht Rem Pp 2-1 Discharge	2S1-112-8III [2.2-8]	VT-3 (VT-4)	4	2 Supports 100% 2	Two Three	50 100	1	
					C-E		C-E		
	Residual Ht Rem Pp2-2 Discharge (2-10-3)	2S1-113-8III [2.2-9]	VT-3 (VT-4)	4	2 Supports 100% 2	One Three	50 100	0	
					C-E		C-E		
C3.40 C3.50	Residual Ht Exchr 2-1 Outlet (2-10-5,16)	2S1-118-8III [2.2-26]	VT-3 (VT-4)	5	2 Supports 100% 3	One Three	40 100	2	
					C-E		C-E		
	Residual Ht Exchr 2-2 Outlet (2-10-12,6)	2S1-119-8III [2.2-27]	VT-3 (VT-4)	8	4 Supports 100% 2 2	One Two Three	50 75 100	1	

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MAJOR ITEM: Piping-Supports (C-C,C-E)
TABLE: 2.2
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CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)									
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-F) (Cont'd)	Line No. & ISI DWG. No.								
					C-E			C-E		
C3.40 C3.50	RHR Ht Exchr Outlet HX2-1 Crosstie (2-10-15)	2S1-2458-8III [2.2-3]	VT-3 (VT-4)	1	1 Support	100%	Three	100	1	
					C-E			C-E		
	RHR Ht Exchr Outlet HX2-2 Crosstie (2-10-14)	2S1-1669-8III [2.2-14]	VT-3 (VT-4)	2	1 Support 1	100%	Two Three	50 100	2	
					C-E			C-E		
C3.40 C3.50	SIS to RCS Hot Leg Loop 1 (2-10-19,31)	2S6-2575-8 [2.2-5]	VT-3 (VT-4)	1	1 Support	100%	Two	100	1	
					C-E			C-E		
	SIS to RCS Hot Leg Loop 2 (2-10-19,31)	2S6-2576-8 [2.2-5]	VT-3 (VT-4)	2	1 Support 1	100%	Two Three	50 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)									
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-F)	Line No. & ISI DWG. No.								
C3.40 C3.50	Cent Charge Pp Suct Pp 2-1 (2-8-13)	2S6-42-6 [2.2-35]	VT-3 (VT-4)	4	C-E 2 Supports 1 1	100%	One Two Three	C-E 50 75 100	0	
	Cent Charg Pp Suct Pp 2-2 (2-8-14)	2S2-43-6 [2.2-7]	VT-3 (VT-4)	3	C-E 1 Support 1 1	100%	One Two Three	C-E 33 66 100	0	
C3.40 C3.50	RWST to Res Ht Rem Pps Suct (2-10-10,8)	2S1-223-12IIIP [2.2-6]							1	No hangers in boundary.
C3.40 C3.50	Res Ht Rem to Charg Pps Suct (2-10-5)	2S2-734-8IIIP [2.2-2]	VT-3 (VT-4)	2	C-E 1 Support 1	100%	Two Three	C-E 50 100	0	
C3.40 C3.50	RHR to Charg Pps Suct (2-10-5)	2S1-1971-8III [2.2-2]	VT-3 (VT-4)	4	C-E 1 Support(s) 2 1	100%	One Two Three	C-E 25 75 100	0	
3.40 C3.50	RHR to SIS Pp 2-2 and Cont Spray (2-10-10,11)	2S1-735-8III [2.2-11]	VT-3 (VT-4)	5	C-E 2 Supports 2 1	100%	One Two Three	C-E 40 80 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Single Stream (C-G)	Line No. & ISI DWG. No.							
C3.40 C3.50	RHR to Safety Injec- tion Pp 2-2 (2-9-1,5)	2S1-1984-8III [2.2-12]	VT-3 (VT-4)	4	C-E 1 Support(s) 100% 1 2	One Two Three	C-E 25 50 100	0	
C3.40 C3.50	Safety Inj Pumps Suction Hdr (2-9-1,4)	2S2-1986-8 [2.2-13]	VT-3 (VT-4)	3	C-E 1 Support(s) 100% 2	Two Three	C-E 33 100	0	
C3.40 C3.50	Residual Heat Rem to RWST (2-10-14)	2S1-2212-8 [2.2-14]						0	No supports in boundary.
C3.40 C3.50	Charging Pumps Disch Emerg (2-9-37,2-8-18)	2S6-1973-6 [2.2-15]	VT-3 (VT-4)	1	C-E 1 Support(s) 100%	Three	C-E 100	0	
C3.40 C3.50	Boron Injection Tank Inlet (2-9-37,2-8-18)	2S6-2032-6III [2.2-15]	VT-3 (VT-4)	4	C-E 1 Support(s) 100% 3	Two Three	C-E 25 100	0	
C3.40 C3.50	RC Pps Barrier CCW Ret Hdr (Penetration)	K17-1357-6 [2.2-36]	VT-3 (VT-4)	4	C-E 2 Supports 100% 2	Two Three	C-E 50 100	1	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT		EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)									
C3.40 C3.50	Support Attach't Support Components Single Stream (C-G)	Line No. & ISI DWG. No.								Applicable To: Mark No.
C3.40 C3.50	Crosstie Chg Pp & SI Pp Suction (2-10-5)	2S2-4296-6 [2.2-2]	VT-3 (VT-4)	2	C-E 1 Support 1	100%	One Two	C-E 50 100	0	
C3.40 C3.50	RHR to Safety Injection Pump 2-1 (2-9-2,6)	2S2-(5848)-6 [2.2-16]	VT-3 (VT-4)	2	C-E 2 Supports	100%	Three	C-E 100	0	
	Multiple Stream (C-G)									
C3.40 C3.50	Steam Gen Steam Outlet 2-1 (501013)	2K15-228-28V [2.2-17] Lead 1	MT VT-3 (VT-4)	2 5	C-C C-E 3 Supports 2	100%	One One Three	100 C-E 60 100	 1	2024-15R 2020-1V
	Steam Gen Steam Outlet 2-2 (501013)	2K15-227-28V [2.2-18] Lead 2	MT VT-3 (VT-4)	2 5	C-C C-E 2 Supports 3	100%	Two One Two	100 C-E 40 100	 2	2025-15R 2022-1V

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-G) (Cont'd)	Line No. & ISI DWG. No.							Applicable To: Mark No.
C3.40 C3.50	Steam Gen Steam Outlet 2-3 (501015)	2K15-226-28V [2.2-19] Lead 3	PT or MT VT-3 (VT-4)	3 5	C-C C-E 3 Support(s) 100% 1 1	Three One Two Three	100 C-E 60 80 100	 1	2026-1V 413-252R 2030-15R
	Steam Gen Steam Outlet 2-4 (501016)	2K15-225-28V [2.2-20] Lead 4	PT or MT VT-3 (VT-4)	1 4	C-C C-E 1 Support(s) 100% 1 2	Three One Two Three	100 C-E 25 50 100	 2	2028-1V
C3.40 C3.50	Main Stm Relief Vlv Hdr 2-3 (501015)	2K15-1065-24V [2.2-19] Lead 3	VT-3 (VT-4)	1	C-E 1 Support 100%	Two	C-E 100	1	
	Main Stm Relief Vlv Hdr 2-4 (501016)	2K15-1066-24V [2.2-20] Lead 4	VT-3 (VT-4)	2	C-E 2 Supports 100%	Two	C-E 100	3	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-G) (Cont'd)	Line No. & ISI DWG. No.							Applicable To: Mark No.
C3.40 C3.50	Stm Gen Feed Wtr Supply Gen 2-1 (FW-501023)	2K16-554-16V [2.2-21] Lead 1	PT or MT VT-3 (VT-4)	1 5	C-C C-E 3 Support(s) 100% 1 1	Three One Two Three	100 C-E 60 80 100	1	2037-7V
	Steam Gen Feed Wtr Supply Gen 2-2 (501023)	2K16-555-16V [2.2-22] Lead 2	PT or MT VT-3 (VT-4)	1 6	C-C C-E 2 Supports 100% 2 2	Three One Two Three	100 C-E 33 66 100	1	2039-9V
	Steam Gen Feed Wtr Supply Gen 2-3 (501023)	2K16-557-16V [2.2-23] Lead 3	PT or MT VT-3 (VT-4)	1 4	C-C C-E 1 Support(s) 100% 3	Three One Three	100 C-E 25 100	3	2042-9V
	Steam Gen Feed Wtr Supply Gen 2-4 (501023)	2K16-556-16V [2.2-24] Lead 4	PT or MT VT-3 (VT-4)	1 3	C-C C-E 1 Support 100% 1 1	Three One Two Three	100 C-E 33 66 100	4	2044-7V

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-G) (Cont'd)	Line No. & ISI DWG. No.							
C3.40 C3.50	Cont Sump to RHR Pps Pump 2-1 Suct (2-10-9,10)	2S1-512-14III [2.2-15]	VT-3 (VT-4)	4	C-E 1 Support(s) 100% 1 2	One Two Three	C-E 25 50 100	0	
	Cont Sump to RHR Pps Pump 2-2 Suct (2-10-10,8)	2S1-513-14III [2.2-6]	VT-3 (VT-4)	5	C-E 1 Support(s) 100% 2 2	One Two Three	C-E 20 60 100	0	
C3.40 C3.50	Charg Pps Suction From RWST Valve A (2-9-3)	2S2-1987-8 [2.2-28]	VT-3 (VT-4)	1	C-E 100% 1 Support	Three	C-E 100	0	
	Charge Pps Suction from RWST Valve B (2-9-3)	2S2-1988-8 [2.2-28]	VT-3 (VT-4)	1	C-E 1 Support 100%	Two	C-E 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-G) (Cont'd)	Line No. & ISI DWG. No.							Applicable To: Mark No.
C3.40 C3.50	RHR Sup to Spray Hdrs 1 & 3 (2-10-17)	2S1-279-8IIIP [2.2-29]	PT	1	C-C C-E	One	100 C-E		49-70V Valve C3.110 Item
			VT-3 (VT-4)	11	5 Supports 100% 3 3	One Two Three	45 72 100	1	
	RHR Sup to Spray Hdrs 2 & 4 (2-10-10,11)	2S1-280-8IIIP [2.2-11]	VT-3 (VT-4)	4	C-E 1 Support(s) 100% 2 1	One Two Three	C-E 40 80 100	1	
C3.40 C3.50	RHR Pp Inj Cold Leg Pp 2-1 (2-9-23,24,25) (2-10-16)	2S6-508-8III [2.2-30] [2.2-31] [2.2-32]	PT	2	C-C C-E	Three	100 C-E		8-52A 8-49R
			VT-3 (VT-4)	22	9 Supports 100% 7 6	One Two Three	40 72 100	4	
	RHR Pp Inj Cold Leg Pp 2-2 (2-9-21) (2-10-2)	2S6-509-8III [2.2-33]	PT	2	C-C C-E	One	100 C-E		8-55A 7-5R
			VT-3 (VT-4)	8	5 Support(s) 100% 2 1	One Two Three	62 87 100	0	

CATEGORY ITEM	COMPONENT OR SYS.	GENERAL ID	NDE METH	TOTAL HANG.	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	TOTAL SNUBBERS	EXAM RELIEF'S & REMARKS
C-C,C-E	Support Members - (Cont'd)								
C3.40 C3.50	Support Attach't Support Components Multiple Stream (C-G) (Cont'd)	Line No. & ISI DWG. No.							
C3.40 C3.50	RHR Pp 2-1 Inj Cold Leg Loop 1 (2-9-22)	2S6-3844-6III [2.2-34]	VT-3 (VT-4)	7	C-E 1 Support(s) 100% 3 3	One Two Three	C-E 14 57 100	0	
	RHR Pp 2-1 Inj Cold Leg Loop 2 (2-9-22)	2S6-3845-6III [2.2-34]	VT-3 (VT-4)	7	C-E 1 Support(s) 100% 4 2	One Two Three	C-E 14 71 100	0	
	RHR Pp 2-1 Inj Cold Leg Loop 3 (2-9-21)(2-10-12)	2S6-3846-6III [2.2-33]						0	No supports in boundary.
	RHR Pp 2-1 Inj Cold Leg Loop 4 (2-9-21)(2-10-12)	2S6-3847-6III [2.2-33]	VT-3 (VT-4)	1	C-E 1 Support 100%	Two	C-E 100	0	
C3.40 C3.50	Safety Inj Pump Suction Pump 2-1 (2-9-2,6)	2S2-1982-6 [2.2-16]	VT-3 (VT-4)	3	C-E 1 Support(s) 100% 2	Two Three	C-E 33 100	0	
	Safety Inj Pump Suction Pp 2-2 (2-9-1,5)	2S2-1983-6 [2.2-12]	VT-3 (VT-4)	4	C-E 1 Support(s) 100% 2 1	One Two Three	C-E 25 75 100	0	
	End of Item C3.40 and 3.50								

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MAJOR ITEM: Pumps (RHR Pumps)
TABLE: 2.3
PAGE 1 of 5

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Table IWC-2500-1 Sub-Item Out of Sequence Intentionally (Each Pump is Described Completely Before the Next Pump is Described)							[*] ISI DWG Page No. Ingersoll Rand Serial No. 2-1 037049 2-2 A69-35
	Residual Heat Removal Pumps	DWG. REF. DC-663217-26 * [2.3-1]						
C-G	Pressure Retaining Welds							
C6.10	Pump Casing Welds							C6.10 Items Not Applicable
C-D	Pressure Retaining Bolting (Larger than 2 inch dia.)							
C4.30	Bolts, Studs, and Nuts							C4.30 Item Not Applicable
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)							C3.70 Item Not Applicable
C-E	Support Members							
C3.80	Support Plates							
	RHR Pump 2-1	Plate 2-1	VT-3	1	Exposed Areas	One	100	The RHR Pumps Are Resting On A Plate Imbedded In The Deck
	RHR Pump 2-2	Plate 2-2	VT-3	1	Exposed Areas	Two	100	

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	RHR Pumps - Cont'd							
C-E	Support Members - (Cont'd)							[*] ISI DWG. Page No.
C3.80	Supports							
	Safety Injection Pumps	DWG. REF. * [2.3-2]						Pacific Pump S/N 45489 & JN51890-01
C-G	Pressure Retaining Welds							
C6.10	Pump Casing Welds							C6.10 Item Not Applicable
C-D	Pressure Retaining Bolting (Larger Than 2-Inch Dia.)							
C4.30	Bolts, Studs, and Nuts							
	SI Pump 2-1 OR[1] SI Pump 2-2	Casing Bolts	UT	8	All Bolts 100% (number 5 on Dwg. 2.3-2)	[1]Dependent on Maintenance Schedule Due to Design	100	Relief No. 010 Dia. = 2.12"

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	SI Pumps - Cont'd							[*] ISI Dwg. Page No.
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)							C3.70 Item Not Applicable
C3.80	Support Components	Support Base						
	SI Pump 2-1	Base 2-1	VT-3	1	Exposed Areas	One	100	The SI pumps are resting on concrete foundations
	SI Pump 2-2	Base 2-2	VT-3	1	Exposed Areas	Two	100	
	Centrifugal Charging Pumps	DWG. REF. DC-663210-146 * [2.3-3]						
C-G	Pressure Retaining Welds							Exams req'd on one pump:
C6.10	Pump Casing Welds							Mfg. Dresser Pacific Pumps S/N 45617 & 45618
	Cent'l Pp 2-1 OR Cent'l Pp 2-2	Branch Weld to Upper Case Weld N-A	PT	1	360° Weld N-A 360°	Two	100	Suction Side, Six inch 150# Flange
C6.10	Cent'l Pp 2-1 OR[1] 2-2	Machined Weld Drive end of pump casing	PT	1	One Weld 100%	[1]Dependent on Maintenance Schedule Due to Design	100	Relief No. 011

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Cent'l Chg Pumps - Cont'd	*[2.3-3]						[*] ISI Dwg. Page No.
C-D	Pressure Retaining Bolting (Larger than 2 inch Dia.)							
C4.30	Bolts, Studs, and Nuts							C4.30 Item Not Applicable
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)	Welded Attach't					[1]100%	[1]Of One Stream Typical
	Cent'l Pp 2-1	Items 1-4	PT or MT	4	4 Attach'ts 100%	One	50	
	Cent'l Pp 2-2	Items 1-4	PT or MT	4	4 Attach'ts 100%	Three	100	
C-E	Support Members							
C3.80	Support Components	Support Base						The Cent'l Chg. Pps Are Resting On Concrete Foundations
	Cent'l Pp 2-1	Base 2-1	VT-3	1	Exposed Areas	One	50	
	Cent'l Pp 2-2	Base 2-2	VT-3	1				

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MAJOR ITEM: Pumps (Recip'g Chg)
TABLE: 2.3
PAGE 5 of 5

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Reciprocating Charging Pump	DWG. REF. DC-663210-143 * [2.3-4]						[*] ISI DWG. Page No.
C-G	Pressure Retaining Welds in Pumps and Valves							Union Pump #2-3 S/N 274174
C6.10	Pump Casing Welds							C6.10 Item Not Applicable
C-D	Pressure Retaining Bolting (Larger than 2 inch Dia.)							
C4.30	Bolts, Studs, and Nuts							C4.30 Item Not Applicable
C-C	Support Members							
C3.70	Integrally Welded Support Attachments (To Pressure Boundary)							C3.70 Item Not Applicable
C-E	Support Members							
C3.80	Support Components	Support Base						
	Recip'g Pp 2-3	Base 2-3	VT-3	1	Exposed Areas	Two	100	The Reciprocating Pump is Resting On Concrete Foundation

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REV. 4

MAJOR ITEM: VALVES
TABLE: 2.4
PAGE 1 of 1

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS
	Table IWC-2500-1 Sub Item Out Of Sequence Intentionally					ISI DWG's Contain Data Relating to Valve Support Components, Valve Bolting Dimensions, and Identification		
C-G	Pressure Retaining Welds in Pumps and Valves							
C6.20	Valve Body Welds							C6.20 Item Not Applicable
C-D	Pressure Retaining Bolting (> 2" Dia.)							
C4.40	Bolts, Studs, and Nuts							C4.40 Item Not Applicable
C-C	Support Members							
C3.100	Integrally Welded Support Attachments (To Pressure Boundary)				C3.100 and C3.110 Code Items are summarized under Table 2.2 and included with their respective Piping Systems under Code Items C3.40 and C3.50. Table 2.2 describes the support amounts by line number and nomenclature. All supports are scheduled per Code requirements.			
C3.110	Component Supports							

TEN YEAR EXAMINATION PROGRAM
ASME SECTION XI SYSTEMS-CLASS 3

CODE ITEM D-A, D-B, D-C: REV. 4

MAJOR ITEM: COMPONENT SUPPORTS (ALL TYPES)
TABLE: 3.1
PAGE 1 of 5

CATEGORY ITEM	COMPONENT OR SYSTEM	GENERAL IDENTIFICATION	NDE METH	TOTAL ITEMS	EXAMINATION AMOUNT & EXTENT	EXAM'N PERIOD	% TO DATE	EXAM RELIEF'S & REMARKS

Category D-A, D-B, and D-C component support members are itemized by line number and number of supports on the line according to system in descending size order. Support totals for all applicable Class 3 lines over 4 inch nominal diameter are given. A visual examination, VT-3 (and VT-4 as applicable) will be given each support once each inspection period (3 1/3 years) per Table IWD-2500-1 of Section XI.

COMPONENT OR SYSTEM		P&ID 104628 COORD.	PG&E REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
Auxiliary Feedwater Pump					
	2-1	33C	DC-663056	VT-3	Pumps rest on 4 integral legs to base pad.
	2-2	33B	24, 25	VT-3	
	2-3	33A		VT-3	
Letdown Heat Exchr	2-1	313C	DC-663210-11	VT-3	Vessel has 2 supports to base.
Seal Water Heat Exchr					
	2-1	311C	DC-663210-7	VT-3	Vessel has 2 supports to base.
Residual Heat Removal Pump Seal Water Cooler					
	2-1	211D, 325C	DC-663217-9,16	VT-3	Coolers have bracket to RHR Pp
	2-2	211D, 271C		VT-3	
Spent Fuel Pit Heat Exchanger					
	2-1	316C	DC-663211-7	VT-3	Vessel has 2 supports to base.

COMPONENT OR SYSTEM	P&ID 104628 COORD.	PG&E REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
Component Cooling Water Surge Tank				
2-1	257B	DC-663225-2	VT-3	Tank has 2 braced supports to base.
Component Cooling Water Pump				
2-1	262C	DC-663213-1	VT-3	Pumps have 4 integral legs to base.
2-2	264C		VT-3	
2-3	266C		VT-3	
Component Cooling Water Heat Exchanger				
2-1	257E, 356C	DC-663212-1, 2	VT-3	Vessels have 2 supports to base.
2-2	257D, 357C		VT-3	
Component Cooling Water Pump Lube Oil Cooler				
2-1	263C	DC-663213-4	VT-3	Coolers mounted to pumps.
2-2	265C		VT-3	
2-3	267C		VT-3	

COMPONENT OR SYSTEM	P&ID 104628 COORD.	PG&E REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
Centrifugal Charging Pump Lube Oil, Gear Oil and Seal Coolers				
2-1	321C	DC-663210-40,47,50	VT-3	Cooler brackets mount to pumps.
2-2	273C		VT-3	
Safety Injection Pump Lube Oil and Seal Coolers				
2-1	275C	DC-663216-26,32	VT-3	Cooler brackets mount to pumps.
2-2	326C		VT-3	
Reciprocating Charging Pump Fluid Drive and Lube Oil Coolers				
2-3	288C	DC-663210-25	VT-3	Coolers are mounted to pump.
Reactor Coolant Pump Upper Bearing Oil Coolers				
2-1	294D	DC-663207-4,6	VT-3	Cooler mount To brackets At Top of R.C. Pumps.
2-2	290D		VT-3	
2-3	292D		VT-3	
2-4	293D		VT-3	
Condensate Storage Tank				
2-1	332D	DC-663071-27	VT-3	Base of tank rests on concrete foundation.

COMPONENT OR SYSTEM	P&ID 104628 COORD.	PG&E REF. DWG. NO.	NDE METHOD	EXAM RELIEFS AND REMARKS
Firewater Transfer Tank (Performed with Unit 1)				
0-1	338D	438038	VT-3	Base of tank rests on concrete foundation.
Makeup Water Transfer Pumps (Performed with Unit 1)				
0-1	333B	DC-663062-3	VT-3	Pump mount on bed plate.
0-2	335B		VT-3	
Auxiliary Salt Water Pumps				
2-1	354C	DC-663030-1	VT-3	Pump mount to deck.
2-2	354C		VT-3	
Spent Fuel Pool Cooling Pump				
2-1	316C	DC-663211-12	VT-3	Pump mount on two pedestals to bed plate.
2-2	316C		VT-3	Pump mount on two pedestals to bed plate.

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CODE ITEM D-A, D-B, D-C: REV. 4
MAJOR ITEM: PIPING SUPPORTS (ALL TYPES)
TABLE: 3.2

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Feedwater System - Sys 03						
Aux FW Pp 2-1 Suction	2K-558-8	31C	447118	VT-3	2	0
Aux FW Pp 2-1 Raw Wtr Suct	2K-561-8	30B	447118	VT-3	1	0
Aux FW Pps 2 + 3 Cnds Suct Hdr	2K-562-8	30B	447118	VT-3	3	0
Aux FW Pps Raw Wtr Suct Hdr	2K-638-8	31A	447118	VT-3	4	0
Aux FW Pp 2-3 Suction	2K-560-6	30A	447118	VT-3,VT-4	2	1
Aux FW Pp 1 Disch Hdr	2K16-568-6	33C	445878	VT-3,VT-4	7	3
Aux FW Pp 2-2 Raw Wtr Suct	2K-488-6	31B	447118		0	0
Aux FW Pp 2-3 Raw Wtr Suct	2K-489-6	31A	447118	VT-3	1	0
Aux FW Pp 2-2 Suction	2K-559-6	31B	447118	VT-3	1	0
Turbine Stm Supply System - Sys 04						
Aux Feed Pp 2-1 Turb Exh	2K-1045-10	63C	447119	VT-3, VT-4	14	0
Spent Fuel Storage System - Sys 13						
Spent Fuel Pit Pump 1-1 Suct	2S2-154-10	245-D	470583	VT-3,VT-4	5	0
Spent Fuel Pit Pump 1-2 Suct	2S2-5634-10	246-D	G-128-01	VT-3,VT-4	2	0
Spent Fuel Pit Pump 1-1 Disch	2S2-155-8	244-D	470471	VT-3,VT-4	6	1
SPP Heat Exchr Outlet	2S2-159-8	245-E	470472	VT-3,VT-4	17	0
Spent Fuel Pit Pump 1-2 Disch	2S2-5635-8	244-D	H-088-01	VT-3,VT-4	2	0

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Component Cooling Water System - Sys 14						
CCW Ht Exchr 1 CCW Inlet	2K-95-30	253-E	449316	VT-3,VT-4	15	0
CCW HT Exchr 2 CCW Inlet	2K-96-30	253-D	449316	VT-3,VT-4	15	1
CCW HT Exchr 1 CCW Outlet	2K-101-30	258-E	449316	VT-3	1	0
CCW HT Exchr 2 CCW Outlet	2K-102-30	258-D	449316	VT-3,VT-4	1	0
CCW HT Exchr Outlet Crosstie	2K-98-24	258-E	449316		0	0
CCW Return Header A	2K-81-20	254A,262A,277A,281A 291A,304A,311A,322A	449316 449314	VT-3,VT-4	6	0
CCW Return Header B	2K-82-20	254A,262B,270B	449316 449314	VT-3,VT-4	12	0
Comp Clg Pp 1 Disch	2K-89-20	251-E	449316	VT-3,VT-4	1	0
Comp Clg Pp 2 Disch	2K-90-20	252-E	449316	VT-3	1	0
Comp Clg Pp 3 Disch	2K-91-20	254-E	449316	VT-3,VT-4	1	0
CCW Pp's 2-2 & 2-3 Suct Crosstie	2K-97-20	252-C	449316		0	0
CCW Supply Header A	2K-103-20	259E,263E,272E,281E 291E,304E,311E,322E	449316 449314	VT-3,VT-4	8	0
CCW Supply Hdr B	2K-104-20	259D,263D,270D	449316 449314	VT-3	9	0
CCW Supply Hdr C	2K-2277-20	259D,273E,270E 281E,291E	449315 449316	VT-3	8	0
CCW Return Hdr C	2K-2282-20	254A,263B,277B 280B,291A	449315 449316	VT-3,VT-4	8	0

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Component Cooling Water System - Sys 14 (Cont'd)						
CCW Pp's 2-1 & 2-2 Suct Crosstie	2K-2285-20	251C	449316		0	0
Comp Clg Pp 1 Disch Hdrs A & B	2K-2994-20	251E	449316	VT-3,VT-4	4	1
Comp Clg Pp 2 Disch Hdrs A & B	2K-3036-20	253E	449316		0	0
Comp Clg Pp 3 Disch Hdrs A & B	2K-3039-20	255E	449316		0	0
Cont Fan Clr CCW Sup Hdr B	2K-105-18	272D	449314	VT-3,VT-4	8	0
Cont Fan Clr CCW Ret Hdr B	2K-106-18	271B	449314	VT-3,VT-4	8	1
CCW Supply Hdr C	2K-2278-18	296E,304E,311E	449315	VT-3	4	0
CCW Return Hdr C	2K-2281-18	293A,304A,311A	449315	VT-3,VT-4	5	0
CCW Return Header B Bypass	2K-2369-18	276B	449314	VT-3,VT-4	1	0
Cont Fan Clr Supply Hdr A	2K-146-16	324E	449314	VT-3,VT-4	4	1
Cont Fan Clr Return Hdr A	2K-147-16	324A	449314	VT-3,VT-4	6	2
CCW Return Header A Bypass	2K-2399-16	326B	449314	VT-3	1	0
RHR Ht Exchr 2 CCW Supply	2K-94-12	270D,203C	449314	VT-3	3	0
RHR Ht Exchr 2 CCW Return	2K-99-12	270B,203C	449314	VT-3,VT-4	3	0
RHR Ht Exchr 1 CCW Supply	2K-124-12	324D,203E	449314	VT-3	3	0
RHR Ht Exchr 1 CCW Return	2K-127-12	324B,204E	449315	VT-3	4	0

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Component Cooling Water System - Sys 14 (Cont'd)						
Spent Fuel Ht Exchr CCW Sup	2K-152-12	316D	449315	VT-3	4	0
Spent Fuel Ht Exchr CCW Ret	2K-153-12	316C	449315	VT-3,VT-4	5	0
CCW Supply Hdr C	2K-2279-12	316E	449315	VT-3,VT-4	2	0
CCW Return Hdr C	2K-2280-12	316B	449315	VT-3,VT-4	2	0
Cont Fan Clr 5 CCW Supply	2K-3279-12	277D	446503	VT-3,VT-4	2	0
Cont Fan CLR 4 CCW Supply	2K-3280-12	327E	446503	VT-3,VT-4	3	0
Cont Fan Clr 3 CCW Supply	2K-3281-12	328E	446503	VT-3,VT-4	2	1
Cont Fan Clr 2 CCW Supply	2K-3282-12	278D	446503	VT-3,VT-4	2	0
Cont Fan Clr 1 CCW Supply	2K-3283-12	279D	446503	VT-3	1	0
Cont Fan Clr 5 CCW Rtn	2K-3284-12	277B	446503	VT-3,VT-4	2	0
Cont Fan Clr 4 CCW Rtn	2K-3285-12	327A	446503	VT-3,VT-4	3	0
Cont Fan Clr 3 CCW Rtn	2K-3286-12	328A	446503	VT-3,VT-4	2	0
Cont Fan Clr 2 CCW Rtn	2K2-3287-12	278B	446503	VT-3,VT-4	2	0
Cont Fan Clr 1 CCW Rtn	2K2-3288-12	279B	446503	VT-3,VT-4	2	0
Reac Cool Pps CCW Sup Hdr	2K-133-10	312E	445876 449315	VT-3,VT-4	2	0
BA & Waste Conc CCW Sup Hdr	2K-148-10	322D	451411	VT-3	5	0
BA & Waste Conc CCW Ret Hdr	2K-149-10	322B	451411	VT-3,VT-4	3	0

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Component Cooling Water System - Sys 14 (Cont'd)						
Reac Cool Pps CCW Sup Hdr	2K-180-10	312E	446495	VT-3,VT-4	1	0
Ltdn Ht Exchr CCW Supply	2K-125-8	333D	449315	VT-3,VT-4	5	1
Ltdn Ht Exchr CCW Rtn	2K-126-8	333C	449315	VT-3,VT-4	5	0
RC Pumps CCW Sup Hdr	2K-2296-8	312E	446495	VT-3,VT-4	9	0
BA Conc CCW Sup Hdr	2K-2312-8	321D	451411	VT-3	3	0
BA Conc CCW Rtn Hdr	2K-2341-8	321B	451411	VT-3	3	0
Comp Clg Wtr Pp 1 Recirc	2K-116-6	271D	449316	VT-3	1	0
Comp Clg Wtr Pp 2 Recirc	2K-117-6	252D	449316	VT-3	1	0
CCW Surge Tk Conn Hdr B	2K-121-6	257B	445881	VT-3,VT-4	8	0
CCW Surge Tk Conn Hdr A	2K-123-6	256A	445881	VT-3,VT-4	10	0
Waste Conc CCW Supply Hdr	(2)K-150-8 *	325D	451411		0	0
Waste Conc CCW Rtn Hdr	(2)K-151-8 *	325B	451411	VT-3	1	0
Waste Conc Evap Cond CCW Sup	(2)K-1767-6 *	305D	451411	VT-3	2	0
Waste Conc Evap Cond CCW Rtn	(2)K-1768-6 *	305B	451411	VT-3	1	0
Waste Conc CCW Rtn Hdr	(2)K-1951-10 *	324B	451411	VT-3	1	0
Waste Conc CCW Supply Hdr	(2)K-2207-10 *	324D	451411	VT-3,VT-4	5	1

* Common Line with Unit 1. Included here for information. Examined as Unit 1 Line.

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Component Cooling Water System - Sys 14 (Cont'd)						
RCP Oil Clr CCW Rtn Hdr	2K-142-6	291A	445880	VT-3,VT-4	2	0
RCP Barrier CCW Rtn Hdr	2K-143-6	293A	445880	VT-3,VT-4	2	0
Comp Clg Wtr Pp 3 Recirc	2K-157-6	254D	449316	VT-3	1	0
RC Pps Barrier CCW Ret Hdr	2K17-1357-6	293B	446490 445880	VT-3,VT-4	1	1
BA Conc Evap Cond CCW Sup	2K-1759-6	301D	451411	VT-3	2	0
BA Conc Evap Cond CCW Ret	2K-1760-6	301B	451411	VT-3	1	0
RCP 4 CCW Sup Hdr	2K-1968-6	292D	446495	VT-3	2	0
RCP 3 CCW Sup Hdr	2K-2211-6	292D	446495	VT-3	1	0
RCP 1 CCW Sup Hdr	2K-2297-6	294D	446495	VT-3	13	0
RCP 2 CCW Sup Hdr	2K-2298-6	291D	446495	VT-3	15	1
RC Pumps Oil Clr CCW Ret Hdr	2K-2311-6	292C	446498	VT-3	12	2
RCP Thermal Bar CCW Ret Hdr	2K17-2340-6	292C	446490	VT-3	9	2
RC Pps Oil Clr CCW Ret Hdr	2K-3179-6	292C	445498	VT-3,VT-4	1	1
Makeup Water System - Sys 16						
Aux FW Pps Condensate Suct	2K-380-10	30C, 332C	447118	VT-3	12	0
Raw Wtr Stor Resv Disch Hdr	2K-1862-8	388C	449298	VT-3	1	0

COMPONENT OR SYSTEM	LINE NO.	COORDINATES	DWG. NO.	NDE METH	TOTAL HANG	TOTAL SNUBBERS
Saltwater Systems - Sys 17						
Aux Sltwtr Pps Units 1 + 2 Crosstie	2G1-933-24	374C	57744 57750 57753	VT-3	1	0
Comp Clg Ht Exchr 1 Outlet	2G1-713-24	377C	500032 500034		0	0
Comp Clg Ht Exchr 2 Outlet	2G1-714-24	377C	500032 500034		0	0
Aux Sltwtr Pp 1 Disch	2G1-687-24	374C	57744 57750 57753 57743 57745 500031 500034	VT-3	9	0
Aux Sltwtr Pps Disch Crosstie	2G1-676-24	374C	57750 57753 57745	VT-3	6	0
Aux Sltwtr Pp 2 Disch	2G1-680-24	375C	57744 57750 57753 57743 57745 500031 500034	VT-3	7	0
Mus Demin Drain A To Ocean	2G1-3681-6	378C	500031 500034	VT-3	0	0
Mus Demin Drain B To Ocean	2G1-3682-6	377C	500031 500034	VT-3	0	0
Diesel Engine Jacket Water Cooling System - SYS 21	*5	376C(typ.)	By ALCO		0	0

REQUEST #	REQUEST FOR RELIEF INDEX AND DESCRIPTION
NDE-001	Reactor Vessel Shell-To-Bottom Head Weld
NDE-002	Reactor Vessel Closure Head and Bottom Head Circumferential and Meridional Welds
NDE-003	Reactor Vessel Head-To-Flange Weld
NDE-004	Reactor Vessel Nozzle-To-Vessel Welds
NDE-005	Pressurizer Vessel Nozzle-To-Vessel Welds and Inner Radius Section
NDE-006	ASME Code Class 2 Exemption Criteria (IWC-1220)
NDE-007	Class 2 Pressure Vessel Nozzle and Shell Welds
NDE-008	Class 2 Vessel Insulation Design
NDE-009	Class 1 and 2 Pipe Weld Accessibility
NDE-010	Bolt Design For Safety Injection Pumps
NDE-011	Centrifugal Charging Pump End Plate Weld Schedule
NDE-012	Scheduling Class 2 Multiple Stream Pipe Welds
NDE-013	Deleted
NDE-014	Deleted
NDE-015	Steam Generator Nozzle Inner Radius
REP-001	Deleted

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - CIRCUMFERENTIAL WELD				(B1.10)
SHELL-TO-BOTTOM HEAD				
Item: Circumferential Weld #10-201 @ Elevation -342.88"	1	1.1	B-A	B1.11

CODE REQUIREMENT

Volumetric Examination (by Ultrasonic Shear and Longitudinal Beam) from both directions at right angles to welds where feasible. Essentially 100% of the weld length is required for examination at or near end of inspection interval.

BASIS FOR REQUEST

Vessel design of Bottom Head-to-Shell Circumferential weld (10-201) allows only partial examination. Core Support Lugs (12) interfere with remote tool accessibility. Approximately 75% of the weld is accessible for Code volumetric examination from the shell side and it is completely accessible from the head side.

PROPOSED EXAMINATION

Volumetric Examination to extent possible, Visual Examination as required by Code Category B-N-1 (and B-N-3), in addition to Pressure Test as required by Code Category B-P.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - HEAD WELDS				(B1.20)
Item: (a) Bottom Head (#4-202) Circ'l Welds &	1	1.1	B-A	B1.21
(b) Closure Head (#6-205B) Circ'l Weld	1	1.1	B-A	B1.21
Item: (c) Bottom Head Meridional Welds (#1-202A, through #1-202F)	1	1.1	B-A	B1.22
Item: (d) Closure Head Meridional Welds (#1-205A, through #1-205F)	1	1.1	B-A	B1.22

CODE REQUIREMENT

Volumetric Examination (by Ultrasonic Shear and Longitudinal Beam) from both directions at right angles to the weld where feasible. Essentially 100% of each weld length is required for welds 6-205B and 1-205A to F during the interval; welds 4-202 and 1-202A to F may be deferred to the end of the inspection interval.

BASIS FOR REQUEST

The Bottom Head Circumferential Weld (4-202) is completely inaccessible for Code volumetric examination due to the bottom head instrument penetrations. Bottom Head Meridional Welds (1-205 A to F) are approximately 50% inaccessible due to the bottom head instrument penetrations. The Closure Head Circumferential Weld (6-205B) is completely inaccessible due to the CRDM Penetrations and vessel head cooling duct shroud. The Closure Head Meridional Welds are inaccessible except for 38 inches (approximately 55%) due to the cooling duct shroud and CRDM penetrations.

PROPOSED EXAMINATION

The accessible length of each Closure Head and Bottom Head Meridional Weld will be ultrasonically examined as scheduled. Bottom Head Welds will be visually examined as required by Category B-N-1 (and B-N-3), all items will be pressure tested as required by Category B-P.

SCHEDULED IMPLEMENTATION

Commercial start to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL				
Item: Head-To-Flange Weld No. 6-205A	1	1.1	B-A	B1.40

CODE REQUIREMENT

Volumetric Examination (by Ultrasonic Angle and Longitudinal Beam) from both sides at right angles to the weld where feasible.

BASIS FOR REQUEST

Flange design prohibits head-to-flange weld examination from the flange side. Additionally 3 Top Head Lifting Lugs limit full scan from the head. Approximately 95% of the weld is accessible from the head side.

PROPOSED EXAMINATION

The Head-to-Flange Weld will be examined as accessible. Additionally, the welds will be visually examined during pressure test per Category B-P.

SCHEDULED IMPLEMENTATION

Commercial start to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
REACTOR VESSEL - NOZZLE WELDS				
Item: Primary Nozzle to Vessel Welds	1	1.1	B-D	B3.90

(a) 29 Inch Outlet Nozzles (Total 4)
(Pipe Nominal Diameter)

(b) 27.5 Inch Inlet Nozzles (Total 4)
(Pipe Nominal Diameter)

CODE REQUIREMENT

Volumetric Examination (by Ultrasonic Shear and Longitudinal Beam) at right angles to the weld from the vessel shell. Volumetric Examination (by Ultrasonic Longitudinal Beam) from inside the vessel nozzle. Welds will be examined from inside the nozzle as scheduled, and from the shell at the end of the inspection interval per Code Case 1647 (N-73).

BASIS FOR REQUEST

Nozzle Reinforcement precludes part of the examination for all outlet nozzles as it prevents the transducers from moving completely across the weld. It prevents full scan from the near side of adjacent nozzles by obstructing full transducer movement back from the nozzle. Inlet nozzle openings similarly obstruct full coverage at the near side of all adjacent nozzles. Approximately 60% of each nozzle is accessible from the shell side. All nozzles are completely accessible from the nozzle I.D.

PROPOSED EXAMINATION

Volumetric examination of all nozzles as accessible. Visual examination per category B-N-1 and pressure test per category B-P.

SCHEDULED IMPLEMENTATION

Commercial start up to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
PRESSURIZER VESSEL-NOZZLE-TO-VESSEL WELDS & INNER RADIUS				
Item: Safety Nozzle, Spray Nozzle, Relief Nozzles (3), Surge Nozzle. Nozzle to vessel welds. Inner Radius Area.	1	1.2	B-D	B3.110 B3.120

CODE REQUIREMENT

Volumetric Examination (by Ultrasonic Shear and Longitudinal Beam) at right angles to the weld from the vessel shell. Volumetric Examination to include nozzle inner radius area.

BASIS FOR REQUEST

Nozzle welds are accessible from vessel head side only (not accessible from nozzle side due to configuration). Surge nozzle is further limited by heater penetrations. Approximately 50% of the surge nozzle is accessible from the head side. Compound curvature of vessel heads combined with short outside radii of nozzles and surface geometry makes meaningful inner radius examination impossible.

PROPOSED EXAMINATION

Volumetric examination of all nozzle welds as accessible (from head side only). Visual examination (VT-2) during pressure test per Category B-P.

SCHEDULED IMPLEMENTATION

Commercial start up to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
PIPING WELDS				(C5.10) C5.11, C5.12 (C5.20) C5.21, C5.22 (C5.30) C5.31, C5.32
Item: Class 2 Piping Systems	2	2.2	C-F	

CODE REQUIREMENT

The NDE Exemption Criteria established by IWC-1220 1974 Edition, Summer 75 Addenda is to be used to develop the DCPP Unit 2 Code Class 2 pipe weld ISI Program as indicated by 10CFR50.55a(b)(2)(iv)(B).

BASIS FOR REQUEST

PG&E does not concur with the basis for many of the Summer 75 Exemption Criteria. IWC-1220(a) uses design parameters while neglecting the possibility of using conservative design specifications and does not take the actual operating conditions of systems into account. It also fails to recognize the safety significance of some systems over others. IWC-1220(c) uses system chemistry control to allow exempting components from inspections. Chemistry control, however, eliminates only one possible failure mode and should not be the sole justification for eliminating inspections. The requirements of IWC-1220 in the 1977 Edition, Summer 1978 Addenda are more realistic than those of the 1975 Edition, and are in keeping with the philosophy of PG&E and ASME.

PROPOSED CRITERIA

The Class 2 NDE Exemption Criteria established by IWC-1220 1977 Edition, Summer 78 Addenda will be used to develop the DCPP Unit 2 Code Class 2 Pipe Weld ISI Program. Appendix B will be revised after each refueling outage and the latest Appendix B revision will be used with each subsequent program plan revision.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
CLASS 2 PRESSURE VESSEL NOZZLE & SHELL WELDS				
Seal Inj. Filter 2-1 Girth Welds Item No. 1, No. 2	2	2.1	C-A	C1.10, C1.20
Excess Letdown Ht Exchr Girth Welds Item No. 13, No. 14	2	2.1	C-A	C1.10, C1.20
RHR Ht Exchr 2-1 Girth Welds Item 21, 22	2	2.1	C-A	C1.10, C1.20
RHR Ht Exchr 2-1 Nozzle Welds Item 23, 24	2	2.1	C-B	C2.20
Stabilizer Separator Girths Welds G-A, G-B	2	2.1	C-A	C1.20
Regenerative Ht Exchr+Shell Welds Item Numbers 9, 10, 11, 12	2	2.1	C-A	C1.20, C1.30

CODE REQUIREMENTS

Volumetric examination by Ultrasonic Angle and Longitudinal Beam from both sides of the weld where possible.

BASIS FOR REQUEST

Seal Injection Filter 2-1 Girth Welds No. 1, No. 2

The Seal Injection Filters are located in a filter bank with interconnected concrete vaults for shielding. The filters are approximately 61" long with a 22" max. diameter. They are set into vaults that are approximately 63" tall by 36" on each side. Access to each vault is through a 21½" diameter removable hatch at the top which exposes the top of the filter for cartridge replacement. However, access to the applicable welds from this side is restricted by the filter cover plate assembly and cover plate lifting fixtures. Alternate access is provided by an unshielded crawl space behind the filter bank. This crawl space is obstructed by remote valve operators and instrument cables. Radiation levels are expected to exceed 10 rads per hour in this area, and a liquid penetrant examination takes 45 minutes, not counting the time required to negotiate the obstructed crawl space. The combined factors of limited accessibility, high radiation levels, and small size (2") of the line to/from the filters pose an unjustified risk to the examination personnel.

COMPONENT OR ITEM | ASME XI CODE CLASS | PROGRAM TABLE | CODE CATEGORY | CODE ITEM

BASIS FOR REQUEST (Continued)

Excess Letdown Heat Exchanger Girth Welds No.13, No.14
This is a vertical vessel supported by steel 'feet' on concrete piers with pads welded to the shell closely abutting and restricting access to each subject weld. On the vessel shell, at 90° to each support pad, the nozzle penetrations further limit access to these welds. The shell to flange weld cannot be scanned from the flange side due to flange configuration, and the head to shell weld is limited from the head side due to head curvature. Approximately 15% of weld 13 is accessible from the shell side. Approximately 10% of weld 14 is accessible from the shell side.

RHR Heat Exchanger 2-1 Girth Welds 21, 22 and Nozzle Welds 23, 24
This is also a vertical vessel supported as is the excess letdown heat exchanger. The head to shell and shell to flange welds (21 and 22) are also restricted to approximately 15% and 10% due to the support pads, nozzles, flange and head curvature. The nozzle welds are restricted by the adjacent support pads, by the flange, and by the curvature of the head underneath. Approximately 10% of each nozzle weld is accessible from the shell side. They are not accessible from the nozzle side due to the nozzle geometry.

Stabilizer Separator Girth Welds G-A, G-B
These welds are obstructed from the head side by support skirt welds which prevent transducer access completely. Weld G-A (top) is approximately 95% accessible from the shell side due to vent line penetration. Weld G-B (bottom) is approximately 80% accessible from the shell side due to the outlet nozzle penetration.

Regenerative Heat Exchanger Shell No. III, Welds #9, 10, 11 and 12
The regenerative heat exchanger (RHE) consists of 3 shells arranged vertically (shell no. I, no. II, and no. III). ASME Section XI requires 100% volumetric examination of all four welds in any one shell. PG&E has selected shell no. III as the typical shell for examination.

Volumetric examination by radiography is not practicable for the following reasons: (1) high background radiation levels, (2) complex geometry of the tubesheet to shell weld, including the tubes themselves, (3) the vessel is filled with water.

Material Considerations:

Volumetric examination by ultrasonics is of limited reliability due to the shell material and product form, ATSM A351 Gr CF8 centrifugally cast stainless steel. This material has a large grain structure which disperses the ultrasonic beam, requiring use of large, low frequency transducers which are not sensitive to small flaws. PG&E believes that this impaired examination sensitivity, combined with the physical access limitations described below, make the ultrasonic method ineffective for this application. This conclusion is supported by EPRI report NP-5173 (April 1987).

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM

Regenerative Heat Exchanger Shell No. III, Welds #9, 10, 11 and 12 (Cont'd)
Physical Access Limitations:
Head to Shell Welds (Welds 9, 12): Welds 9 and 12 are partly accessible (approximately 60 to 80 percent, respectively from the shell side due to nozzle obstructions. Examinations from the head side are not practicable because the head curvature geometry is not conducive to effective volumetric examination techniques.

Tubesheet to Shell Welds (Welds 10, 11): Welds 10 and 11 are partly accessible (approximately 30 and 45 percent, respectively) from the shell side due to vessel support and nozzle obstructions. Welds 10 and 11 are not accessible from the tubesheet side due to vessel support obstructions. Even if these welds were accessible, examination is not practicable because the complex tubesheet geometry is not conducive to effective volumetric techniques.

PROPOSED AND ALTERNATE EXAMINATION
Seal Injection Filter Girth Welds - Scheduled pressure test.

Excess Letdown Heat Exchanger Girth Welds - Surface examination approximately 80% (limited by vessel supports). Volumetric examination to the extent practical (approximately 10% of weld 14 and 15% of weld 13).

RHR Heat Exchanger Shell and Nozzle Welds - Surface examination approximately 80% each (limited by vessel supports). Volumetric examination to the extent practical (approximately 10% of welds 22, 23, and 24 and 15% of weld 21).

Stabilizer Separator Girth Welds - Volumetric examination to the extent practical (approximately 95% of weld G-A and 80% of weld G-B).

Regenerative Heat Exchanger Shell Welds - Visual examination (VT-2) during system operational pressure test
Liquid penetrant surface examination (PT) of 100% of head to shell welds 9 and 12.
Due to support and nozzle obstructions, tubesheet to shell welds 10 and 11 are each approximately 45 percent accessible for an alternate PT examination. Therefore, to provide an acceptable alternative, PG&E will perform a PT "composite" examination equal to 100% of each weld by examining as necessary the accessible portions of tubesheet to shell welds 10 and 11 (shell No. III), 6 and 7 (shell No. II), and 2 and 3 (shell No. I).

In the unlikely event of RHE shell weld degradation not being detected by these alternate ISI examination methods, potential RHE tube leakage through a shell weld would be detected by pressurizer level indications and would be isolable.

SCHEDULED IMPLEMENTATION
Commercial startup to 120 months of operation. NOTE: Refer to Inservice Examination Isometric Drawings for details.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
BORON INJECTION TANK INSULATION DESIGN				
Circumferential Welds (Girth A, B)	2	2.1	C-A	C1.20

CODE REQUIREMENT

Volumetric Examination of Circumferential Welds (by Ultrasonic Shear and Longitudinal Beam) from both directions at right angles to welds where feasible. The Volumetric Examination is performed at structural discontinuities (as defined by NB-3213.2 and Table IWC-2500-1 Footnote 2) so that the examinations total 100% of one vessel. Examination techniques are required to be performed in accordance with ASME Code Section V, Article 4 and divided in accordance with Code Section XI Table IWC-2412-1 over the inspection interval.

BASIS FOR REQUEST

Vessel insulation removable panels and vessel accessibility provisions were designed and constructed to conform to the Summer 1975 Code Addenda. With the acceptance of Summer 1978 Addenda, the existing provisions for removal of insulation (20%) became inadequate to comply with new code requirements. The present design consists of removable insulation panels approximately 120° apart for each circumferential weld. The panels expose a minimum of 20% of each weld for examination when scheduled. The proposed examination schedule outlined in Table 2.1 (specified proposed examinations) meets the summer 1975 Code Addenda and 10 CFR 50.55a in effect at the time that the preservice inspection was performed. To impose a design change for insulation panelling and accessibility would create a significant burden on plant and personnel with no significant gain in plant or public safety.

PROPOSED EXAMINATION

Full Volumetric Examination of the accessible areas to total 100% (of 20%) over the inspection interval as outlined above and Pressure Test as required by Code Category C-H.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
PIPE WELDS	1 & 2	1.4, 2.2	B-J, C-F	B9.X, C5.X

CODE REQUIREMENTS

Volumetric examination per Appendix III for applicable Class 1 pipe welds 4 inch and greater nominal diameter and for applicable Class 2 pipe welds over 1/2 inch nominal wall thickness. Surface examination for all applicable pipe welds.

BASIS FOR REQUEST

Many welds are not 100% accessible for examination. The specific reasons are dependent on each weld's configuration, but in general the limiting features could include the following:

1. Lugs or other welded attachments.
2. Wall or floor penetrations, hangers or components closely adjacent to the examination surface.
3. Surface configuration, such as local roughness or compound curvature, especially at the intrados of elbows or tees.
4. Surface obstructions, including flanges or the bevels at valve bodies or thick-wall fittings. These conditions, when present, may obstruct a portion of the test surface, especially from volumetric examination due to transducer lift-off.

A list of specific limited welds with an estimate of the accessible percentage of each and the reason for limitation is included as Appendix B.

PROPOSED EXAMINATION

PG&E proposes to examine each and every scheduled weld to the fullest extent possible. If, during the course of examination, some obstruction or limitation is encountered, that limitation will be fully documented including location, percentage of total examination surface obstructed and the nature of the limitation. (Recording these limitations is required by all present PG&E nondestructive examination procedures.) At that time, the examination result will be subject to approval of the Authorized Nuclear Inservice Inspector, and a list and description of all obstructions will be forwarded to the NRC with the Report of Inservice Inspection following each refueling outage.

SCHEDULE IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
SAFETY INJECTION PUMPS				
Item: Pump Casing Bolts - Design (Exceeding 2 inch diameter)	2	2.3	C-D	C4.30

CODE REQUIREMENT

Volumetric Examination (when in place) by Ultrasonic Longitudinal Beam to comply with Section XI, Code Figure IWC-2520-6. The bolt examinations are distributed over the inspection interval to comply with IWC-2412-1.

BASIS FOR REQUEST

Bolting Ultrasonic Examination is restricted by the design (acorn nuts) which prevents ultrasonic transmission through the bolts while the pump is assembled. Because of the pump design and availability, no specific inspection period is specified. Instead, the examinations will be scheduled in accordance with the plant maintenance schedule, and each bolt will be examined once during the inspection interval.

PROPOSED SCHEDULE

Volumetric Examination of all bolts (as required by Table IWC-2500-1) on one pump selected for maintenance and pressure test as required by Code Category C-H.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
CENTRIFUGAL CHARGING PUMP				
Item: Suction End Plate Weld	2	2.3	C-G	C6.10

CODE REQUIREMENT

Surface Examination from inside or outside of pump casing. The Surface Examination may be performed on one pump. The examination is required (when practical) to be distributed over the inspection interval to comply with Table IWC-2412-1.

BASIS FOR RELIEF

The Suction End Plate Weld, is a machined weld that is essentially inaccessible (by design of the pump) for an examination according to a specific inspection period schedule. Because of the pump design, no specific inspection period schedule is appropriate. Instead, examination will be scheduled in accordance with the plant maintenance schedule, and will be done once during the inspection interval.

PROPOSED SCHEDULE

Surface Examination of all machined weld areas on the Suction End Plate as required on one pump selected for maintenance as schedule allows, and Pressure Test as required by Code Category C-H.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	APPLICABLE CODE SECTIONS
SCHEDULING OF CLASS 2 PIPE WELDS IN MULTIPLE STREAM SYSTEMS	2	2.2	Paragraph IWC-2411 of the 1974 Edition, Summer 1975 Addenda of Section XI.

CODE REQUIREMENT

The ASME Code Section XI 1977 Edition, Summer 1978 Addenda, requires a selection of welds based on stress calculations. 10CFR50.55a (b) (2) (iv) (B) allows owners of units having construction permit applications predating July 1, 1978 to schedule Class 2 pipe welds according to paragraph IWC-1220, Table IWC-2520 Category C-F and C-G, and paragraph IWC-2411 from the 1974 Edition, including Addendas through Summer 1975. Paragraph IWC-2411 states that "the examinations...shall be divided among... the multiple streams of a system... such that the total examinations completed over the system's service lifetime will be equivalent to having performed 100% of the required examinations in one of the multiple streams of the system.

BASIS FOR REQUEST

The PSI for Unit 2 commenced and was 90% complete during 1976-1977 when Section XI of the Code allowed the 'single stream' method for scheduling Class 2 pipe welds. The Code Edition used at that time was the 1974 Code with Addenda thru Winter 1976. At that time, since this was part of the published Code, PG&E assumed that it would become the industry standard. However the Winter 1976 Addenda was never incorporated into 10CFR50.55a.

There are, however, many other cases where the "single stream" philosophy is endorsed in the Code as referenced in 10CFR50.55a. The 'single stream' method is specifically established in the Section XI 1977 Edition, Summer 1978 Addenda for Class 1 pipe welds (Category B-J), Class 2 vessel welds (Category C-A), support members (Category C-C and C-E), bolting (Category C-D) and pump and valve welds (Category C-G). 'Single stream' for Class 2 pipe welds is neither endorsed nor prohibited by this Code. The Diablo Canyon Unit 2 PSI Plan made line selections that contained the Code required number of welds, but welds were not distributed over the multiple streams.

CONTINUED ON NEXT PAGE

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	APPLICABLE CODE SECTIONS

All welds on all streams have passed all Construction Code acceptance examinations. Each stream of a 'multiple stream' system sees the same service conditions (except the two loops of the main steam and feedwater systems having unsheltered exterior sections which are exposed to the atmosphere) as the representative 'single stream'. In the case where there are exterior welds, the "worst case" loop having exterior welds was selected for examination. Therefore the single stream scheduling method provides at least as representative a selection of welds as the multiple stream method.

The preparatory work, including surface conditioning, has already been completed for the 'single stream' schedule. Changing to a multiple stream schedule would require surface preparation for other welds. The additional work is not commensurate to any expected benefit of using the 'multiple steam' schedule. No other examination (such as that for supports) which is based on the pipe weld line selection has been limited to single stream; i.e., all supports on all lines are still scheduled for examination.

ALTERNATE SCHEDULE

100% of the Code-required total of welds will be examined. These will be in one stream of 'multiple stream' systems to provide a representative sample. Additionally all feedwater nozzle-to-vessel welds are separately scheduled for volumetric examination on a 3 year basis. All supports on all multiple streams of all systems not exempted by IWC-1220 will be examined (i.e., the single stream pipe weld schedule is not being used to limit any other type of examination to a single stream). Should the examination of one stream reveal unacceptable indications, additional examinations will be conducted on another stream in accordance with IWC-2430 (c) and IWC-2430 (d). All lines are scheduled for periodic pressure test. This program of examinations provides reasonable assurance that any potential flaw conditions will be detected at an early stage.

SCHEDULED IMPLEMENTATION

Commercial startup to 120 months of operation.

COMPONENT OR ITEM	ASME XI CODE CLASS	PROGRAM TABLE	CODE CATEGORY	CODE ITEM
Steam Generators - NOZZLE INNER RADIUS				
Item: Steam Generator Primary Inlet and Outlet Nozzle Inner Radius Areas	1	1.3	B-D	B3.140

CODE REQUIREMENT

Volumetric Examination to include nozzle inner radius area. NOTE: The Steam Generators have integrally cast nozzles. There are no nozzle to vessel welds.

BASIS FOR REQUEST

Roughness of the as cast surface, compound curvature of steam generator channel heads, and constantly variable orientation of inner radius makes meaningful examination impossible.

PROPOSED EXAMINATION

Visual examination (VT-2) of nozzle areas during vessel pressure test per Category B-P.

SCHEDULE IMPLEMENTATION

Commercial startup to 120 months of operation.

APPENDIX A

LIST OF CALIBRATION STANDARDS
CLASS 1 LINES, S 1978 ASME XI

Line	Size	Spec.	Std.	Nominal Wall	Material	Thickness
5	31	*	22 A, B	2.5	SS	2.5
6	31	*	22 A, B	2.5	SS	2.5
7	31	*	22 A, B	2.5	SS	2.5
8	31	*	22 A, B	2.5	SS	2.5
1	29	*	22 A, B	2.5	SS	2.5
2	29	*	22 A, B	2.5	SS	2.5
3	29	*	22 A, B	2.5	SS	2.5
4	29	*	22 A, B	2.5	SS	2.5
9	27.5	*	22 A, B	2.5	SS	2.5
10	27.5	*	22 A, B	2.5	SS	2.5
11	27.5	*	22 A, B	2.5	SS	2.5
12	27.5	*	22 A, B	2.5	SS	2.5
16	14	*	12	Sch 160	SS	1.406
109	14	S6	12	Sch 160	Tp 316	1.406
1665	14	S6	12	Sch 160	Tp 316	1.406
253	10	S6	9	Sch 140	Tp 316	1.000
254	10	S6	9	Sch 140	Tp 316	1.000
255	10	S6	9	Sch 140	Tp 316	1.000
256	10	S6	9	Sch 140	Tp 316	1.000
2575**	8	S6	8	Sch 140	Tp 316	.812
2576**	8	S6	8	Sch 140	Tp 316	.812
235	6	S6	6	Sch 160	Tp 316	.719
236	6	S6	6	Sch 160	Tp 316	.719
237	6	S6	6	Sch 160	Tp 316	.719
238	6	S6	6	Sch 160	Tp 316	.719
727	6	S6	6	Sch 160	Tp 316	.719
728	6	S6	6	Sch 160	Tp 316	.719
729	6	S6	6	Sch 160	Tp 316	.719
730	6	S6	6	Sch 160	Tp 316	.719
3844**	6	S6	6	Sch 160	Tp 316	.719
3845**	6	S6	6	Sch 160	Tp 316	.719
3846**	6	S6	6	Sch 160	Tp 316	.719
3847**	6	S6	6	Sch 160	Tp 316	.719
13	4	S6	4	Sch 120	Tp 316	.438
14	4	S6	4	Sch 120	Tp 316	.438
15	4	S6	4	Sch 120	Tp 316	.438
4081	4	S6	4	Sch 120	Tp 316	.438

All other lines are 3" or less Ø, Sch.160, Tp. 304, subject to penetrant test (PT)

* Specification by NSSS supplier (Westinghouse) - note Spec. designated as "*"

** Portions of these lines are Class 2. See Isometric Drawing.

APPENDIX A

LIST OF CLAIBRATION STANDARDS
CLASS 2 LINES, S 1978 ASME XI

Line	Size	Spec.	Std.	Nominal Wall	Material	Thickness
225	28	K15	15	1.002 Min.	SA 516/70	1.002 Min.
226	28	K15	15	1.002 Min.	SA 516/70	1.002 Min.
227	28	K15	15	1.002 Min.	SA 516/70	1.002 Min.
228	28	K15	15	1.002 Min.	SA 516/70	1.002 Min.
1065	24	K15	14	Sch 60	A 106/B	.969
1066	24	K15	14	Sch 60	A 106/B	.969
544	16	K16	13	Sch 80	A 106/B	.844
555	16	K16	13	Sch 80	A 106/B	.844
556	16	K16	13	Sch 80	A 106/B	.844
557	16	K16	13	Sch 80	A 106/B	.844
110	14	S1	PT (11)	Sch 40	304	.438
111	14	S1	PT (11)	Sch 40	304	.438
512	14	S1	PT (11)	Sch 40	Tp 304	.438
513	14	S1	PT (11)	Sch 40	Tp 304	.438
927	14	S1	PT (11)	Sch 40	304	.438
3551	14	S1	PT (11)	Sch 40	304	.438
120	12	S6	- 16 -	Sch 160	Tp 316	1.312
223	12	S1	PT (10)	Sch 40S*	304	.375
985	12	S1	PT (10)	Sch 40S*	Tp 304	.375
112	8	S1	PT (7)	Sch 40S	Tp 304	.322
113	8	S1	PT (7)	Sch 40S	Tp 304	.322
118	8	S1	PT (7)	Sch 40S	Tp 304	.322
119	8	S1	PT (7)	Sch 40S	Tp 304	.322
279	8	S1	PT (7)	Sch 40S	Tp 304	.322
280	8	S1	PT (7)	Sch 40S	Tp 304	.322
508	8	S6	8	Sch 140	Tp 316	.812
509	8	S6	8	Sch 140	Tp 316	.812
734	8	S2	PT	Sch 10S	Tp 304	.148
735	8	S1	PT (7)	Sch 40S	Tp 304	.322
1456	8	S2	PT	Sch 10S	Tp 304	.148
1661	8	S1	PT (7)	Sch 40S	Tp 304	.322
1663	8	S1	PT (7)	Sch 40S	Tp 304	.322
1669	8	S1	PT (7)	Sch 40S	Tp 304	.322
1971	8	S1	PT (5)	Sch 40S	Tp 304	.322
1984	8	S2	PT	Sch 10S	Tp 304	.148
1986	8	S2	PT	Sch 10S	Tp 304	.148
1987	8	S2	PT	Sch 10S	Tp 304	.148
1988	8	S2	PT	Sch 10S	Tp 304	.148
2212	8	S1	PT (7)	Sch 40S	Tp 304	.322
2458	8	S1	PT (7)	Sch 40S	Tp 304	.322
2575**	8	S6	8	Sch 140	Tp 316	.812
2576**	8	S6	8	Sch 140	Tp 316	.812
42	6	S2	PT	Sch 10S	Tp 304	.134
43	6	S2	PT	Sch 10S	Tp 304	.134
1454	6	S6	6	Sch 160	Tp 316	.719
1973	6	S6	6	Sch 160	Tp 316	.719
1982	6	S2	PT	Sch 10S	Tp 304	.134
1983	6	S2	PT	Sch 10S	Tp 304	.134
2032	6	S6	6	Sch 160	Tp 316	.719

APPENDIX A

LIST OF CALIBRATION STANDARDS

CLASS 2 LINES, S 1978 ASME XI

Line	Size	Spec.	Std.	Nominal Wall	Material	Thickness
3844**	6	S6	6	Sch 160	Tp 316	.719
3845**	6	S6	6	Sch 160	Tp 316	.719
3846**	6	S6	6	Sch 160	Tp 316	.719
3847**	6	S6	6	Sch 160	Tp 316	.719
4296	6	S2	PT	Sch 10S	Tp 304	.134
5848	6	S2	PT	Sch 10S	Tp 304	.134

*12" Sch 40S is standard wall, .375"T. NOT same as 12" Sch 40

**Portions of these lines are Class 1. See isometric drawing.

NOTE: Class 2 lines less than .50" wall thickness are no longer subject to ultrasonic test requirement (ASME XI S 1978). For these lines, "PT" (penetrant test) will be indicated, followed by the ultrasonic calibration standard number in parentheses (for reference only).

WELDS HAVING LIMITED ACCESSIBILITY TO NDE
DIABLO CANYON POWER PLANT UNIT 2

CLASS 1

LINE	WELD	ESTIMATE % ACCESS**	BASIS***	LIMITATION	CODE ITEM:
1	WIB-RC-1-5SE	75*	4	No scan downstream side: steam generator	B5.30/ B5.50
1	WIB-RC-1-1SE	25*	3	No scan upstream side: Rx Vessel	B5.10/ B5.50
1	WIB-RC-1-2	50*	3	Limited scan upstream side: Rx Vessel	B9.11
2	WIB-RC-2-5SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
2	WIB-RC-2-1SE	25*	3	No scan upstream side: Rx Vessel	B5.10/ B5.50
2	WIB-RC-2-2	50*	3	Limited scan upstream side: Rx Vessel	B9.11
3	WIB-RC-3-5SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
4	WIB-RC-4-5SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
5	WIB-RC-1-11	75	4	Limited scan downstream side: pump	B9.11
5	WIB-RC-1-6SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
6	WIB-RC-2-11	75	4	Limited scan downstream side: pump	B9.11
6	WIB-RC-2-6SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
6	WIB-RC-2-8LS-A	85	1	One inch weldolet	B9.12
6	WIB-RC-2-8LS-B	85	1	One inch weldolet	B9.12
7	WIB-RC-3-11	75	4	No scan downstream side: pump	B9.11
7	WIB-RC-3-6SE	75	4	No scan downstream side: steam generator	B5.30/ B5.50
8	WIB-RC-4-11	75	4	No scan downstream side: pump	B9.11
8	WIB-RC-4-6SE	75	4	No scan upstream side: steam generator	B5.30/ B5.50
9	WIB-RC-1-12	95*	4	Some loss of coupling when shoe bridges taper	B9.11
10	WIB-RC-2-12	75	4	No scan upstream side: pump	B9.11
10	WIB-RC-2-15	50	3	Weld crown "phonographic" machine surface	B9.11
11	WIB-RC-3-12	75	4	No scan upstream side: pump	B9.11
12	WIB-RC-4-12	75	4	No scan upstream side: pump	B9.11
13	WIB-56	70*	3	No scan upstream side: branch connection	B9.11
13	WIB-55	65*	4	No scan downstream side: branch connection	B9.11
13	WIB-62	75	4	No scan downstream side: valve	B9.11
13	WIB-71	90	3	Elbow intrados limits downstream scan	B9.11

WELDS HAVING LIMITED ACCESSIBILITY TO NDE
DIABLO CANYON POWER PLANT UNIT 2

CLASS 1

LINE	WELD	ESTIMATE % ACCESS**	BASIS***	LIMITATION	CODE ITEM:
14	WIB-104	75	3	Branch connection geometry limits scan	B9.31
14	WIB-92	75	4	No scan upstream side: valve	B9.11
14	WIB-97	75	4	No scan downstream side: valve	B9.11
14	WIB-88	90*	3	Elbow intrados limits upstream scan.	B9.11
15	WIB-322	90*	3	Elbow intrados limits upstream scan.	B9.11
51	409-3A	99*surf.	2	No PT on plate thickness next to wall	B10.10
51	898-2	99*surf.	2	PT on 1/8" nearest clamp best effort	B10.10
55	WIB-856	99*surf.	2	Best effort @ BDC poor access-support	B9.21
109	WIB-243	65	3	Branch connection geometry limits scan	B9.31
109	WIB-246	90*	2	Rupture restraint limits scans	B9.11
109	WIB-253	90	1	Welded plug at 0 degrees	B9.11
235	WIB-1	65	3	Branch connection geometry limits scans	B9.31
235	WIB-6	75*	4	No scan downstream side:valve	B9.11
235	WIB-11	75	4	No scan upstream side: reducer	B9.11
236	WIB-106	60*	4	No scan downstream side: branch connection	B9.11
238	WIB-265	60*	4	No scan downstream side: valve	B9.11
253	WIB-39	75*	2	Rupture restraint limits scans	B9.11
253	WIB-37	25*	4	Branch connection geometry limits scans	B9.31
254	WIB-164	75*	4	Branch connection limits scan on downstream side	B9.11
254	WIB-172	75	4	No scan upstream side: valve	B9.11
255	WIB-192	60	4	Branch connection geometry limits scan	B9.31
255	WIB-196	75	4	No scan upstream side: valve	B9.11
255	WIB-197	90*	4	Fittings limit scan	B9.11
256	WIB-299	75	4	No scan downstream side: valve	B9.11
256	WIB-291	95*	2	Scan on downstream side limited by support	B9.11
727	WIB-359SE	75	4	Safe end geometry limits scan	B5.20/ B5.50
727	WIB-362	75	2	Code nameplate limits scan on upstream side	B9.11
		80 surf.	2	Also surface exam limitation	

WELDS HAVING LIMITED ACCESSIBILITY TO NDE
DIABLO CANYON POWER PLANT UNIT 2

CLASS 1

LINE	WELD	ESTIMATE % ACCESS**	BASIS***	LIMITATION	CODE ITEM:
728	WIB-430	95	2	Grating limits scans	B9.11
728	WIB-423SE	90*	4	Upstream scan limited by nozzle boss	B5.20/ B5.50
729	WIB-369SE	90*	4	Safe end configuration limits upstream scan	B5.20/ B5.50
729	WIB-378	75	4	No scan on downstream side: valve	B9.11
730	WIB-380SE	75	4	Safe end configuration limits scan	B5.20/ B5.50
730	WIB-391	75	3	Reducer limits scan upstream	B9.11
1171	WIB-408	90* surf.	1	Code ID Band limits exam to 7/8" on one side	B9.21
1171	WIB-410A	90* surf.	2	Hanger limits access	B9.21
1172	989-29R	95* surf.	2	Support steel top & bottom	B10.10
1991	WIB-514	90* surf.	2	Hanger limits access	B9.21
2576	WIB-119	90	3	Elbow intrados limits scan @ 180	B9.11
3844	WIB-47	75	3	No scan downstream side: tee	B9.11
3845	WIB-177	90	3	Elbow intrados limits downstream scan	B9.11
3845	WIB-181	90	3	Elbow intrados limits downstream scan	B9.11
3846	WIB-203	75	3	No scan upstream side: valve	B9.11
3847	WIB-300	95*	3	No scan downstream side: tee	B9.11

CLASS 2

112	WIC-36	90 surf.	1	Welded support limits surface exam 3" @ 0&180	C5.11
554	WICG-103-1	95*	1	Weldolet on upstream side @ TDC	C5.21
1357	WIC-1357A	75*	4	No scan on upstream side: valve	C5.21
1357	WIC-1357B	75*	2	No scans from 290° to 310°: ventilation duct	C5.21
1357	WIC-1357C	80*	2	Scans limited by ventilation duct	C5.21
1357	WIC-1357E	90*	2	No scan upstream from 135° to 180°: penetration	C5.21
1454	WIC-332	85	1	Welded attachments limit scan on upstream side	C5.21
1454	23-36R	90* surf.	2	Support blocks 1/8" of lugs nearest plates	C3.40
1973	WIC-325	50	2	Tee and pipe restraint structure limit scans	C5.21
		90 surf.	2	Restraint also surface exam limitation	
3844	WIC-105	75	4	No scan on downstream side: valve	C5.21

WELDS HAVING LIMITED ACCESSIBILITY TO NDE
DIABLO CANYON POWER PLANT UNIT 2

NOTES:

* Percentage accessible is based on first and second refueling outage examination results. Revision bars indicate limited accessible welds which have been added to Relief Request NDE-009 (Appendix B) subsequent to NRC SER dated Decembe~ 14, 1988.

** Percentage accessible estimates are only applicable for volumetric examinations, except where surface estimates are provided. Surface examination accessibility is 100% except where so noted.

*** Basis for relief request NDE-009:

1. Lugs or other welded attachments.

2. Wall or floor penetrations, hangers or components closely adjacent to the examination surface.

3. Surface configuration, such as local roughness or compound curvature, especially at the intrados of elbows or tees.

4. Surface obstructions, including flanges or the bevels at valve bodies or thick wall fittings. These conditions when present, may obstruct a portion of the test surface, especially from volumetric examination due to transducer lift-off.

FOOTNOTES:

(1) Identifies the drawing sheet number of the ASME code classification drawings, PG&E Drawing 104628, Rev. 19.

(2) Identifies the applicable ASME B&PV code section XI pressure test requirement, as established by the 1977 edition - summer 1978 addenda.

(3) INS/FUNCT is the test pressure developed under the operating conditions associated with normal system operation or a system/component functional test.

(4) I is one test per each inspection interval (10 yr)
P is one test per each inspection period (3, 7, 10 yrs)
R is one test per each refueling outage

(5) P_o is the nominal system operating pressure.

P_{sv} is the safety or relief valve setting pressure.

P_g is the design pressure of vapor or gas space above liquid level for which over pressure protection is provided by relief valves.

NOTE 1: Piping pressurized during normal reactor operation and does not require test per IWC-5221. Normal reactor operation includes systems in operation during startup, operation, cooldown, and shutdown conditions. (IWC-1220 Footnote [2]).

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS I

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.1

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG)(3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 of 1
1. Reactor Coolant Pumps 2-1, 2-2, 2-3, 2-4	8	IWB-5221 IWB-5222	2235 2459	R I	P_o = 2235 psig for Class 1 Piping
2. Steam Generators 2-1, 2-2, 2-3, 2-4 (Tube Side)	5,6,8	IWB-5221 IWB-5222	2235 2459	R I	
3. Reactor Vessel, Primary Coolant Loops and Connected Piping	8,9	IWB-5221 IWB-5222	2235 2459	R I	Includes Category B-E, CRD and instrumentation partial penetration welds
4. Pressurizer 2-1	10	IWB-5221 IWB-5222	2235 2459	R I	Includes Category B-E, heater partial penetration welds
5. Pressurizer Relief/Spray	10	IWB-5221 IWB-5222	2235 2459	R I	
6. Hot & Cold Leg RTDS	11	IWB-5221 IWB-5222	2235 2459	R I	
7. Reactor Coolant Pump Seal Water Injection/Bypass	12	IWB-5221 IWB-5222	2235 2459	R I	
8. Letdown and Excess Letdown Lines	12,13, 8	IWB-5221 IWB-5222	2235 2459	R I	
9. Charging and Auxiliary Spray	14, 8, 10	IWB-5221 IWB-5222	2235 2459	R I	
10. SIS Accum Disch and Test Lines	17, 8	IWB-5221 IWB-5222	2235 2459	R I	
11. RHR Injection to Cold Legs	17, 8	IWB-5222 IWB-5222	2235 2459	R I	

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS I REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.1
PAGE 2 of 2

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG)(3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 of 1
12. Boron Injection Inside Containment	8,18	IWB-5221 IWB-5222	2235 2459	R I	
13. Safety Injection Inside Containment	17,19	IWB-5221 IWB-5222	2235 2459	R I	
14. RHR Hot Leg Suction and Disch	8,20,19	IWB-5221 IWB-5222	2235 2459	R I	

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2 REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
1.	Feedwater Supply Leads	3,5,6	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
2.	Auxiliary Feedwater Supply	3	IWC-5222 (a)	1331	I	P_{sv} = 1065, NOTE 1
3.	Steam Generators 2-3 & 2-4 Secondary Sides	5	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
4.	Main Steam Leads 3 & 4 and	5	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
5.	Main Steam Leads 1 & 2	6	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
6.	Steam Generators 2-2 & 2-1 Secondary Sides	6	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
7.	Auxiliary Feed Pump 2-1 Turbine Steam Lead	5,6	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
8.	Steam Generator Blowdown	5,6,7	IWC-5222 (a)	1331	I	P_{sv} = 1065; NOTE 1
9.	Loop 1 & 4 Hot Leg Sample Lines 2S-1675-3/8 and 2S6-1676-3/8	8,22	IWC-5222 (a)	2459	I	no safety valve in system - tested with class 1; note 1

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
10.	Pressurized Sample Lines 2S-1673-3/8 & 2S-1674-3/8	10,22	IWC-5222 (a)	2459	I	no safety valve in system - tested with Class 1; Note 1
11.	Excess Letdown Heat Exchanger 2-1 Tube Side and Inlet/Outlet Piping	12	IWC-5222 (a)	2459	I	no safety valve in system - tested with Class 1; Note 1
12.	Reactor Coolant Pumps Seal Water Outlet/Excess Letdown H-X Outlet (Spec S2 Piping Portion)	12	IWC-5222 (a)	188	I	P_{sv} = 150; Note 1; Request for relief #6
13.	Reactor Coolant Pumps Hi Pressure Seal Water Outlet Piping (Spec 26) To Valve 2-8142	12	IWC-5222 (a)	2459	I	no safety valve in system - tested with Class 1; Note 1
14.	RCP Seal Water Inlet Piping	12,14	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
15.	RCP Seal Water Inlet Unisolable From Class 1 (2-8393 TO 2-8372)	12	IWC-5222 (a)	2459	I	request for relief #5; Note 1
16.	Regenerative Heat Exchanger 2-1 Shell Side and Letdown Piping To 2-8153	13	IWC-5222 (a)	750	I	P_{sv} = 600; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
17.	Boric Acid Pumps Discharge Header, BA Blender Inlet, Recirc To BIT To 2-8911	14	IWC-5222 (a)	275	I	P_{sv} = 220; Note 1
18.	Recip Charging Pump & Discharge Piping	14	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
19.	Centrifugal Charging Pumps and Suction Piping	14,18	IWC-5222 (a)	275	I	P_{sv} = 220; Request for relief #1; Note 1
20.	Charging Pump Discharge, Seal Wtr Inj Filter, Regen H-X Piping	14	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
21.	Seal Water Injection Filters	14	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
22.	Charging Line To Cold Legs & Pressurizer Upstream Of Aux Spray Valves 2-8147, 2-8146,2-8145, 2-8148, 2-8482	14	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
23.	Charging Line Portions Unisolable From Class 1	14	IWC-5222 (a)	2459	I	Request for relief #5; Note 1
24.	Boric Acid Tanks To Pump Disch Iso Valves	15	IWC-5222 (b)	Tank Filled	I	Request for relief #1; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
25.	Boric Acid Transfer Pumps, Disch and Recirc Piping	15,18	IWC-5222 (a)	275	I	P_{sv} = 220; Note 1
26.	Accumulator Injection Loops 1 Thru 4, Test & Fill Piping Up To Valves 2-8877A, B, C & D	17	IWC-5222 (a)	2459	I	Request for relief #5; Note 1
27.	Accumulator Test & Fill Piping	17,19, 18	IWC-5221	INS/FUNCT	P	
28.	Safety Injection	17	IWC-5222 (a)	875	I	P_{sv} = 700; Note 1
29.	Accumulator Sample Lines From Valves 2-9367A-D TO 2-9352A-D	17,22	IWC-5222 (a)	875	I	P_{sv} = 700; Note 1
30.	Boron Inj Check Valves Line 2S6-4348-3/4 & SIS Pump Disch Test Line 2S6-2570-3/4	17,18, 19	IWC-5221	Ins/Funct	P	
31.	Boric Acid Recirc Downstream 2-8911 To and From BIT	18	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
32.	Chg To BIT and BIT Bypass	14,18	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
33.	Boron Injection Tank, Inlet and Outlet Piping	18	IWC-5222 (a)	3419	I	P_{sv} = 2735; Note 1
34.	Boron Inj To Cold Legs (2-8801A,B TO 2-8820)	18	IWC-5221	INS/FUNCT	P	(Request for relief #5)
35.	Refueling Water Storage Tank and Supply To First Iso Vlvs	18,19 23	IWC-5222 (b)	Tank Filled	I	Note 1
36.	RWST Supply To Chg Pump Pumps (2-8805 TO 2-8924)	18	IWC-5221	Ins/Funct	P	
37.	RWST Supply To Chg Pump Suct (2-8924 To Chg Pump)	14,18	IWC-5221	Tank Filled	I	
38.	Safety Injection Pump Discharge/Hot Leg Injection Piping Inside Cont. Iso Valves (2-8802A,B)	19	IWC-5221	INS/FUNCT	P	(Request for relief #5)
39.	RHR Cold Leg Inj Piping From 2-8809A,B To Class 1	19	IWC-5222 (a)	2459	I	Request for relief #5; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
40.	RHR Cold Leg Inj Piping Upstream 2-8809A,B	19,22	IWC-5222 (a)	750	I	P_{sv} = 600; Note 1
41.	Containment Recirc Sump Outlet Lines 2*-2749 & 2-2750-14	19	IWC-5221			Request for relief #7
42.	Cont Recirc Sump Outlet Lines Downstream Of Valves 2-8982A,B	19	IWC-5222 (a)	563	I	P_{sv} = 450; Note 1
43.	RHR Suction Piping From RWST 2-8981	19,20	IWC-5222 (a)	563	I	P_{sv} = 450; Note 1
44.	RHR Suction Piping From RWST To 2-8981	19	IWC-5222 (a)	275	I	P_{sv} = 220; Note 1
45.	RHR Disch Piping, Supply To SIS Pump Suction	19,20	IWC-5222 (a)	750	I	P_{sv} = 600; Note1
46.	Safety Injection Pumps Suction Line To RWST	18,19	IWC-5221	Ins/Funct	P	
47.	SIS Pp RHR Suction	19	IWC-5222 (A)	275	I	P_{sv} = 220; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
48.	SIS Pp Discharge Piping To 2-8802A,B, 2-8835	19	IWC-5221	Ins/Funct	P	
49.	SI Cold Leg Inj Downstream Of 2-8835	19	IWC-5221	INS/FUNCT	P	(Request for relief #5)
50.	RHR Hot Leg Inj Test Lines To 2-8884A-D, 2-8825, 2-8885A,B, 2-8824, 2-8823	19	IWC-5221	INS/FUNCT	P	(Request for relief #5)
51.	RHR Hot Leg 1 & 2 Injection Piping To 2-8703 Plus Bypass Line (2-8726A,B)	20	IWC-5222 (a)	750	I	P_{sv} = 600; Note 1
52.	RHR Hot Leg 1 & 2 Downstream 2-8703 TO 2-8740A,B	20	IWC-5222 (a)	2459	I	Request for relief #5; Note 1
53.	RHR Pumps & Suction Piping	20	IWC-5222 (a)	563	I	P_{sv} = 450; Note 1; Request for relief #1
54.	RHR Pump Discharge Piping And Cold Leg Inj Piping	18,20 19,23	IWC-5222 (a)	750	I	P_{sv} = 600; Note 1

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 2

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.2
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	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5) (X) From Footnote Page 1 Of 1
55.	RHR Pump Seal Piping	21	IWC-5222 (a)	563	I	P_{sv} = 450; Note 1
56.	RHR Sample Lines	22	IWC-5222 (a)	750	I	P_{sv} = 600; Note 1
57.	Containment Spray Ring Supply Piping, Spec S3	23	IWC-5222 (c)	None Req'd		Spray Ring Nozzles Flow Test Performed Every 5 Years
58.	Cont. Spray Pump Discharge Piping	23	IWC-5221	Ins/Funct	P	
59.	RWST Supply To Eductors	23	IWC-5221	Ins/Funct	P	RWST filled
60.	Cont. Spray Pumps, Suction Piping. RWST Eductor Suction	23	IWC-5221	Ins/Funct	P	RWST filled
61.	Spray Additive Tank and Unisolable Piping	23	IWC-5222 (b)	5.5	I	P_g = 5; Note 1
62.	Containment Fan Cooler CCW Supply & Return, Spec K2 Piping	27,32	IWC-5222 (a)	165	I	P_{sv} = 150
63.	Containment Fan Coolers	27,32	IWC-5222 (a)	165	I	P_{sv} = 150

DIABLO CANYON POWER PLANT - UNIT 2
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

Table 5.2
REV. 4

SYSTEM PRESSURE
TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5) (X) From Footnote Page 1 Of 1
64. Reactor Coolant Pumps CCW Supply & Oil Cooler Return Containment Penetrations, Spec K2	29	IWC-5222 (a)	165	I		P_{sv} = 150
65. Reactor Coolant Pumps CCW Return Containment Penetration, Line K17-1357-6	29	IWC-5222 (a)	3106	I		P_{sv} = 2485
66. Excess Letdown Heat Exchanger, Shell Side	31	IWC-5222 (a)	165	I		P_{sv} = 150
67. Excess Letdown Heat Exchanger, Shell Side	31	IWC-5222 (a)	165	I		P_{sv} = 150
68. Steam Gen N_2 Supply Hdr	6	IWC-5221 (a)	Ins/Funct	P	52	Line 1863. Tested at normal operating pressure.
69. Line 4681, 4682, 4683, 4684, 4586, 4686	9	Exempt	None	None	59,80	NA-1130 (c) Cap sealed.
70. PZR Quench Tk Gas Analyzer	10	IWC-5221 (a)	<50	P(5 yrs)	76	Line 1163, Request for relief #8
71. PZR Relief Tk N_2 Supply	10	IWC-5221 (a)	<50	P(5 yrs)	52	Line 1162, Request for relief #8
72. Pri Wtr Sup to Pzr Rlf Tk	10	IWC-5221 (a)	<50	P(5 yrs)	52	Line 3000. Request for relief #8

DIABLO CANYON POWER PLANT - UNIT 2
IEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

Table 5.2
REV.4

SYSTEM PRESSURE
TEST SUMMARY

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5) (X) From Footnote Page 1 Of 1
73.	Rv's Discharge To P.R.T.: Chg Pps.Suct Rv Disch RHR Ht Exchr 1 Out Rv RHR Ht Exchr 2 Out Rv SI Pps Suct Rv Out Cnt Spray. Pps Disch Rv Out P.R.T. SI Pp 1-2 Disch Line Rv SIS Rv Outlet Hdr To P.R.T. SIS Rv Outlet Hdr To P.R.T. SIS Pp 1-1 Disch Line Rv SIS Pps Recirc Disch Line Rv	10	IWC-5221 (a)	<50	P(5 YRS)71		Request for relief #8 Line 1459 Line 2003 Line 2004 Line 2061 Line 2518 Line 2572 Line 2998 Line 2999 Line 3851 Line 3852
74.	PZR Deadweight Press Gen	10	None	None	None	76	Line 478. Abandoned In place
75.	Tanks N_2 Supply Hdr	17	IWC-5221 (a)	R for R #8	P (5 YRS)	51	Line 531. Request for relief #8.
76.	Accums Samples Hdr	22	IWC-5221 (a)	R for R #8	P (5 YRS)	59	Line 1679. Request for relief #8.
77.	Lines 636, 2514, 2515, 637 4529, 4525	23	Exempt	None	None	76,59,78 52,80,59	NA-1130 (c). (Note penetration receives LLRT)

DIABLO CANYON POWER PLANT - UNIT 2
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

Table 5.2
REV. 4

SYSTEM PRESSURE
TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5) (X) From Footnote Page 1 Of 1
78. Fuel Trans Tube To Refuel Canal	24,42	IWC-5221 (a)	(<50) R for R #9	P (5 yrs)	64	Line 1336. Request for relief #9 O-Ring seal test @ flange
79. Aux Steam Cont Penetrator	40	IWC-5221 (a)	R for R #8	P (5 yrs)	70	Line 3935. Request for relief #8
80. Firewater Supply Before Cont.	41	IWC-5221 (a)	R for R #8	P (5 yrs)	79	Line 986. Request for relief #8
81. Cont Str Sumps Pps Disch	42	IWC-5221 (a)	R for R #8	P (5 yrs)	49	Line 749. Request for relief #8
82. Refueling Canal Water Inlet	42	IWC-5221 (a)	R for R #8	P (5 yrs)	46	Line 3001. Request for relief #8
83. Refueling Canal Water Return	42	IWC-5221 (a)	R for R #8	P (5 yrs)	47	Line 2993. Request for relief #8
84. React Cool Drn Tk N_2 Supply	42	IWC-5221 (a)	R for R #8	P (5 yrs)	52	Line 527. Request for relief #8
85. Post LOCA Sample & R & Cavity Sump	42	IWC-5221 (a)	<50	P (5 yrs)	82	Line 4663. Request for relief #8
86. React Cool Drn Tk Vent	42	IWC-5221 (a)	<50	P (5 yrs)	51	Line 525. Request for relief #8
87. React Cool Drn Tk Gas Anal	42	IWC-5221 (a)	<50	P (5 yrs)	51	Line 526. Request for relief #8

DIABLO CANYON POWER PLANT - UNIT 2
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

Table 5.2
REV. 4

SYSTEM PRESSURE
TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5) (X) From Footnote Page 1 Of 1
88. React Cool Drn Pps Disch Hdr	42	IWC-5221 (a)	R for R #8	P (5 yrs)	50	Line 3729. Request for relief #8
89. Chps Air Sup Fans 1 & 2 Disch Ext And Penetrator 83 Inlet & Air Sup	43	IWC-5221 (a)	<50	P (5 yrs)	83	Line 4382, 4386, 4387, 4388, 4389. Request for relief #8
90. Chps Exh Air Filt 2 Inlet	43	IWC-5221 (a)	<50	P (5 yrs)	81	Line 4390. Request for relief #8
91. Chps Exh Sys Flow Cont In	43	IWC-5221 (a)	<50	P (5 yrs)	57	Line 4395. Request for relief #8
92. Containment Vacuum Relief	43	IWC-5221 (a)	<50	P (5 yrs)	63	Line 647. Request for relief #8
93. Containment Purge Relief	43	IWC-5221 (a)	<50	P (5 yrs)	62	Line K2-48" (RCV-11 To RCV-12). Request for relief #8
94. Containment Purge In	43	IWC-5221 (a)	<50	P (5 yrs)	61	Line K2-48" (FCV-661 TO FCV-660). Request for relief #8
95. Incore chiller Water Rtn.	43	IWC-5221 (a)	<50	P (5 yrs)	83	Line 3936. Request for relief #8
96. Incore Chiller Water Supply	43	IWC-5221 (a)	<50	P (5 yrs)	82	Line 3937. Request for relief #8
97. Containment Air Sample Inlet	44	IWC-5221 (a)	<50	P (5 yrs)	68	Line 3837. Request for relief #8

DIABLO CANYON POWER PLANT - UNIT 2
TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS - CLASS 2

Table 5.2
REV. 4

SYSTEM PRESSURE TEST SUMMARY

COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET No.(1)	CODE REQUIREMENT(2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ(4)	CONTAINMENT PENETRATION	REMARKS (5) (X) From Footnote Page 1 Of 1
98. Containment Air Sample Return	44	IWC-5221 (a)	<50	P (5 yrs)	69	Line 3838. Request for relief #8
99. Post LOCA Samp Cnt Air Rtn	44	IWC-5221 (a)	<50	P (5 yrs)	82	Line 5190. Request for relief #8
100. Post LOCA Samp Cnt Air Sup	44	IWC-5221 (a)	<50	P (5 yrs)	82	Line S-3/8" (FCV-698 to FCV-699). Request for relief #8
101. Hyd Mon Cel 82 Cnt Air Sup	44	IWC-5221 (a)	R for R #8	P (5 yrs)	52	Line 4633. Request for relief #8
102. Hyd Mon Cel 82 Cnt Air Rtn	44	IWC-5221 (a)	R for R #8	P (5 yrs)	52	Line 4634. Request for relief #8
103. Hyd Mon Cel 83 Cnt Air Sup	44	IWC-5221 (a)	R for R #8	P (5 yrs)	78	Line 4635. Request for relief #8
104. Hyd Mon Cel 83 Cnt Air Rtn	44	IWC-5221 (a)	R for R #8	P (5 yrs)	78	Line 4636. Request for relief #8
105. Service Air Penetrator Hdr	45	IWC-5221 (a)	R for R #8	P (5 yrs)	56	Line 3941. Request for relief #8
106. Inside Cnt Instr Air Sup Hdr	45	IWC-5221 (a)	R for R #8	P (5 yrs)	54	Line 3242. Request for relief #8
107. Cnt Instr Air Sup FCV-584 BP	45	IWC-5221 (a)	R for R #8	P (5 yrs)	54	Line 4353. Request for relief #8

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 3

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.3

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
						(X) From Footnote Page 1 Of 1
1.	Auxiliary Feedwater Pumps Discharge Piping	3	IWD-5223 (a)	1331	I	P_{SV} = 1065
			IWD-5221/5222	Ins/Funct	P	
2.	Auxiliary Feed Pumps Recirc Header To Condensate Storage Tank	3	IWD-5223 (a)	Ins/Funct	I	No Safety Valve In System Tested At Normal operating conditions
			IWD-5221/5222	Ins/Funct	P	
3.	Auxiliary Feed Pump Turbine Cooling Water Piping	3	IWD-5223 (a)	Ins/Funct	I	No Safety Valve In System - tested at normal operating conditions
			IWD-5221/5222	Ins/Funct	P	
4.	Auxiliary Feedwater Pumps Suction Piping, And Chemical Inj	3,4	IWD-5223 (b)	Tank Filled	I	Request for relief #1; no safety valve in system - tested at normal operating conditions; condensate storage tanks
			IWD-5221/5222	Ins/Funct	P	
5.	Auxiliary Feed Pump Turbine Steam Supply & Trap Drain	6	IWD-5223 (a)	1331	I	P_{SV} = 1065
			IWD-5221/5222	Ins/Funct	P	
6.	Aux Feed Pump Turbine Exhaust And Leakoff Drains	6	IWD-5223 (c)	None Req'd	-	Unimpaired flow demonstrated monthly by STP M-6B & every 5 years by STP M-6A on open ended system
			IWD-5221/5222	Ins/Funct	P	

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 3 REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.3
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	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
						(X) From Footnote Page 1 Of 1
7.	Component Cooling Water pumps	25	IWD-5223 (a)	165	I	P_{sv} = 150
			IWD-5221/5222	Ins/Funct	P	
8.	Component Cooling Water Heat Exchangers (Shell Side)	25	IWD-5223 (a)	165	I	P_{sv} = 150
			IWD-5221/5222	Ins/Funct	P	
9.	Component Cooling Water Surge Tank	25	IWD-5223 (a)	33	I	P_{sv} = 30
			IWD-5221/5222	Ins/Funct	P	
10.	Component Cooling Water Suction & Discharge Piping, Headers A, B & C, Supply & Return Piping From Components With The Exception Of Item Number 11	25,32	IWD-5223 (a)	165	I	P_{sv} = 150
			IWD-5221/5222	Ins/Funct	P	
11.	Reactor Coolant Pump Thermal Barrier CCW Return & Supply From Check Valves, Spec K17	29	IWD-5223 (a)	3106	I	P_{sv} = 2485
			IWD-5221/5222	Ins/Funct	P	
12.	Condensate Storage Tank And Unisolable Piping	33	IWD-5223 (b)	Tank Filled	I	
			IWD-5221/5222	Ins/Funct	P	

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 3

REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.3

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
						(X) From Footnote Page 1 Of 1
13.	Fire Water Transfer Tank	33	IWD-5223 (b)	Tank Filled	I	
			IWD-5221/5222	Ins/Funct	P	
14.	Makeup Water Transfer Pumps And Suction Piping Pumps And Suction Piping	33,36	IWD-5223 (b)	Tank Filled	I	Request for relief #1; no safety valve in system - tested at normal operating conditions; condensate storage Tk
			IWD-5221/5222	Ins/Funct	P	
15.	MU Water Transfer Pumps Discharge Piping	26,33	IWD-5223 (a)	Ins/Funct	I	No safety valve in system - tested at normal operating conditions
			IWD-5221/5222	Ins/Funct	P	
16.	CCW And Spent Fuel Pit System Primary Water Makeup Piping	24,34 25	IWD-5223 (a)	Ins/Funct	I	No safety valve in system - tested at normal operating conditions
			IWD-5221/5222	Ins/Funct	P	
17.	Auxiliary Saltwater Pump Supply To CCW Heat Exchangers	35	IWD-5223 (a)	Ins/Funct	I	Request for relief #4; tested at max pp disch pressure
			IWD-5221/5222	Ins/Funct	P	Request for relief #4
18.	Component Cooling Water Heat Exchangers Tube Side	35	IWD-5223 (a)	Ins/Funct	I	Tested at max pp disch pressure
			IWD-5221/5222	Ins/Funct	P	
19.	CCW Heat Exchangers Saltwater Outlet Piping	35	IWD-5223 (c)	None Req'd		Open ended discharge to ocean
			IWD-5221/5222	Ins/Funct	P	Request for relief #4

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS-CLASS 3 REV. 4

SYSTEM PRESSURE - TEST SUMMARY
TABLE: 5.3
PAGE 4 of 4

	COMPONENT OR PIPING SYSTEM DESCRIPTION	SHEET NO. (1)	CODE REQUIREMENT (2)	REQUIRED TEST PRESS (PSIG) (3)	TEST FREQ (4)	REMARKS (5)
						(X) From Footnote Page 1 Of 1
20.	Diesel Engine Jacket Water Cooling System	37	IWD-5223 (a)	7.5	I	P_{sv} = 6
			IWD-5221/5222	Ins/Funct	P	
21.	Spent Fuel Pool Pumps And Suction Piping	24	IWD-5223 (a)	Pool Filled	I	Request for relief #1; no safety valve in system - tested at normal operating conditions; spent fuel pool
			IWD-5221/5222	Ins/Funct	P	
22.	Spent Fuel Pool Pumps Discharge piping through SFP Heat Exchr To Spent Fuel Pool	24	IWD-5223 (a)	Ins/Funct	I	No safety valve in system - tested at normal operating conditions
			IWD-5221/5222	Ins/Funct	P	

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REV. 4

SYSTEM PRESSURE TEST - SUMMARY
TABLE: 5.4
PAGE 1 of 4

NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	TABLE 5.2 ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
1	Centrifugal Type Pumps - Various	2	19 24 46 53 60	Pump Mechanical Seals Will Not Permit Hydro Pressures Above Suction Piping Test Pressure.	Establish Hydro Boundary In Accordance With 1980 ASME Section XI IWA- 5224 (d).	Testing to be specified under test frequency in the summary.
		3	4 14			
2	Deleted					
3	Deleted					

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REV. 4

SYSTEM PRESSURE TEST - SUMMARY
TABLE: 5.4
PAGE 2 of 4

NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	TABLE 5.2 ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
4	Embedded Auxiliary Saltwater Piping	3	17 19	The Majority Of ASW Piping Is Underground And Not Accessible For Inspection And/Or Testing. Preservice Testing Was Not Required By Construction Code.	Visual Leak Test Of Exposed Portions Of System During System Pressure Tests As Specified In The Summary	Testing to be as specified under test frequency in the summary.
					Periodic Pump Testing Testing Will Verify Unimpaired Flow Through The Inaccessible Portions Of The System.	Testing to be as specified in the pump inservice testing program.
5	Class 2 Safety Injection, Residual Heat Head PCP Seal Injection, Charging And Boron Inj Piping	2	15 23 26 34 38 39 49 50 52	Some Of The Piping Is Not Isolable From The Class 1 Piping.	The Unisolable Portions Will Be Tested At Test Pressures Determined By The Class 1 Requirements.	Testing to be as specified under test frequency in the summary.

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REV. 4

SYSTEM PRESSURE TEST - SUMMARY
TABLE: 5.4
PAGE 3 of 4

NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	TABLE 5.2 ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
6	RCP Seal Return Piping From 2-8141A,B,C,D To The RCP Seals.	2	12	Piping Is Not Isolable From The RCP Seals And Cannot Be Included In The Hydrostatic Pressure Test Bound. The Piping Is Pressurized During Normal Reactor Operation And Any Leakage Would Be Detected During Operation.	None	None
7	RHR Pump Suction From Containment Sumps	2	41	Piping Is Open Ended To The Containment And Cannot Be Isolated To Perform Pressure Test	None	None

TEN YEAR EXAMINATION SUMMARY
ASME SECTION XI SYSTEMS

REQUEST FOR RELIEF FROM CODE REQUIREMENTS
REV. 4

SYSTEM PRESSURE TEST - SUMMARY
TABLE: 5.4
PAGE 4 of 4

NO.	SYSTEM OR COMPONENT DESCRIPTION	CODE CLASS	SUM ITEM NO.	BASIS FOR REQUESTING RELIEF	TESTING IN LIEU OF REQUIREMENTS	TESTING SCHEDULE
8.	Non-Safety Related Systems Containment Penetrations Except Refueling Fuel Transfer Tube.	2	70,71 72,73 75,76 79,80 81,82 83,84 85,86 87,88 89,90 91,92 93,94 95,96 97,98 99,100 101,102 103,104 105,106 107	The Components, Piping And Valves Associated With These Containment Penetrations are classified Code Class 2 Soley On The Basis That They Are Required To Ensure Containment Integrity. They Have No Other Safety Related Function. As Such, Testing Of The Containment Penetration Portion Of These Systems Should Be Consistent With The Need For Containment Integrity Which Is Demonstrated By Periodic Containment Local Leak Rate Tests (Every 5 Years) As Required By 10 CFR 50 Appendix J.	Local Leak Rate Test At 50 Psi Per 10 CFR 50, Appx. J	Every 5 years
9.	Fuel Transfer Tube To Refuel Canal	2	78	Non-Safety Related System, As Above. Line Is Inaccessible, Encased In Concrete.	Test Of Integrity Of O-Ring Seal At Flange	Every 5 Years

The attached sheets identify the pumps that are subject to the testing requirements of Section XI, Subsection IWP and the requests for relief from code requirements.

LEGEND:

CODE CLASS
ASME Code Class taken from DWG 102028 Revision 21 (104628 Rev. 19 for Unit 2), "ASME CODE BOUNDARIES FOR INSERVICE INSPECTION AND TESTING PROGRAM."

NOTE: IWP indicates a non ASME code class pump that is required to be tested in accordance with ASME XI, subsection IWP.

TEST FREQUENCY NOTATION

Notation	Frequency
Q	At least once per 92 days
A	At least once per 366 days
NA	Not applicable

TEST PARAMETER NOTATION

Notation	Parameter
N	Pump Speed (if variable speed)
Pi	Pump Inlet Pressure
Dp	Pump Differential Pressure
Q	Flow Rate
V	Pump Vibration
L	Pump Lubrication (observe level or pressure)
Tb	Pump Bearing Temperature

PUMP NAME AND NUMBER	CODE CLASS	TEST PROCEDURE	TEST PARAMETER AND FREQUENCY N	Pi	Dp	Q	V	L	Tb	REQUEST FOR RELIEF	REMARKS
Safety Injection Pump 1	2	P-1B	NA	Q	Q	Q	Q	Q	A	#1, 2	*Dp ≥ 1455 psid
Safety Injection Pump 2	2	P-1B	NA	Q	Q	Q	Q	Q	A	#1, 2	*Dp ≥ 1455 psid
Centrifugal Charging Pump 1	2	P-2B	NA	Q	Q	Q	Q	Q	A	#1	*Dp ≥ 2400 psid
Centrifugal Charging Pump 2	2	P-2B	NA	Q	Q	Q	Q	Q	A	#1	*Dp ≥ 2400 psid
Residual Heat Removal Pump 1	2	P-3B	NA	Q	Q	Q	Q	NA	NA	#1	*Dp ≥ 165 psid
Residual Heat Removal Pump 2	2	P-3B	NA	Q	Q	Q	Q	NA	NA	#1	*Dp ≥ 165 psid
Containment Spray Pump 1	2	P-4B	NA	Q	Q	Q	Q	Q	A	#1, 2	*Dp ≥ 205 psid
Containment Spray Pump 2	2	P-4B	NA	Q	Q	Q	Q	Q	A	#1, 2	*Dp ≥ 205 psid
Auxiliary Feed Pump 2 (Mtr)	3	P-5B	NA	Q	Q	Q	Q	Q	A	#1	*Dp ≥ 1370 psid
Auxiliary Feed Pump 3 (Mtr)	3	P-5B	NA	Q	Q	Q	Q	Q	A	#1	*Dp ≥ 1370 psid
Auxiliary Feed Pump 1 (Turb)	3	P-6B	Q	Q	Q	Q	Q	Q	A	#1	*Dp ≥ 1312 psid
Auxiliary Saltwater Pump 1	3	P-7B	NA	Q	Q	Q	Q	NA	NA	#1	
Auxiliary Saltwater Pump 2	3	P-7B	NA	Q	Q	Q	Q	NA	NA	#1	
Component Cooling Water Pump 1	3	P-8B	NA	Q	Q	Q	Q	Q	A	#1	See Note #1
Component Cooling Water Pump 2	3	P-8B	NA	Q	Q	Q	Q	Q	A	#1	See Note #1
Component Cooling Water Pump 3	3	P-8B	NA	Q	Q	Q	Q	Q	A	#1	See Note #1
Diesel FO Transfer Pump 01	IWP	P-12B	NA	NA	Q	Q	Q	NA	A	#1, 3	
Diesel FO Transfer Pump 02	IWP	P-12B	NA	NA	Q	Q	Q	NA	A	#1, 3	
Boric Acid Transfer Pump 1	2	P-14B	NA	Q	Q	Q	Q	Q	A	#1	
Boric Acid Transfer Pump 2	2	P-14B	NA	Q	Q	Q	Q	Q	A	#1	
MU Water Transfer Pump 01	3	P-15B	NA	Q	Q	Q	Q	Q	A	#1	
MU Water Transfer Pump 02	3	P-15B	NA	Q	Q	Q	Q	Q	A	#1	
Reciprocating Charging Pump 3	2	P-17B	Q	Q	NA	Q	Q	Q	A	#1	See Note #2

*Per Tech. Spec.

#	NOTES

1 The Component Cooling Water Pump Inservice Test is performed by measuring flow and pump head then comparing it to the required differential pressure indicated on a pump test curve.

This pump test curve is actually a "family" of curves that includes a reference curve with "alert" and "action" curves for both the high and low limits. The limit curves are generated using the "Allowable Ranges of Test Quantities" TABLE IWP-3100-2.

A variable flow measurement is required because of the difficulty in establishing a single test flow rate on a system that has varying heat loads and therefore varying flow requirements.

2 The Reciprocating Charging Pump is a non-safety related pump powered from vital power supplies. ASME Section XI pump testing is not required for this pump; however, this pump is included in the pump program as an optional motive force for the boration flowpath in Modes 5 and 6 pursuant to DCPP Technical Specifications 3.1.2.1 and 3.1.2.3.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	PUMP NAME, NUMBER AND FUNCTION	CODE CLASS	CODE REQUIREMENTS	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
1	All Pumps in Program These pumps function in shutting down the reactor or in mitigating the consequences of an accident.	2, 3, or IWP	IWP-3400 Frequency of Inservice Tests	Relief is requested to perform inservice tests on pumps "at least one per 92 days" instead of the "at least once per 31 days" frequency required by ASME Section XI 1977 Edition (Addenda through Summer 1978). In accordance with 10CFR50.55a Paragraph (g) Subparagraph (4)(IV), the Inservice Tests of Pumps "may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in paragraph (b) of this section...". Paragraph (b) Subparagraph (2) references ASME Section XI, 1980 Edition (Addenda through Winter 1980). The newer requirements of Subsection IWP-3400 of ASME Section XI, specifies Inservice Pump Tests to be run every 3 months.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	PUMP NAME, NUMBER AND FUNCTION	CODE CLASS	CODE REQUIREMENTS	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
2	Safety Injection Pumps No. 1 and 2. These pumps function to supply water to the reactor coolant system, in the event of a loss of coolant accident.	2	IWP-4100, 4140 and 4600 require the use of a calibrated flow instrument.	Relief is requested from calibration of flow meters FI-973 and FI-929. These instruments are variable-area, or head-type flow meters whose response and accuracy are used in the inservice test of the pumps, to provide verification of pump flow during testing.
	Containment Spray Pumps No. 1 and 2. These pumps function to supply water containing NaOH to the containment atmosphere to remove heat and airborne fission products.	2		These flow meters shall be observed to function properly during each pump test.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	PUMP NAME, NUMBER AND FUNCTION	CODE CLASS	CODE REQUIREMENTS	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
3	Diesel FO Transfer Pumps No. 01 and 02 These pumps function to supply fuel oil from the diesel fuel oil storage tank to the individual diesel day tanks.	3	IWP-3100 requires the measurement of pump inlet pressure	Relief is requested from the measurement of pump inlet pressure. Instrumentation for measurement of the pump inlet was not provided in the system design. These are positive displacement pumps and measurement of a constant discharge pressure will indicate no problem in the suction line during the fixed flow pump test.
4	Deleted			
5	Deleted			
6	Deleted			
7	Deleted			
8	Deleted			

The attached sheets identify the system valves that are subject to the testing requirements of Section XI, Subsection IWV and the requests for relief from code requirements.

LEGEND:

VALVE CLASS (VLV CLS)
ASME code class taken from DWG 102028 Revision 21 (104628 Rev. 19 for Unit 2) "ASME CODE BOUNDARIES FOR INSERVICE INSPECTION AND TESTING PROGRAM."

NOTE: T.S. indicates a non ASME code class valve that is required to be tested by Technical Specification. IWV indicates a non ASME code class valve that is required to be tested in accordance with ASME Section XI, Subsection IWV.

VALVE CATEGORY (VLV CAT)
ASME IWV-2200 VALVE CATEGORIES

VALVE SIZE (VLV SIZ)
ASME SIZE IN INCHES

VALVE TYPE (VLV TYP) NOTATION

NOTATION	TYPE
BA	Ball Valve
BV	Butterfly Valve
CK	Check Valve
DI	Diaphragm Valve
GA	Gate Valve
GL	Globe Valve
PL	Plug Valve
RV	Relief Valve

LEGEND: (Cont'd)

ACTUATOR TYPE (ACT TYP) NOTATION

NOTATION	TYPE
A	Air Operated
E	Electric Motor
H	Electrohydraulic
M	Manual
N	None
S	Solenoid Operated

NORMAL POSITION (NRM POS) NOTATION

NOTATION	POSITION
O	Open
C	Closed
LO	Locked, Sealed, or Deenergized (Breaker Open) Open
LC	Locked, Sealed, or Deenergized (Breaker Open) Closed
V	Variable

LEGEND: (Cont'd)

TEST REQUIREMENT (TEST REQ) NOTATION

NOTATION	REQUIREMENT
EC	Exercise of Check Valve - Full Stroke
EF	Exercise of Valve - Full Stroke
EP	Exercise of Check Valve or Valve - Partial Stroke
EM	Manual Exercise of Check Valve/Disassembly Inspection
LT	Valve Leak Test
PI	Position Indication Test
RT	Test Per ASME PTC - 25.3-1976 for Safety and Relief Valve

TEST FREQUENCY (TEST FRQ) NOTATION

NOTATION	FREQUENCY
Q	At least once per 92 days
R	At least once per 18 months (refueling)
2A	At least once per 24 months
CS	At least each cold shutdown but not more frequent than once per 92 days (This notation identifies valves that cannot be exercised during plant operation. A statement of the technical justification for not full stroke exercising these valves during plant operation is included in Table 4.2.2.
T	Per IWV 3511
RR	Tested on a rotational basis during refueling outages.

LEGEND: (Cont'd)

STROKE TIME (STR TIM)

STROKE TIME GIVEN IN SECONDS FOR OPENING AND IN SECONDS FOLLOWED BY A 'c' FOR CLOSING.

RELIEF REQUEST (REL REQ)

RELIEF REQUEST NUMBER GIVEN IN REFERENCE TO REQUESTS AT THE END OF THE PROGRAM.

PROCEDURE NUMBER (PROC NO.)

IDENTIFIES PROCEDURE USED TO MEET TEST REQUIREMENT.

DRAWING REFERENCE NUMBERS

UNIT 1: 1020--SERIES
UNIT 2: 1080--SERIES

UNIT 2 SPECIFIC INFORMATION INDICATED BY PARENTHESES

FEEDWATER SYSTEM P & ID NO. 1020 03

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	SG-3 FW CK	47-A	2	C	16	CK	N	O	EC	CS	NA		V-3P3	FW-531
NONE	SG-4 FW CK	47-A	2	C	16	CK	N	O	EC	CS	NA		V-3P3	FW-532
NONE	AUX FP-1 SUCT CK FROM CST	42-C	3	C	8	CK	N	C	EP	Q	NA		P-6B	FW-348
									EC	CS	NA		P-6B	
NONE	AUX FP-1 SUCT CK FROM RWS	41-C	3	C	8	CK	N	C	EM	RR	NA	#1	V-18	FW-349
NONE	AUX FP-2 SUCT CK FROM CST	42-D	3	C	6	CK	N	C	EP	Q	NA		P-5B	FW-350
									EC	CS	NA		P-5B	
NONE	AUX FP-3 SUCT CK FROM CST	42-D	3	C	6	CK	N	C	EP	Q	NA		P-5B	FW-352
									EC	CS	NA		P-5B	
NONE	AUX FP-2 & 3 SUCT CK FROM RWS	41-D	3	C	8	CK	N	C	EM	RR	NA	#1	V-18	FW-353
NONE	AUX FP-1 RECIRC CK	43-C	3	C	1.5	CK	N	C	EC	Q	NA		P-6B	FW-354
NONE	AUX FP-2 RECIRC CK	43-D	3	C	1.5	CK	N	C	EC	Q	NA		P-5B	FW-355
NONE	AUX FP-3 RECIRC CK	44-D	3	C	1.5	CK	N	C	EC	Q	NA		P-5B	FW-356
NONE	AUX FP-1 DISCH CK	44-C	3	C	6	CK	N	C	EP	Q	NA		P-6B	FW-361
									EC	CS	NA		P-6B	
NONE	AUX FP-2 DISCH CK	44-D	3	C	4	CK	N	C	EP	Q	NA		P-5B	FW-362
									EC	CS	NA		P-5B	
NONE	AUX FP-3 DISCH CK	44-D	3	C	4	CK	N	C	EP	Q	NA		P-5B	FW-363
									EC	CS	NA		P-5B	
NONE	SG-2 FW CK	47-A	2	C	16	CK	N	O	EC	CS	NA		V-3P3	FW-367
NONE	SG-1 FW CK	47-A	2	C	16	CK	N	O	EC	CS	NA		V-3P3	FW-368
NONE	AUX FP-1 TO SG-1 CK	47-C	2	C	3	CK	N	C	EP	Q	NA		P-6B	FW-369
									EC	CS	NA		P-6B	

FEEDWATER SYSTEM P & ID NO. 1020 03

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	AUX FP-2 TO SG-1 CK	47-D	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-370
									EC	CS	NA		P-5B	
NONE	AUX FP-1 TO SG-2 CK	47-C	2	C	3	CK	N	C	EP	Q	NA		P-6B	FW-371
									EC	CS	NA		P-6B	
NONE	AUX FP-2 TO SG-2 CK	47-D	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-372
									EC	CS	NA		P-5B	
NONE	AUX FP-1 TO SG-3 CK	47-B	2	C	3	CK	N	C	EP	Q	NA		P-6B	FW-373
									EC	CS	NA		P-6B	
NONE	AUX FP-3 TO SG-3 CK	47-C	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-374
									EC	CS	NA		P-5B	
NONE	AUX FP-1 TO SG-4 CK	47-B	2	C	3	CK	N	C	EP	Q	NA		P-6B	FW-375
									EC	CS	NA		P-6B	
NONE	AUX FP-3 TO SG-4 CK	47-C	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-376
									EC	CS	NA		P-5B	
NONE	SG-1 AUX FW 1ST CK	49-B	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-377
									EC	CS	NA		P-5B	
NONE	SG-2 AUX FW 1ST CK	48-B	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-378
									EC	CS	NA		P-5B	
NONE	SG-3 AUX FW 1ST CK	48-B	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-379
									EC	CS	NA		P-5B	

FEEDWATER SYSTEM P & ID NO. 1020 03

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	SG-4 AUX FW 1ST CK	48-B	2	C	3	CK	N	C	EP	Q	NA		P-5B	FW-380
									EC	CS	NA		P-5B	
FCV-436	RWS SUP AUX FP-1	41-C	3	B	8	BV	E	C	PI	2A	NA		V-2U5	
									EF	Q	30		V-3P4	
FCV-437	RWS SUP AUX FP-2 & 3	41-D	3	B	8	BV	E	C	PI	2A	NA		V-2U5	
									EF	Q	30		V-3P4	
FCV-438	SG-1 FW ISO	48-A	2	B	16	GA	E	O	PI	2A	NA		V-2U1	
									EF	CS	60c		V-3P2	
FCV-439	SG-2 FW ISO	47-A	2	B	16	GA	E	O	PI	2A	NA		V-2U2	
									EF	CS	60c		V-3P2	
FCV-440	SG-3 FW ISO	47-A	2	B	16	GA	E	O	PI	2A	NA		V-2U3	
									EF	CS	60c		V-3P2	
FCV-441	SG-4 FW ISO	48-A	2	B	16	GA	E	O	PI	2A	NA		V-2U4	
									EF	CS	60c		V-3P2	
LCV-106	AUX FP-1 TO SG-1 REG	47-C	2	B	3	GL	E	O	PI	2A	NA		V-2U1	
									EF	Q	20		V-3P5	
LCV-107	AUX FP-1 TO SG-2 REG	47-C	2	B	3	GL	E	O	PI	2A	NA		V-2U2	
									EF	Q	20		V-3P5	
LCV-108	AUX FP-1 TO SG-3 REG	47-B	2	B	3	GL	E	O	PI	2A	NA		V-2U3	
									EF	Q	20		V-3P5	
LCV-109	AUX FP-1 TO SG-4 REG	47-B	2	B	3	GL	E	O	PI	2A	NA		V-2U4	
									EF	Q	20		V-3P5	
LCV-110	AUX FP-2 TO SG-1 REG	47-D	2	B	2	GL	H	O	PI	2A	NA		V-2U1	
									EF	Q	40		V-3P6	

FEEDWATER SYSTEM P & ID NO. 1020 03

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
LCV-111	AUX FP-2 TO SG-2 REG	47-D	2	B	2	GL	H	O	PI	2A	NA		V-2U2	
									EF	Q	40		V-3P6	
LCV-113	AUX FP-3 TO SG-4 REG	47-C	2	B	2	GL	H	O	PI	2A	NA		V-2U3	
									EF	Q	40		V-3P6	
LCV-115	AUX FP-3 TO SG-3 REG	47-C	2	B	2	GL	H	O	PI	2A	NA		V-2U4	
									EF	Q	40		V-3P6	
FCV-510	SG-1 FW REG	33A-E (38-C)	T.S.	B	12	GL	A	O	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-520	SG-2 FW REG	33A-D (38-D)	T.S.	B	12	GL	A	O	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-530	SG-3 FW REG	33A-A (38-E)	T.S.	B	12	GL	A	O	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-540	SG-4 FW REG	33A-C (38-D)	T.S.	B	12	GL	A	O	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-1510	SG-1 FW REG BYPASS	33A-E (37-B)	T.S.	B	6	GL	A	C	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-1520	SG-2 FW REG BYPASS	33A-C (38-D)	T.S.	B	6	GL	A	C	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-1530	SG-3 FW REG BYPASS	33A-A (38-E)	T.S.	B	6	GL	A	C	EF	R*	5C		V-3P1	* PER TECH SPEC
FCV-1540	SG-4 FW REG BYPASS	33A-B (38-E)	T.S.	B	6	GL	A	C	EF	R*	5C		V-3P1	* PER TECH SPEC

TURBINE STEAM SUPPLY SYSTEM P & ID NO. 1020 04

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	SG-1 MS LINE CK	31-A	IWV	C	28	CK	N	O	EM	R	NA	#2	V-18	MS-1068
NONE	SG-2 MS LINE CK	31-B	IWV	C	28	CK	N	O	EM	R	NA	#2	V-18	MS-2066
NONE	SG-3 MS LINE CK	31-D	IWV	C	28	CK	N	O	EM	R	NA	#2	V-18	MS-3062
NONE	SG-4 MS LINE CK	31-E	IWV	C	28	CK	N	O	EM	R	NA	#2	V-18	MS-4062
NONE	SG-2 STM TO AUX FP-1 CK	30-B	2	C	4	CK	N	C	EP	Q	NA		P-6B	MS-5266
									EC	CS	NA		P-6B	
NONE	SG-3 STM TO AUX FP-1 CK	31-C	2	C	4	CK	N	C	EP	Q	NA		P-6B	MS-5267
									EC	CS	NA		P-6B	
FCV-22	SG-4 MSIV BYPASS	31-E	2	B	3	GL	A	C	PI	2A	NA		V-2U4	
									EF	Q	5C		M-16P	
FCV-23	SG-3 MSIV BYPASS	31-C	2	B	3	GL	A	C	PI	2A	NA		V-2U3	
									EF	Q	5C		M-16P	
FCV-24	SG-2 MSIV BYPASS	31-B	2	B	3	GL	A	C	PI	2A	NA		V-2U2	
									EF	Q	5C		M-16P	
FCV-25	SG-1 MSIV BYPASS	31-A	2	B	3	GL	A	C	PI	2A	NA		V-2U1	
									EF	Q	5C		M-16P	
FCV-37	SG-2 STM TO AUX FP-1	30-B	2	B	4	GA	E	O	PI	2A	NA		V-2U2	
									EF	Q	10		M-16N	
FCV-38	SG-3 STM TO AUX FP-1	31-C	2	B	4	GA	E	O	PI	2A	NA		V-2U3	
									EF	Q	10		M-16N	

TURBINE STEAM SUPPLY SYSTEM P & ID NO. 1020 04

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-41	SG-1 MSIV	31-A	2	B	28	CK	A	O	PI	2A	NA		V-2U1	
									EP	Q	NA		V-10	
									EF	CS	5c		V-3R2	
FCV-42	SG-2 MSIV	31-B	2	B	28	CK	A	O	PI	2A	NA		V-2U2	
									EP	Q	NA		V-10	
									EF	CS	5c		V-3R2	
FCV-43	SG-3 MSIV	31-D	2	B	28	CK	A	O	PI	2A	NA		V-2U3	
									EP	Q	NA		V-10	
									EF	CS	5c		V-3R2	
FCV-44	SG-4 MSIV	31-E	2	B	28	CK	A	O	PI	2A	NA		V-2U4	
									EP	Q	NA		V-10	
									EF	CS	5c		V-3R2	
FCV-95	AUX FP-1 STM SUP	31-B	3	B	4	GA	E	C	PI	2A	NA		V-2U5	
									EF	Q	15		M-16N	
FCV-151	SG-1 BD ISO OC	72-C	2	B	3	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-154	SG-2 BD ISO OC	72-C	2	B	3	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	

TURBINE STEAM SUPPLY SYSTEM P & ID NO. 1020 04

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-157	SG-3 BD ISO OC	72-D	2	B	3	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-160	SG-4 BD ISO OC	72-E	2	B	3	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-244	SG-4 SAMPLE ISO OC	72-E	2	B	.75	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-246	SG-3 SAMPLE ISO OC	72-D	2	B	.75	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-248	SG-2 SAMPLE ISO OC	72-C	2	B	.75	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-250	SG-1 SAMPLE ISO OC	72-C	2	B	.75	GA	A	O	PI	2A	NA		V-2J4	
									EF	Q	10c		V-3S2	
FCV-760	SG-1 BD ISO IC	71-C	2	B	3	GA	A	O	PI	2A	NA		V-2N	
									EF	Q	5c		M-16P3	
FCV-761	SG-2 BD ISO IC	71-C	2	B	3	GA	A	O	PI	2A	NA		V-2N	
									EF	Q	5c		M-16P3	
FCV-762	SG-3 BD ISO IC	71-D	2	B	3	GA	A	O	PI	2A	NA		V-2N	
									EF	Q	5c		M-16P3	
FCV-763	SG-4 BD ISO IC	71-E	2	B	3	GA	A	O	PI	2A	NA		V-2N	
									EF	Q	5c		M-16P3	
PCV-19	SG-1 10% ATM DUMP	30-A	2	B	8	GL	A	C	PI	2A	NA		V-2U1	
									EF	CS	60		V-3R1	Both open and close.

TURBINE STEAM SUPPLY SYSTEM P & ID NO. 1020 04

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
PCV-20	SG-2 10% ATM DUMP	30-C	2	B	8	GL	A	C	PI	2A	NA		V-2U2	
									EF	CS	60		V-3R1	Both open and close.
PCV-21	SG-3 10% ATM DUMP	31-D	2	B	8	GL	A	C	PI	2A	NA		V-2U3	
									EF	CS	60		V-3R1	Both open and close.
PCV-22	SG-4 10% ATM DUMP	31-E	2	B	8	GL	A	C	PI	2A	NA		V-2U4	
									EF	CS	60		V-3R1	Both open and close.
RV-3	SG-1 SAFETY	30-A	2	C	10	RV	N	C	RT	T	NA		M-77	1065#
RV-4	SG-1 SAFETY	31-A	2	C	10	RV	N	C	RT	T	NA		M-77	1078#
RV-5	SG-1 SAFETY	31-A	2	C	10	RV	N	C	RT	T	NA		M-77	1090#
RV-6	SG-1 SAFETY	31-A	2	C	10	RV	N	C	RT	T	NA		M-77	1103#
RV-7	SG-2 SAFETY	30-B	2	C	10	RV	N	C	RT	T	NA		M-77	1065#
RV-8	SG-2 SAFETY	31-B	2	C	10	RV	N	C	RT	T	NA		M-77	1078#
RV-9	SG-2 SAFETY	31-B	2	C	10	RV	N	C	RT	T	NA		M-77	1090#
RV-10	SG-2 SAFETY	31-B	2	C	10	RV	N	C	RT	T	NA		M-77	1103#

TURBINE STEAM SUPPLY SYSTEM P & ID NO. 1020 04

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
RV-11	SG-3 SAFETY	31-D	2	C	10	RV	N	C	RT	T	NA		M-77	1065#
RV-12	SG-3 SAFETY	31-D	2	C	10	RV	N	C	RT	T	NA		M-77	1078#
RV-13	SG-3 SAFETY	32-D	2	C	10	RV	N	C	RT	T	NA		M-77	1090#
RV-14	SG-3 SAFETY	31-D	2	C	10	RV	N	C	RT	T	NA		M-77	1103#
RV-58	SG-4 SAFETY	31-E	2	C	10	RV	N	C	RT	T	NA		M-77	1065#
RV-59	SG-4 SAFETY	31-E	2	C	10	RV	N	C	RT	T	NA		M-77	1078#
RV-60	SG-4 SAFETY	32-E	2	C	10	RV	N	C	RT	T	NA		M-77	1090#
RV-61	SG-4 SAFETY	31-E	2	C	10	RV	N	C	RT	T	NA		M-77	1103#
RV-222	SG-1 SAFETY	31-A	2	C	10	RV	N	C	RT	T	NA		M-77	1115#
RV-223	SG-2 SAFETY	31-B	2	C	10	RV	N	C	RT	T	NA		M-77	1115#
RV-224	SG-3 SAFETY	31-D	2	C	10	RV	N	C	RT	T	NA		M-77	1115#
RV-225	SG-4 SAFETY	31-E	2	C	10	RV	N	C	RT	T	NA		M-77	1115#

AUXILIARY STEAM SYSTEM P & ID NO. 1020 06

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	AUX STM SUP TO CONT ISO IC	43-E	2	A,C	2	CK	N	C	LT	2A	NA		V-670	AXS-208 PASSIVE
NONE	AUX STM SUP TO CONT ISO OC	43-D	2	A	2	GA	M	LC	LT	2A	NA		V-670	AXS-26 PASSIVE

REACTOR COOLANT SYSTEM P & ID NO. 1020 07

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	MISC EQUIP DR TANK ISO OC	48-A	2	A	3/4	GL	M	LC	LT	2A	NA		V-671	RCS-512 OR 522 PASSIVE
PCV-455C	PZR PORV	40-C	1	B	3	GL	A	C	PI	2A	NA		V-2T1	
									EF	CS	3.5		V-3J2	|
PCV-456	PZR PORV	40-B	1	B	3	GL	A	C	PI	2A	NA		V-2T1	
									EF	CS	3.5		V-3J2	|
PCV-474	PZR PORV	40-C	1	B	3	GL	A	C	PI	2A	NA		V-2T1	
									EF	CS	3.5		V-3J2	|
8000A	PZR PORV ISO	41-C	1	B	3	GA	E	O	PI	2A	NA		V-2T1	
									EF	Q	15c		V-3J1	
8000B	PZR PORV ISO	41-C	1	B	3	GA	E	O	PI	2A	NA		V-2T1	
									EF	Q	15c		V-3J1	
8000C	PZR PORV ISO	40-B	1	B	3	GA	E	O	PI	2A	NA		V-2T1	
									EF	Q	15c		V-3J1	
8010A	PZR SAFETY	43-D	1	A,C	6	RV	N	C	RT	T	NA		M-77	2485#
8010B	PZR SAFETY	43-D	1	A,C	6	RV	N	C	RT	T	NA		M-77	2485#
8010C	PZR SAFETY	42-D	1	A,C	6	RV	N	C	RT	T	NA		M-77	2485#
8028	RV DISC HDR TO PRT ISO IC	47-C	2	A,C	4	CK	N	C	LT	2A	NA		V-671	PASSIVE

REACTOR COOLANT SYSTEM P & ID NO. 1020 07

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8029	PRI WTR TO PRT ISO OC	48-D	2	A	3	DI	A	O	PI	2A	NA		V-2J7	
									LT	2A	NA		V-652	
									EF	Q	10c		V-3S1	
8034A	PRT TO GA ISO IC	48-E	2	A	3/8	GL	A	O	PI	2A	NA		V-204	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
8034B	PRT TO GA ISO OC	48-E	2	A	3/8	GL	A	C	PI	2A	NA		V-2J7	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
8045	N2 TO PRT ISO OC	48-E	2	A	3/4	DI	A	O	PI	2A	NA		V-2J7	
									LT	2A	NA		V-652	
									EF	Q	10c		V-3S1	
8046	PRI WTR TO PRT ISO IC	48-D	2	A,C	3	CK	N	C	LT	2A	NA		V-652	
									EC	2A	NA	#3	V-652	
8047	N2 TO PRT ISO IC	48-E	2	A,C	3/4	CK	N	C	LT	2A	NA		V-652	
									EC	2A	NA	#3	V-652	
8078A	REACTOR VESSEL HEAD VENT	75-B	2	B	1	GL	S	LC	PI	2A	NA		V-2T2	
									EF	CS	10		V-2T2	

REACTOR COOLANT SYSTEM P & ID NO. 1020 07

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8078B	REACTOR VESSEL HEAD VENT	75-B	2	B	1	GL	S	LC	PI	2A	NA		V-2T2	
									EF	CS	10		V-2T2	
8078C	REACTOR VESSEL HEAD VENT	75-B	2	B	1	GL	S	LC	PI	2A	NA		V-2T2	
									EF	CS	10		V-2T2	
8078D	REACTOR VESSEL HEAD VENT	75-B	2	B	1	GL	S	LC	PI	2A	NA		V-2T2	
									EF	CS	10		V-2T2	

CHEMICAL AND VOLUME CONTROL SYSTEM P & ID NO. 1020 08

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-110A	BA SUP TO BLENDER	40B-B	2	B	2	GL	A	C	PI	2A	NA		V-2K	
									EF	Q	10		V-3E1	
LCV-112B	VCT OUT ISO	43B-D	IWV	B	4	GA	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		M-16A	
LCV-112C	VCT OUT ISO	43B-D	IWV	B	4	GA	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		M-16A	
8100	RCP SEAL WTR RETURN ISO OC	39-E	2	A	4	GA	E	O	PI	2A	NA		V-2I	
									LT	2A	NA		V-645	
									EF	CS	10c		V-3K2	
8104	EMERG BORATE	41B-A	2	B	2	GL	E	C	PI	2A	NA		V-2K	
									EF	Q	10		V-3E5	
8105	CENT CHG PP RECIRC	41B-A	IWV	B	2	GL	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		V-3K9	
8106	CENT CHG PP RECIRC	41B-A	2	B	2	GL	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		V-3K9	
8107	CHG LINE ISO OC	47B-C	2	B	3	GA	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		M-16A	
8108	CHG LINE ISO	47B-C	2	B	3	GA	E	O	PI	2A	NA		V-2I	
									EF	CS	10c		M-16A	
8109	RCP SEAL WTR RETURN ISO IC	38-D	2	A,C	3/4	CK	N	O	LT	2A	NA		V-645	
									EC	2A	NA	#3	V-645	

CHEMICAL AND VOLUME CONTROL SYSTEM P & ID NO. 1020 08

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8112	RCP SEAL WTR RETURN ISO IC	38-E	2	A	4	GA	E	O	PI	2A	NA		V-2I	
									LT	2A	NA		V-645	
									EF	CS	10c		V-3K2	
8121	RCP SEAL WTR RETURN HDR RV	37-E	2	C	2	RV	N	C	RT	T	NA		M-77	
8145	PZR AUX SPRAY	43-D	1	B	2	GL	A	C	PI	2A	NA		V-2S	
									EF	CS	10		V-3K8	
8146	NORMAL CHG	43-D	1	B	3	GL	A	O	PI	2A	NA		V-2S	
									EF	Q	10(20)		V-3K5	
8147	ALTERNATE CHG	42-D	1	B	3	GL	A	C	PI	2A	NA		V-2S	
									EF	Q	10(20)		V-3K5	
8148	PZR AUX SPRAY BYP	43-D	1	B	2	GL	A	C	PI	2A	NA		V-2S	
									EF	CS	10		V-3K8	
8149A	LTDN ORF RO-27 ISO IC	43-C	2	A	2	GL	A	C	PI	2A	NA		V-2Y	
									LT	2A	NA		V-635	
									EF	Q	10c		V-3K7	

CHEMICAL AND VOLUME CONTROL SYSTEM P & ID NO. 1020 08

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8149B	LTDN ORF RO-27 ISO IC	43-C	2	A	2	GL	A	C	PI	2A	NA		V-2Y	
									LT	2A	NA		V-635	
									EF	Q	10c		V-3K7	
8149C	LTDN ORF RO-27 ISO IC	43-C	2	A	2	GL	A	C	PI	2A	NA		V-2Y	
									LT	2A	NA		V-635	
									EF	Q	10c		V-3K7	
8152	LTDN LINE ISO OC	44-C	2	A	2	GL	A	O	PI	2A	NA		V-2J6	
									LT	2A	NA		V-635	
									EF	CS	10c		V-3K7	
8368A	RCP-1 SEAL INJ ISO CK IC	31-B	2	A,C	2	CK	N	O	LT	2A	NA		V-641	
									EC	2A	NA	#3	V-641	
8368B	RCP-2 SEAL INJ ISO CK IC	33-B	2	A,C	2	CK	N	O	LT	2A	NA		V-641	
									EC	2A	NA	#3	V-641	

CHEMICAL AND VOLUME CONTROL SYSTEM P & ID NO. 1020 08

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8368C	RCP-3 SEAL INJ ISO CK IC	35-B	2	A,C	2	CK	N	O	LT	2A	NA		V-641	
									EC	2A	NA	#3	V-641	
8368D	RCP-4 SEAL INJ ISO CK IC	37-B	2	A,C	2	CK	N	O	LT	2A	NA		V-641	
									EC	2A	NA	#3	V-641	
8377	PZR AUX SPRAY CK	42-E	1	C	2	CK	N	C	EC	CS	NA		V-3K8	
8378C	CHG LINE CK	43-B	2	C	3	CK	N	O	EC	Q	NA		V-3K5	
8445	EMER BORATE REV FLO CK	41B-B	2	C	2	CK	N	C	EC	Q	NA		V-3E5	
8475	RECIP CHG PP-3 DISCH CK	45B-C	2	C	2	CK	N	O	EC	Q	NA		P-17B	
8478A	CENT CHG PP-1 DISCH CK	45B-B	2	C	4	CK	N	C	EP	Q	NA		P-2B	
									EC	R	NA	#4	V-4A	
8478B	CENT CHG PP-2 DISCH CK	45B-A	2	C	4	CK	N	C	EP	Q	NA		P-2B	
									EC	R	NA	#4	V-4A	
8479A	CENT CHG PP-1 RECIRC CK	44B-B	2	C	2	CK	N	C	EC	Q	NA		P-2B	
8479B	CENT CHG PP-1 RECIRC CK	45B-A	2	C	2	CK	N	C	EC	Q	NA		P-2B	
8487A	BA TRANSFER PP-2 (PP-1) DISCH CK	52B-B (57B-B)	2	C	2	CK	N	O	EC	Q	NA		P-14B	
8487B	BA TRANSFER PP-1 (PP-2) DISCH CK	52B-A (57B-A)	2	C	2	CK	N	O	EC	Q	NA		P-14B	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	FI-927 ISOL OC	42-E	2	A	3/4	GL	M	LC	LT	2A	NA		V-652B	SI-161 PASSIVE
8801A	BIT DISCH TO RCS OC	43-D	1	B	4	GA	E	C	PI	2A	NA		V-2J6	
									EF	Q	10		M-16A	
8801B	BIT DISCH TO RCS OC	43-C	1	B	4	GA	E	C	PI	2A	NA		V-2J6	
									EF	Q	10		M-16A	
8802A	SI PP-1 DISCH ISO OC	54-E	2	A	4	GA	E	LC	PI	2A	NA		V-2J6	
									LT	R*	NA		V-7E	*PER TECH SPEC
									EF	CS	10		V-3L1	
8802B	SI PP-2 DISCH ISO OC	54-D	2	A	4	GA	E	LC	PI	2A	NA		V-2J6	
									LT	R*	NA		V-7E	*PER TECH SPEC
									EF	CS	10		V-3L1	
8803A	BIT INLET	45-C	2	B	4	GA	E	C	PI	2A	NA		V-2C	
									EF	Q	10		M-16B	
8803B	BIT INLET	45-B	2	B	4	GA	E	C	PI	2A	NA		V-2C	
									EF	Q	10		M-16B	
8804A	CHG PP SUCT FROM RHR	48-B	2	B	8	GA	E	C	PI	2A	NA		V-7B	
									EF	R	15	#6	V-7B	
8804B	SI PP SUCT FROM RHR	58-C	2	B	8	GA	E	C	PI	2A	NA		V-7B	
									EF	R	15	#6	V-7B	
8805A	RWST TO CHARG PP SUCT	48-C	2	B	8	GA	E	C	PI	2A	NA		V-2Z	
									EF	CS	10		V-3K11	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8805B	RWST TO CHARG PP SUCT	48-C	2	B	8	GA	E	C	PI	2A	NA		V-2Z	
									EF	CS	10		V-3K11	
8807A	SI PP-1 SUCT TO CCP SUCT XTIE	48-B	2	B	4	GA	E	C	PI	2A	NA		V-2H	
									EF	Q	10		V-3L3	
8807B	SI PP-1 SUCT TO CCP SUCT XTIE	48-B	2	B	4	GA	E	C	PI	2A	NA		V-2H	
									EF	Q	10		V-3L3	
8808A	ACCUM-1 DISCH ISO	31-D	1	B	10	GA	E	LO	PI	2A	NA		V-13	
									EF	CS	12		V-3L4	
8808B	ACCUM-2 DISCH ISO	33-D	1	B	10	GA	E	LO	PI	2A	NA		V-13	
									EF	CS	12		V-3L4	
8808C	ACCUM-3 DISCH ISO	35-D	1	B	10	GA	E	LO	PI	2A	NA		V-13	
									EF	CS	12		V-3L4	
8808D	ACCUM-4 DISCH ISO	37-D	1	B	10	GA	E	LO	PI	2A	NA		V-13	
									EF	CS	12		V-3L4	
8809A	RHR TO COLD LEGS-1, 2 ISO OC	54-C	2	B	8	GA	E	LO	PI	2A	NA		V-2J3	
									EF	CS	15c		V-3L5	
8809B	RHR TO COLD LEGS-3, 4 ISO OC	54-B	2	B	8	GA	E	LO	PI	2A	NA		V-2J3	
									EF	CS	15c		V-3L5	
8818A	RHR TO COLD LEG-1 CK	52-C	1	A,C	6	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#20	V-18	
8818B	RHR TO COLD LEG-2 CK	52-B	1	A,C	6	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#20	V-18	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8818C	RHR TO COLD LEG-3 CK	52-B	1	A,C	6	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#20	V-18	
8818D	RHR TO COLD LEG-4 CK	52-A	1	A,C	6	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#20	V-18	
8819A	SI TO COLD LEG-1 CK	52-C	1	A,C	2	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EC	R	NA	#7	V-4A	
8819B	SI TO COLD LEG-2 CK	52-B	1	A,C	2	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EC	R	NA	#7	V-4A	
8819C	SI TO COLD LEG-3 CK	50-B	1	A,C	2	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EC	R	NA	#7	V-4A	
8819D	SI TO COLD LEG-4 CK	50-A	1	A,C	2	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EC	R	NA	#7	V-4A	
8820	BIT COLD INJECT CK	41-D	1	C	3	CK	N	C	EP	CS	NA	#8	V-4B	
									EC	R	NA	#8	V-4A	
8821A	SI PP-1 DISCH ISO	55-E	2	B	4	GA	E	O	PI	2A	NA		V-2J6	
									EF	Q	15c		V-3L2	
8821B	SI PP-2 DISCH ISO	55-D	2	B	4	GA	E	O	PI	2A	NA		V-2J6	
									EF	Q	15c		V-3L2	
8835	SI COLD INJECT ISO OC	54-C	2	B	4	GA	E	LO	PI	2A	NA		V-2J6	
									EF	CS	15c		V-3L6	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8870A	BA RETURN FROM BIT	45-D	2	B	1	GL	A	O	PI	2A	NA		V-2C	
									EF	Q	10c		M-16A	
8870B	BA RETURN FROM BIT	45-D	2	V	1	GL	A	O	PI	2A	NA		V-2C	
									EF	Q	10c		M-16A	
8871	SI TEST LINE ISO IC	38-C	2	A	3/4	GL	A	C	PI	2A	NA		V-201	
									LT	2A	NA		V-652B	
									EF	Q	10c		V-3S5	
8880	N2 SUP TO ACCUM ISO OC	39-E	2	A	1	GL	A	O	PI	2A	NA		V-2J7	
									LT	2A	NA		V-652	
									EF	Q	10c		V3S5	
8883	SI PP-1 TO TEST LINE ISO OC	54-E	2	A	3/4	GL	A	C	PI	2A	NA		V-2J7	
									LT	2A	NA		V-652B	
									EF	Q	10c		V3S5	
8900A	BIT LOOP-1 COLD INJ	40-E	1	C	1.5	CK	N	C	EC	R	NA	#8	V-4A	
8900B	BIT LOOP-2 COLD INJ	40-B	1	C	1.5	CK	N	C	EC	R	NA	#8	V-4A	
8900C	BIT LOOP-3 COLD INJ	40-C	1	C	1.5	CK	N	C	EC	R	NA	#8	V-4A	
8900D	BIT LOOP-4 COLD INJ	40-D	1	C	1.5	CK	N	C	EC	R	NA	#8	V-4A	
8905A	SI TO HOT LEG-1	52-E	1	A,C	2	CK	N	C	EC	R	NA	#7	V-4A	
									LT	R*	NA		V-5C	*PER TECH SPEC

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8905B	SI TO HOT LEG-2 CK	52-E	1	A,C	2	CK	N	C	EC	R	NA	#7	V-4A	
									LT	R*	NA		V-5C	*PER TECH SPEC
8905C	SI TO HOT LEG-3 CK	52-D	1	A,C	2	CK	N	C	EC	R	NA	#7	V-4A	
									LT	R*	NA		V-5C	*PER TECH SPEC
8905D	SI TO HOT LEG-4 CK	52-D	1	A,C	2	CK	N	C	EC	R	NA	#7	V-4A	
									LT	R*	NA		V-5C	*PER TECH SPEC
8911	BA SUPPLY TO BIT	44-C	2	B	1	GL	A	O	PI	2A	NA		V-2C	
									EF	Q	10c		M-16B	
8912	BA SUPPLY TO BIT CK	44-B	2	C	1	CK	N	O	EC	Q	NA		M-16B	
8916	N2 SUP TO ACCUM CK IC	38-E	2	A,C	1	CK	N	C	LT	2A	NA		V-652	
									EC	2A	NA	#3	V-652	
8919A	SI PP-1 TO RWST CK	57-E	2	C	3/4	CK	N	C	EC	Q	NA		P-1B	
8919B	SI PP-2 TO RWST CK	57-D	2	C	3/4	CK	N	C	EC	Q	NA		P-1B	
8922A	SI PP-1 DISCH CK	56-E	2	C	4	CK	N	C	EC	R	NA	#7	V-4A	
8922B	SI PP-2 DISCH CK	56-D	2	C	4	CK	N	C	EC	R	NA	#7	V-4A	
8923A	SI PP-1 SUCT	58-E	2	B	6	GA	E	O	PI	2A	NA		V-2H	
									EF	Q	15c		V-3L10	
8923B	SI PP-2 SUCT	58-D	2	B	6	GA	E	O	PI	2A	NA		V-2H	
									EF	Q	15c		V-3L10	
8924	RWST TO CHG PP CK	48-C	2	C	8	CK	N	C	EP	CS	NA		V-3K10	
									EC	R	NA	#9	V-4A	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8948A	LOOP-1 COLD INJ CK	30-B	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#10	V-18	
8948B	LOOP-2 COLD INJ CK	30-D	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#10	V-18	
8948C	LOOP-3 COLD INJ CK	30-A	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#10	V-18	
8948D	LOOP-4 COLD INJ CK	30-A	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#10	V-18	
8949A	SI TO HOT LEG-1 CK	50-E	1	A,C	6	CK	N	C	EC	R	NA	#11	V-4A	
									LT	R*	NA		V-5	*PER TECH SPEC
8949B	SI TO HOT LEG-2 CK	50-E	1	A,C	6	CK	N	C	EC	R	NA	#11	V-4A	
									LT	R*	NA		V-5	*PER TECH SPEC
8949C	SI TO HOT LEG-3 CK	50-D	1	A,C	6	CK	N	C	EC	R	NA	#11	V-4A	
									LT	R*	NA		V-5	*PER TECH SPEC
8949D	SI TO HOT LEG-4 CK	50-D	1	A,C	6	CK	N	C	EC	R	NA	#11	V-4A	
									LT	R*	NA		V-5	*PER TECH SPEC
8956A	ACCUM-1 DISCH CK	31-C	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#12	V-18	

SAFETY INJECTION SYSTEM P & ID NO. 1020 09

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8956B	ACCUM-2 DISCH CK	31-B	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#12	V-18	
8956C	ACCUM-3 DISCH CK	31-A	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#12	V-18	
8956D	ACCUM-4 DISCH CK	31-A	1	A,C	10	CK	N	C	LT	R*	NA		V-5	*PER TECH SPEC
									EM	RR	NA	#12	V-18	
8961	SI TEST LINE ISO OC	39-C	2	A	3/4	PL	A	C	PI	2A	NA		V-2J7	
									LT	2A	NA		V-652B	
									EF	Q	10c		V-3S5	
8974A	SI RECIRC TO RWST	57-D	IWV.	B	2	GL	E	LO	PI	2A	NA		V-7B	
									EF	CS	15c		V-3L15	
8974B	SI RECIRC TO RWST	57-D	2	B	2	GL	E	LO	PI	2A	NA		V-7B	
									EF	CS	15c		V-3L15	
8976	RWST TO SI PP ISO	59-D	2	B	8	GA	E	LO	PI	2A	NA		V-2J6	
									EF	CS	15c		V-3L13	
8977	RWST TO SI PP CK	59-D	2	C	8	CK	N	C	EP	Q	NA		P-1B	
									EC	R	NA	#13	V-4A	
8980	RWST TO RHR PPS ISO OC	59-B	2	B	12	GA	E	LO	PI	2A	NA		V-2J3	
									EF	CS	25c		V-3L14	
8981	RWST TO RHR PP CK	59-B	2	C	12	CK	N	C	EC	R	NA	#14	V-4A	
8982A	CONT RECIR TO RHR PP-1 ISO OC	52-A	2	B	14	GA	E	LC	PI	2A	NA		V-7B	
									EF	R	30	#15	V-7B	
8982B	CONT RECIR TO RHR PP-2 ISO OC	53-A	2	B	14	GA	E	LC	PI	2A	NA		V-7B	
									EF	R	30	#15	V-7B	

RESIDUAL HEAT REMOVAL SYSTEM P & ID NO. 1020 10

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-641A	RHR PP-1 RECIRC	34-E	2	B	2	GL	E	C	PI	2A	NA		V-2D	
									EF	Q	15c		V-3M1	
FCV-641B	RHR PP-2 RECIRC	34-B	2	B	2	GL	E	C	PI	2A	NA		V-2D	
									EF	Q	15c		V-3M1	
HCV-637	RHR HX-2 OUTLET	31-B	2	B	8	BV	A	O	EF	Q	30		V-3M2	
HCV-638	RHR HX-1 OUTLET	31-D	2	B	8	BV	A	O	EF	Q	30		V-3M2	
8700A	RHR PP-1 SUCT OC	37-D	2	B	14	GA	E	O	PI	2A	NA		V-7B	
									EF	Q	170c		V-3M4	
8700B	RHR PP-2 SUCT OC	37-B	2	B	14	GA	E	O	PI	2A	NA		V-7B	
									EF	Q	170c		V-3M4	
8701	RCS LOOP-4 TO RHR IC	38-D	1	A	14	GA	E	LC	PI	2A	NA		V-7A	
									LT	R*	NA		V-7C	*PER TECH SPEC
									EF	CS	160c		V-3M5	
8702	RCS LOOP-4 TO RHR	39-D	1	A	14	GA	E	LC	PI	2A	NA		V-7A	
									LT	R*	NA		V-7C	*PER TECH SPEC
									EF	CS	160c		V-3M5	
8703	RHR TO HOT LEGS-1, 2 IC	38-B	2	A	12	GA	E	LC	PI	2A	NA		V-2M	
									EF	CS	85		V-3M6	
									LT	R*	NA		V-7D	*PER TECH SPEC
8716A	RHR TRAIN XTIE OC	30-D	2	B	8	GA	E	O	PI	2A	NA		V-2J3	
									EF	CS	15c		V-3M7	

RESIDUAL HEAT REMOVAL SYSTEM P & ID NO. 1020 10

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8716B	RHR TRAIN XTIE OC	30-C	2	B	8	GA	E	O	PI	2A	NA		V-2J3	
									EF	CS	15c		V-3M7	
8730A	RHR PP-1 DISCH CK	35-D	2	C	8	CK	N	C	EP	Q	NA		P-3B	
									EC	CS	NA		V-4B	
8730B	RHR PP-2 DISCH CK	35-C	2	C	8	CK	N	C	EP	Q	NA		P-3B	
									EC	CS	NA		V-4B	
8740A	RHR TO HOT LEG-1 CK	39-B	1	A/C	8	CK	N	C	EC	RR	NA	#16	V-18	
									LT	R*	NA		V-5C	*PER TECH SPEC
8740B	RHR TO HOT LEG-2 CK	39-A	1	A/C	8	CK	N	C	EC	RR	NA	#16	V-18	
									LT	R*	NA		V-5C	*PER TECH SPEC

NUCLEAR STEAM SUPPLY SAMPLING SYSTEM P & ID NO. 1020 11

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
9354A	PZR STM SAMPLE ISO IC	21-A	2	A	3/8	GL	A	O	PI	2A	NA		V-203	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9354B	PZR STM SAMPLE ISO OC	22-A	2	A	3/8	GL	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9355A	PZR LIQUID SAMPLE ISO IC	21-B	2	A	3/8	GL	A	O	PI	2A	NA		V-203	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9355B	PZR LIQUID SAMPLE ISO OC	22-B	2	A	3/8	GL	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9356A	HOT LEG SAMPLE ISO IC	21-B	2	A	3/8	GL	A	O	PI	2A	NA		V-203	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	

NUCLEAR STEAM SUPPLY SAMPLING SYSTEM P & ID NO. 1020 11

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
9356B	HOT LEG SAMPLE ISO OC	22-B	2	A	3/8	GL	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9357A	ACCUM SAMPLE ISO IC	21-C	2	A	3/8	GL	A	O	PI	2A	NA		V-203	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	
9357B	ACCUM SAMPLE ISO OC	22-C	2	A	3/8	GL	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-659	
									EF	Q	10c		V-3S1	

CONTAINMENT SPRAY SYSTEM P & ID NO. 1020 12

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	CS ADD TK VAC BREAK	37-C	2	C	1.75	RV	N	C	RT	T	NA		M-77	CS-1
NONE	CS ADD TK VAC BREAK	37-C	2	C	1.75	RV	N	C	RT	T	NA		M-77	CS-2
NONE	CS PP-1 TO MEDT ISO OC	33-D	2	A	.75	GL	M	LC	LT	2A	NA		V-630	CS-31
														PASSIVE
NONE	CS PP-2 TO MEDT ISO OC	33-A	2	A	.75	GL	M	LC	LT	2A	NA		V-630	CS-32
														PASSIVE
8992	CS ADD TK STOP	37-B	2	B	3	GA	E	LO	PI	2A	NA		V-2G	PASSIVE
8994A	NaOH CS EDUCTOR ISO	36-B	2	B	3	GA	E	C	PI	2A	NA		V-2G	
									EF	CS	10		V-3I2	
8994B	NaOH CS EDUCTOR ISO	37-B	2	B	3	GA	E	C	PI	2A	NA		V-2G	
									EF	CS	10		V-3I2	
8998A	CS ADD TK OUT CK	35-C	2	C	3	CK	N	C	EC	CS	NA		V-3I1	
8998B	CS ADD TK OUT CK	35-B	2	C	3	CK	N	C	EC	CS	NA		V-3I1	
9001A	CS PP-1 ISO	34-D	2	A	8	GA	E	C	PI	2A	NA		V-2B	
									LT	2A	NA		V-630	
									EF	Q	10		M-16H	
9001B	CS PP-2 ISO	34-A	2	A	8	GA	E	C	PI	2A	NA		V-2B	
									LT	2A	NA		V-630	
									EF	Q	10		M-16H	

CONTAINMENT SPRAY SYSTEM P & ID NO. 1020 12

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
9002A	CS PP-1 DISCH CK	33-D	2	C	8	CK	N	C	EC	CS	NA		V-17	|
9002B	CS PP-2 DISCH CK	33-A	2	C	8	CK	N	C	EC	CS	NA		V-17	|
9003A	RHR HX-1 TO CS-A HDR	33-D	2	B	8	GA	E	C	PI	2A	NA		V-7B	
									EF	R	15	#6	V-7B	
9003B	RHR HX-2 TO CS-B HDR	33-B	2	B	8	GA	E	C	PI	2A	NA		V-7B	
									EF	R	15	#6	V-7B	
9011A	CS HDR-A ISO CK IC	31-D	2	A,C	8	CK	N	C	LT	2A	NA		V-630	
									EM	RR	NA	#18	V-18	
9011B	CS HDR-B ISO CK IC	31-A	2	A,C	8	CK	N	C	LT	2A	NA		V-630	
									EM	RR	NA	#18	V-18	

COMPONENT COOLING WATER SYSTEM P & ID NO. 1020 14

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	CCW FCV-749 BYPASS CK IC	71-B	2	A,C	3/4	CK	N	C	LT	2A	NA		V-619	CCW-581
														PASSIVE
NONE	CCW TO RCP & RX VSL	72-E	2	A,C	10	CK	N	O	LT	2A	NA		V-619	CCW-585
	SUPPORT CK IC								EC	2A	NA	#3	V-619	
NONE	CCW PP-1 HDR-A CK	52-E	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-601
NONE	CCW PP-2 HDR-A CK	53-E	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-602
NONE	CCW PP-3 HDR-A CK	55-E	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-603
NONE	CCW PP-1 HDR-B CK	52-D	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-607
NONE	CCW PP-2 HDR-B CK	53-D	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-608
NONE	CCW PP-3 HDR-B CK	55-D	3	C	20	CK	N	O	EC	Q	NA		P-8B	CCW-609
NONE	CCW FCV-750 BYPASS CK IC	73-B	2	A,C	3/4	CK	N	C	LT	2A	NA		V-619	CCW-670
														PASSIVE
NONE	CCW TO EXCESS LTDN HX CK OC	98-D	2	A,C	4	CK	N	O	LT	2A	NA		V-623	CCW-695
									EC	2A	NA	#3	V-623	
FCV-355	CCW HDR-C ISO	59-D	2	B	20	BV	E	O	PI	2A	NA		V-2F	
									EF	CS	15c		V-3H3	
FCV-356	CCW TO RCP & RX VSL	72-E	2	A	10	BV	E	O	PI	2A	NA		V-2J2	
	SUPPORT ISO OC								LT	2A	NA		V-619	
									EF	CS	15c		V-3H4	
FCV-357	RCP'S THM BAR CCW RTN ISO OC	73-B	2	A	6	GL	E	O	PI	2A	NA		V-2J2	
									LT	2A	NA		V-619	
									EF	CS	25c		V-3H5	

COMPONENT COOLING WATER SYSTEM P & ID NO. 1020 14

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-360	CFCU-1, 2, 5 CCW MAX FLO	66-B	3	B	18	BV	A	C	PI	2A	NA		V-2H	
									EF	Q	10		M-16B	
FCV-361	CCW FROM EXCESS LTDN HX ISO OC	98-B	2	A	4	BV	A	C	PI	2A	NA		V-2J2	
									LT	2A	NA		V-623	
									EF	Q	10c		V-3S1	
FCV-363	RCP'S CLR CCW RETURN ISO OC	72-B	2	A	6	BV	E	O	PI	2A	NA		V-2J2	
									LT	2A	NA		V-619	
									EF	CS	20c		V-3H6	
FCV-364	RHR HX-2 CCW RETURN	60-C	3	B	12	BV	A	C	PI	2A	NA		V-2H	
									EF	Q	10		V-3H7	
FCV-365	RHR HX-1 CCW RETURN	104-C	3	B	12	BV	A	C	PI	2A	NA		V-2H	
									EF	Q	10		V-3H7	
FCV-366	CFCU-3/4 CCW MAX FLO	107-B	3	B	16	BV	A	C	PI	2A	NA		V-2H	
									EF	Q	10		M-16B	
FCV-430	CCW HX-1 OUT ISO	58-E	3	B	30	BV	E	O	PI	2A	NA		V-2F	
									EF	Q	45		V-3H8	

COMPONENT COOLING WATER SYSTEM P & ID NO. 1020 14

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-431	CCW HX-2 OUT ISO	58-D	3	B	30	BV	E	O	PI	2A	NA		V-2F	
									EF	Q	45		V-3H8	
FCV-749	RCP'S CLR CCW RETURN ISO IC	72-B	2	A	6	BV	E	O	PI	2A	NA		V-202	
									LT	2A	NA		V-619	
									EF	CS	10c		V-3H10	
FCV-750	RCPS THM BAR CCW RTN ISO IC	73-B	2	A	6	GL	E	O	PI	2A	NA		V-202	
									LT	2A	NA		V-619	
									EF	CS	10c		V-3H9	
LCV-69	MU WTR TO CCW HDR-A	55-B	3	B	3	GL	A	C	EF	Q	10		V-3H11	
LCV-70	MU WTR TO CCW HDR-B	55-B	3	B	3	GL	A	C	EF	Q	10		V-3H11	
RCV-16	CCW SURGE TK VENT	56-C	3	B	3	BA	E	O	PI	2A	NA		V-2F	
									EF	Q	10c		V-3H12	

MAKEUP WATER SYSTEM P & ID NO. 1020 16

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	AFW PP RECIRC TO CST CK	71-C (78-C)	3	C	2	CK	N	C	EC	Q	NA		P-5B	MU-963
NONE	CST TO MU H2O XFR PPS CK	70-E (78-E)	3	C	4	CK	N	C	EC	Q	NA		V-3U2	MU-965
NONE	MU H2O XFR PP-01 DISCH CK	74-D	3	C	4	CK	N	C	EC	Q	NA		V-3U2	MU-968
NONE	MU H2O XFR PP-02 DISCH CK	75-D	3	C	4	CK	N	C	EC	Q	NA		V-3U2	MU-970
NONE	MU H2O TO MISC SOURCES CK	71-E (78-E)	3	C	4	CK	N	C	EC	Q	NA		V-3U2	MU-971
NONE	MU H2O TO CCW SURGE TK CK	82-D (87-D)	3	C	4	CK	N	C	EC	Q	NA		V-3U2	MU-1565

SALTWATER SYSTEM P & ID NO. 1020 17

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	ASW PP-1 DISCH CK	34-C	3	C	24	CK	N	O	EC	Q	NA		P-7B	SW-200
NONE	ASW PP-2 DISCH CK	34-C	3	C	24	CK	N	O	EC	Q	NA		P-7B	SW-201
FCV-495	ASW PP-2 CROSS TIE	35-C	3	B	24	BV	E	O	PI	2A	NA		V-2A	
									EF	Q	15		V-3F1	
FCV-496	ASW PP-1 CROSS TIE	35-C	3	B	24	BV	E	O	PI	2A	NA		V-2A	
									EF	Q	15		V-3F2	
FCV-601	ASW UNIT CROSS TIE	34-C	3	B	24	BV	E	C	PI	2A	NA		V-2A	
									EF	Q	15		V-3F3	
FCV-602	CCW HX-1 SW INLET	36-C	3	B	24	BV	A	O	PI	2A	NA		V-2F	
		(35-C)							EF	Q	60 (120)		V-3F4	
FCV-603	CCW HX-2 SW INLET	35-B	3	B	24	BV	A	O	PI	2A	NA		V-2F	
									EF	Q	60 (90)		V-3F5	

FIRE PROTECTION SYSTEM P & ID NO. 1020 18

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	CONT FIREWATER ISO IC	73-B (73-D)	2	A,C	4	CK	N	C	LT	2A	NA		V-679	FP-180 (FP-867) PASSIVE
FCV-633	CONT FIREWATER ISO OC	72-B (72-E)	2	A	3	GL	A	O	PI	2A	NA		V-2J7	
									LT	2A	NA		V-679	
									EF	Q	10c		V-3S4	

LIQUID RADWASTE SYSTEM P & ID NO. 1020 19

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	N2 TO RCDT ISO IC	38-C	2	A,C	3/4	CK	N	C	LT	2A	NA		V-652	LWS-60
									EC	2A	NA	#3	V-652	
FCV-253	RCDT PP DISCH ISO IC	38-A	2	A	2.5	BA	A	O	PI	2A	NA		V-205	
									LT	2A	NA		V-650	
									EF	Q	10c		V-3S3	
FCV-254	RCDT PP DISCH ISO OC	39-A	2	A	2.5	BA	A	O	PI	2A	NA		V-2J5	
									LT	2A	NA		V-650	
									EF	Q	10c		V-3S3	
FCV-255	RCDT VENT ISO IC	38-B	2	A	3/4	BA	A	O	PI	2A	NA		V-205	
									LT	2A	NA		V-652	
									EF	Q	10c		V-3S3	
FCV-256	RCDT VENT ISO OC	39-B	2	A	3/4	BA	A	O	PI	2A	NA		V-2J5	
									LT	2A	NA		V-652	
									EF	Q	10c		V-3S3	
FCV-257	RCDT GAS ANAL ISO OC	39-B	2	A	1/2	BA	A	C	PI	2A	NA		V-2J5	
									LT	2A	NA		V-652	
									EF	Q	10C		V-3S3	

LIQUID RADWASTE SYSTEM P & ID NO. 1020 19

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-258	RCDT GAS ANAL ISO IC	38-B	2	A	1/2	BA	A	O	PI	2A	NA		V-205	
									LT	2A	NA		V-652	
									EF	Q	10C		V-3S3	
FCV-260	N2 TO RCDT ISO OC	38-C	2	A	3/4	BA	A	O	PI	2A	NA		V-2J5	
									LT	2A	NA		V-652	
									EF	Q	10c		V-3S3	
FCV-500	CONT SUMP DISCH ISO IC	38-D	2	A	2	BA	A	O	PI	2A	NA		V-205	
									LT	2A	NA		V-649	
									EF	Q	10c		V3S3	
FCV-501	CONT SUMP DISCH ISO OC	39-D	2	A	2	BA	A	O	PI	2A	NA		V-2J5	
									LT	2A	NA		V-649	
									EF	Q	10c		V3S3	
FCV-696	RX CAV SUMP SAMPLE SUP ISO IC	38-B	2	A	3/8	GL	S	C	PI	2A	NA		V-682	
									LT	2A	NA		V-682	
									EF	CS	10		V-3T5	
FCV-697	RX CAV SUMP SAMPLE SUP ISO OC	39-B	2	A	3/8	GL	S	C	PI	2A	NA		V-682	
									LT	2A	NA		V-682	
									EF	CS	10		V-3T5	

LIQUID RADWASTE SYSTEM P & ID NO. 1020 19

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
8767	REFUEL WTR PURIF ISO OC	39-C	2	A	4	DI	M	LC	LT	2A	NA		V-646	PASSIVE
8787	REFUEL WTR PURIF ISO OC	38-D	2	A	4	DI	M	LC	LT	2A	NA		V-646	PASSIVE
8795	REFUEL WTR PURIF ISO IC	38-C	2	A	4	DI	M	LC	LT	2A	NA		V-646	PASSIVE
8796	REFUEL WTR PURIF ISO IC	38-D	2	A	4	DI	M	LC	LT	2A	NA		V-646	PASSIVE

DIESEL GENERATOR SYSTEM P & ID NO. 1020 21

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	DSL FO XFR PP-01 DISCH CK	24-D	IWV	C	2	CK	N	C	EC	Q	NA		M-9A	DEG-35
NONE	DSL FO XFR PP-02 DISCH CK	24-B	IWV	C	2	CK	N	C	EC	Q	NA		M-9A	DEG-36
NONE	DSL FO TK 01 SUCT CK	21-D	IWV	C	3	CK	N	C	EC	Q	NA		M-9A	DEG-33
NONE	DSL FO TK 02 SUCT CK	21-B	IWV	C	3	CK	N	C	EC	Q	NA		M-9A	DEG-34
LCV-85	DSL FO DAY TK 1-1 (2-2) SUP	27-E (28-A)	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
LCV-86	DSL FO DAY TK 1-2 (2-1) SUP	27-D	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
LCV-87	DSL FO DAY TK 1-3 SUP	27-C	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
									FS	Q	NA		V-303	
LCV-88	DSL FO DAY TK 1-1 (2-2) SUP	28-E (27-A)	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
LCV-89	DSL FO DAY TK 1-2 (2-1) SUP	28-D (27-B)	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
LCV-90	DSL FO DAY TK 1-3 SUP	28-C	IWV	B	1.5	BA	A	C	EF	Q	10		V-303	
SV-277	DG 1-1 (2-2) AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-278	DG 1-1 (2-2) AIR START MTR SUP	37-C	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-493	DG 1-1 (2-2) AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-499	DG 1-1 (2-2) TURBO AIR ASSIST SUP	47-E (47-D)	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	

DIESEL GENERATOR SYSTEM P & ID NO. 1020 21

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
SV-504	DG 1-1 (2-2) TURBO AIR ASSIST SUP	47-D (47-E)	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-494	DG 1-1 (2-2) AIR START MTR SUP	37-B	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-281	DG 1-2 (2-1) AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-282	DG 1-2 (2-1) AIR START MTR SUP	37-C	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-495	DG 1-2 (2-1) AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-496	DG 1-2 (2-1) AIR START MTR SUP	37-B	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-500	DG 1-2 (2-1) TURBO ASST AIR SUP	47-E (47-D)	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-505	DG 1-2 (2-1) TURBO ASST AIR SUP	47-D (47-E)	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-283	DG 1-3 AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-284	DG 1-3 AIR START MTR SUP	37-C	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-497	DG 1-3 AIR START MTR SUP	37-D	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-498	DG 1-3 AIR START MTR SUP	37-B	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-501	DG 1-3 TURBO AIR ASSIST SUP	47-E	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	
SV-506	DG 1-3 TURBO AIR ASSIST SUP	47-E	IWV	B	1.5	GL	S	C	EF	Q	N/A	#5	M-9A	

VENTILATION AND AIR CONDITIONING SYSTEM P & ID NO. 1020 23

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	CHP SUP FAN-1 ISO OC	45-A	2	A	4	GA	M	LC	LT	2A	NA		V-683	VAC-1
		(45A-D)												PASSIVE
NONE	CHP SUP FAN-2 ISO OC	34-A	2	A	4	GA	M	LC	LT	2A	NA		V-683	VAC-2
		(45A-E)												PASSIVE
NONE	CHP SUP ISO IC CK	35-A	2	A,C	4	CK	N	C	LT	2A	NA		V-683	VAC-200
		(48A-D)												PASSIVE
NONE	CHP SUP ISO IC CK	35-A	2	A,C	4	CK	N	C	LT	2A	NA		V-683	VAC-201
		(48A-C)												PASSIVE
NONE	CONT AIR SAMPLE RETURN ISO IC	44-B	2	A,C	2	CK	N	O	LT	2A	NA		V-668	VAC-21
		(111-C)							EC	2A	NA	#3	V-668	
NONE	CONT AIR SAMPLE POST LOCA	44-C	2	A,C	3/8	CK	N	C	LT	2A	NA		V-682	VAC-116
	RTN ISO IC	(111-D)							EC	2A	NA	#3	V-682	
NONE	CONT H2 SAMPLE RETURN CK IC	44-D	2	A,C	3/8	CK	N	C	LT	2A	NA		V-678	VAC-252
		(131-B)							EC	2A	NA	#3	V-678	EC CLOSE
									EC	CS	NA		V-3T3	EC OPEN
NONE	CONT H2 SAMPLE RETURN CK IC	44-E	2	A,C	3/8	CK	N	C	LT	2A	NA		V-678	VAC-253
		(131-D)							EC	2A	NA	#3	V-678	EC CLOSE
									EC	CS	NA		V-3T3	EC OPEN
FCV-235	CONT H2 SAMPLE SUP ISO IC	44-C	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(131-A)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	
FCV-236	CONT H2 SAMPLE SUP ISO OC	46-C	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(133-A)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	

VENTILATION AND AIR CONDITIONING SYSTEM P & ID NO. 1020 23

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-237	CONT H2 SAMPLE RETURN ISO OC	46-D	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(133-B)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	
FCV-238	CONT H2 SAMPLE SUP ISO IC	46-D	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(131-C)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	
FCV-239	CONT H2 SAMPLE SUP ISO OC	46-D	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(133-C)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	
FCV-240	CONT H2 SAMPLE SUP ISO OC	46-E	2	A	3/8	GL	S	LC	PI	2A	NA		V-678	
		(30-B)							LT	2A	NA		V-678	
									EF	CS	10		V-3T3	
FCV-654	INCORE CHILL WTR SUP ISO OC	34-D	2	A	2	BA	A	O	PI	2A	NA		V-2J7	
		(30-B)							LT	2A	NA		V-682	
									EF	Q	10c		V-3S4	
FCV-655	INCORE CHILL WTR SUP ISO IC	35-D	2	A	2	BA	A	O	PI	2A	NA		V-204	
		(30-B)							LT	2A	NA		V-682	
									EF	Q	10c		V-3S4	
FCV-656	INCORE CHILL WTR SUP ISO OC	34-D	2	A	2	BA	A	O	PI	2A	NA		V-2J7	
		(30-B)							LT	2A	NA		V-682	
									EF	Q	10c		V-3S4	

VENTILATION AND AIR CONDITIONING SYSTEM P & ID NO. 1020 23

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-657	INCORE CHILL WTR SUP ISO IC	35-D	2	A	2	BA	A	O	PI	2A	NA		V-204	
		(30-B)							LT	2A	NA		V-682	
									EF	Q	10c		V-3S4	
FCV-658	CONT EXT H2 RCMB ISO IC	35-B	2	A	4	GA	E	LC	PI	2A	NA		V-2X	
		(48A-C)							LT	2A	NA		V-657	
									EF	CS	15		V-3T3	
FCV-659	CONT EXT H2 RCMB ISO IC	35-B	2	A	4	GA	E	LC	PI	2A	NA		V-2X	
		(34-C)							LT	2A	NA		V-657	
									EF	CS	15		V-3T3	
FCV-660	CONT PURGE SUP ISO IC	35-C	2	A	48	BV	A	C	PI	2A	NA		V-2Q	
		(34-C)							LT	2A	NA		V-661	
									EF	R	2c	#19	V-3T6	
FCV-661	CONT PURGE SUP ISO OC	34-C	2	A	48	BV	A	C	PI	2A	NA		V-2E	
									LT	2A	NA		V-661	
									EF	R	2c	#19	V-3T6	
FCV-662	CONT EXCESS PRES/VAC RLF ISO IC	35-C	2	A	12	BV	A	C	PI	2A	NA		V-2Q	
		(34-C)							LT	2A	NA		V-663	
									EF	R	10c	#19	V-3T6	

VENTILATION AND AIR CONDITIONING SYSTEM P & ID NO. 1020 23

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-663	CONT EXCESS PRES RLF ISO OC	31-C	2	A	12	BV	A	C	PI	2A	NA		V-2E	
		(34-C)							LT	2A	NA		V-663	
									EF	R	10c	#19	V-3T6	
FCV-664	CONT VAC RLF OC	32-C	2	A	12	BV	A	C	PI	2A	NA		V-2E	
		(34-C)							LT	2A	NA		V-663	
									EF	R	10c	#19	V-3T6	
FCV-668	CONT EXT H2 RCMB ISO OC	34-B	2	A	4	GA	E	LC	PI	2A	NA		V-2X	
		(47A-C)							LT	2A	NA		V-657	
									EF	CS	15		V-3T3	
FCV-669	CONT EXT H2 RCMB ISO OC	34-B	2	A	4	GA	E	LC	PI	2A	NA		V-2X	
		(47A-B)							LT	2A	NA		V-657	
									EF	CS	15		V-3T3	
FCV-678	CONT AIR SAMPLE SUP ISO IC	44-A	2	A	1	BA	A	O	PI	2A	NA		V-203	
		(111-B)							LT	2A	NA		V-668	
									EF	Q	10c		V-3T1	

VENTILATION AND AIR CONDITIONING SYSTEM P & ID NO. 1020 23

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
FCV-679	AIR SAMPLE SUP ISO OC	46-A (113-B)	2	A	1	BA	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-668	
									EF	Q	10c		V-3T1	
FCV-681	AIR SAMPLE RETURN ISO OC	46-B (113-C)	2	A	1	BA	A	O	PI	2A	NA		V-2J1	
									LT	2A	NA		V-668	
									EF	Q	10c		V-3T1	
FCV-698	AIR SAMPLE POST LOCA SUP ISO OC	44-B (111-C)	2	A	3/8	GL	S	C	PI	2A	NA		V-682	
									LT	2A	NA		V-682	
									EF	CS	10		V-3T4	
FCV-699	AIR SAMPLE POST LOCA SUP ISO OC	46-B (113-C)	2	A	3/8	GL	S	C	PI	2A	NA		V-682	
									LT	2A	NA		V-682	
									EF	CS	10		V-3T4	
FCV-700	AIR SAMPLE POST LOCA SUP ISO OC	35-C (34-C)	2	A	3/8	GL	S	C	PI	2A	NA		V-682	
									LT	2A	NA		V-682	
									EF	CS	10		V-3T4	
RCV-11	PURGE EXHAUST ISO IC	34-C	2	A	48	BV	A	C	PI	2A	NA		V-2Q	
									LT	2A	NA		V-662	
									EF	R	2c	#19	V-3T6	
RCV-12	PURGE EXHAUST ISO OC	34-C	2	A	48	BV	A	C	PI	2A	NA		V-2E	
									LT	2A	NA		V-662	
									EF	R	2c	#19	V-3T6	

COMPRESSED AIR SYSTEMS P & ID NO. 1020 25

VALVE NUMBER	VALVE DESCRIPTION	P & ID COORD	VLV CLS	VLV CAT	VLV SIZ	VLV TYP	ACT TYP	NRM POS	TST REQ	TST FRQ	STR TIM	REL REQ	PROC NO.	REMARKS
NONE	CONT SERV AIR SUP ISO IC	41-D (48-D)	2	A,C	3	CK	N	C	LT	2A	NA		V-656	AIR-S-114 PASSIVE
NONE	CONT SERV AIR SUP ISO OC	42-D (47-D)	2	A	3	BA	M	LC	LT	2A	NA		V-656	AIR-S-200 PASSIVE
NONE	CONT NORM INST AIR SUP ISO BYPASS OC	42-C (47-C)	2	A	1.5	DI	M	LC	LT	2A	NA		V-654	AIR-I-585 PASSIVE
NONE	CONT NORM INST AIR SUP CK IC	42-D (47-D)	2	A,C	2	CK	N	O	LT	2A	NA		V-654	AIR-I-587
									EC	2A	NA	#3	V-654	
FCV-584	CONT NORM INST AIR SUP ISO OC	42-C (47-C)	2	A	2	BA	A	O	PI	2A	NA		V-2J	
									LT	2A	NA		V-654	
									EF	Q	10c		V-3S4	

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
1	FW-349	AUX FP-1 SUCT CK RWS	3	C	IWV-3522 TST REQ-EC	These valves cannot be exercised with flow because the water from the Raw Water Storage Reservoir would contaminate the steam generators creating chemistry problems which could effect the integrity of the steam generator tubes. These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation. These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the opposite train valve will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
	FW-353	AUX FP-2&3 SUCT CK RWS	3	C	TST FRQ-Q	
	These check valves supply an additional source of water to the steam generator via the aux feedwater pumps.					
2	MS-1068	SG-1 MS LINE CK VALVE	IWV	C	IWV-3522 TST REQ-EC	These valves cannot be exercised closed because provisions are not provided in the plant design to verify that these valves close on reverse flow. These valves will be internally inspected using a fiberoptics scope to verify OPERABILITY. This inspection will be performed each refueling outage.
	MS-2066	SG-2 MS LINE CK VALVE	IWV	C	TST FRQ-Q	
	MS-3062	SG-3 MS LINE CK VALVE	IWV	C		
	MS-4062	SG-4 MS LINE CK VALVE	IWV	C		
	These check valves perform the accident-mitigating function of being required to close in the event of a steam line break upstream of the MSIVs in order to prevent blowing down of more than one steam generator.					

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
3	AIR-I-587	CONT NORM INST AIR SUP CK OC	2	A,C	IWV-3522	These check valves can only be verified closed by leak-rate testing. They will be leak-rate tested at a two year interval.
	CCW-585	CCW TO RCP & RX VSL SUP CK IC	2	A,C	TST REQ-EC	
	CCW-695	CCW TO EXCESS LTDN HX CK OC	2	A,C	TST FRQ-Q	
	LWS-60	N2 TO RCDT IC	2	A,C		
	VAC-21	CONT AIR SAMP RETURN CK IC	2	A,C		
	VAC-116	CONT AIR SAMP POST LOCA RTN ISO IC	2	A,C		
	VAC-252	CONT H2 SAMP RETURN CK IC	2	A,C		
	VAC-253	CONT H2 SAMP RETURN CK IC	2	A,C		
	8046	PRI WTR TO PRT ISO IC	2	A,C		
	8047	N2 TO PRT ISO IC	2	A,C		
	8109	RCP SEAL WTR RETURN ISO IC	2	A,C		
	8368A	RCP-1 SEAL INJ ISO CK IC	2	A,C		
	8368B	RCP-2 SEAL INJ ISO CK IC	2	A,C		
	8368C	RCP-3 SEAL INJ ISO CK IC	2	A,C		
	8368D	RCP-4 SEAL INJ ISO CK IC	2	A,C		
	8916	N2 TO ACCUM SUP CK IC	2	A,C		

These check valves function to prevent reverse flow from containment to the system outside of containment.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
4	8478A	CENT CHG PP-1 DISCH CK	2	C	IWV-3522 TST REQ-EC TST FRQ-Q	These valves cannot be full-stroke exercised during power operation because of insufficient available flow. These valves will be partial-stroke exercised during power operation.
	8478B	CENT CHG PP-2 DISCH CK	2	C		
		These check valves function to supply flow from the centrifugal charging pumps to the BIT on a safety injection.				These valves cannot be full-stroke exercised during cold shutdown because this could result in a possible low temperature overpressurization of the RCS. These valves will be full-stroke exercised on the way to or during refueling outages.
5	SV-277	DG 1-1 (2-2) AIR START MTR SUP	IWV	B	IWV-3413	Measuring the stroke time of these valves is not possible due to the lack of position indication. Unsatisfactory stroke time of these valves will be indicative of the diesel generator failing to reach rated speed in less than 10 seconds as required by T.S. 4.8.1.1.2.A.2.
	SV-278	DG 1-1 (2-2) AIR START MTR SUP	IWV	B		
	SV-493	DG 1-1 (2-2) AIR START MTR SUP	IWV	B		
	SV-494	DG 1-1 (2-2) AIR START MTR SUP	IWV	B		
	SV-499	DG 1-1 (2-2) TURBO AIR ASST SUP	IWV	B		
	SV-504	DG 1-1 (2-2) TURBO AIR ASST SUP	IWV	B		
	SV-281	DG 1-2 (2-1) AIR START MTR SUP	IWV	B		
	SV-282	DG 1-2 (2-1) AIR START MTR SUP	IWV	B		
	SV-495	DG 1-2 (2-1) AIR START MTR SUP	IWV	B		
	SV-496	DG 1-2 (2-1) AIR START MTR SUP	IWV	B		
	SV-500	DG 1-2 (2-1) TURBO AIR ASST SUP	IWV	B		
	SV-505	DG 1-2 (2-1) TURBO AIR ASST SUP	IWV	B		
	SV-283	DG 1-3 AIR START MTR SUP	IWV	B		
	SV-284	DG 1-3 AIR START MTR SUP	IWV	B		
	SV-497	DG 1-3 AIR START MTR SUP	IWV	B		
	SV-498	DG 1-3 AIR START MTR SUP	IWV	B		
	SV-501	DG 1-3 TURBO AIR ASSIST SUP	IWV	B		
	SV-506	DG 1-3 TURBO AIR ASSIST SUP	IWV	B		

These valves open to provide air to the diesel generator starting motors.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
6	8804A	CHARG PP SUCT FROM RHR	2	B	IWV-3412 TST REQ-EF	These valves cannot be exercised during power operation because they are interlocked with valves 8982A & B (Containment Sump Isolation Valves) that are required to be closed with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2. Valves 8982A or B cannot be opened during power operation because this would result in one train of the RHR system being not OPERABLE. Valve 8982A or B cannot be opened during cold shutdown because they are interlocked with valves 8700A & B (RHR Pump Suction Valves) which would have to be closed. With valve 8982A or B opened in this configuration, it is quite likely that the water from the piping between valve 8700A or B and the sump valve connection will be discharged through valve 8982A or B into the containment sump. This would void the suction piping requiring refilling and venting the piping. If a LOCA occurred under this condition, extensive time would be required to recover from this abnormal lineup. Also, during cold shutdown, valves 8804A & B and 9003A & B cannot be exercised open because they are interlocked with valve 8701 and 8702 (RCS Loop-4 TO RHR ISOLATION VALVES) in the closed position. 8701 and 8702 are required to be open and closing one of these valves would result in both RHR train being incapable of removing decay heat from the core. Valves 8804A, B and 9003A & B will be full-stroke exercised during refueling outages.
	8804B	SI PP SUCT FROM RHR	2	B	TST FRQ-Q	
	9003A	RHR HX-1 TO CS-A HDR	2	B		
	9003B	RHR HX-2 TO CS-B HDR	2	B		
		These gate valves function to line up the safety injection system to the cold leg recirculation phase on an accident condition.				

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
7	8819A	SI TO COLD LEG-1 CK	1	A,C	IWV-3522 TST REQ-EC	These valves cannot be exercised during power operation because the safety injection pumps do not develop sufficient head to overcome RCS pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification Surveillance Requirement 4.5.3.2. to protect against a low temperature overpressurization of the RCS. Also during cold shutdown there may not be sufficient volume in the RCS to accommodate the amount of water needed to full-stroke exercise these valves. These valves will be full-stroke exercised during refueling outages.
	8819B	SI TO COLD LEG-1 CK	1	A,C	TST FRQ-Q	
	8819C	SI TO COLD LEG-1 CK	1	A,C		
	8819D	SI TO COLD LEG-1 CK	1	A,C		
	8905A	SI TO HOT LEG-1 CK	1	A,C		
	8905B	SI TO HOT LEG-2 CK	1	A,C		
	8905C	SI TO HOT LEG-3 CK	1	A,C		
	8905D	SI TO HOT LEG-4 CK	1	A,C		
	8922A	SI PP-1 DISCH CK	2	C		
	8922B	SI PP-2 DISCH CK	2	C		

These check valves function to supply flow from the safety injection pumps to the RCS.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
8	8820	BIT COLD INJECT CK	1	C	IWV-3522 TST REQ-EC TST FRQ-Q	These valves cannot be exercised during power operation because this would require injecting highly concentrated boric acid solution from the BIT into the RCS resulting in a possible plant shutdown. During power operation these valves cannot be partial-stroke exercised utilizing the bypass line because this could result in bypassing the BIT, thereby not achieving design flow through the BIT if an accident occurred. Valve 8820 will be partial-stroke exercised during cold shutdown utilizing the bypass line (this method will not verify a partial-stroke exercise of the other valves). These valves cannot be full-stroke exercised during cold shutdown because this would require injecting the BIT into the RCS which could significantly delay startup from the cold shutdown condition (the BIT would have to be brought to the proper boron concentration and the RCS would have to be diluted sufficiently to allow startup). These valves will be full-stroke exercised on the way to or during refueling outages.
	8900A	BIT LOOP-1 COLD INJECT CK	1	C		
	8900B	BIT LOOP-2 COLD INJECT CK	1	C		
	8900C	BIT LOOP-3 COLD INJECT CK	1	C		
	8900D	BIT LOOP-4 COLD INJECT CK	1	C		
		These check valves function to supply flow from the BIT to the cold legs on a safety injection.				

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
9	8924	RWST TO CHARG PP CK This check valve functions to supply borated water from the RWST to the suction of the charging pumps.	2	C	IWV-3522 TST REQ-EC TST FRQ-Q	This valve cannot be exercised during power operation because this would require injecting borated water from the RWST into the RCS which could result in a plant shutdown. This valve will be partial-stroke exercised during cold shutdown. This valve cannot be full-stroke exercised during cold shutdown because this would require utilizing the flow path through the BIT. This flow path cannot be utilized during cold shutdown because this would require injecting the BIT into the RCS which could significantly delay startup from the cold shutdown condition (the BIT would have to be brought to the proper boron concentration and the RCS would have to be diluted sufficiently to allow startup). This valve will be full-stroke exercised during refueling outages.
10	8948A	LOOP-1 COLD INJECT CK	1	A,C	IWV-3522 TST REQ-EC TST FRQ-Q	These valves cannot be exercised during power operation because the accumulators, RHR pumps and SI pumps do not develop sufficient head to overcome RCS pressure.
	8948B	LOOP-2 COLD INJECT CK	1	A,C		
	8948C	LOOP-3 COLD INJECT CK	1	A,C		
	8948D	LOOP-D COLD INJECT CK These check valves function to supply safety injection flow to the RCS cold legs.	1	A,C		These valves cannot be full-stroke exercised during cold shutdowns because this would involve personnel entry inside the secondary shield area to verify all valves fully stroked. Entry into this area could result in excessive radiation exposure.

Item 10 continued on next page.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
10	(continued)					These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation. These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the remaining valves in this group will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
11	8949A	SI TO HOT LEG-1 CK	1	A,C	IWV-3522 TST REQ-EC	Valves 8949C & D cannot be exercised during power operation because the safety injection pumps do not develop sufficient head to overcome RCS pressure. Valves 8949A & B cannot be exercised during power operation because the RHR or safety injection pumps do not develop sufficient head to overcome RCS pressure. These valves cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification Surveillance Requirement 4.5.3.2 to protect against a low temperature over-pressurization of the RCS. Valves 8949A & B cannot be exercised during cold shutdown using the RHR pump because this would result in short cycling the core and not removing decay heat properly. These valves will be full-stroke exercised during refueling outages.
	8949B	SI TO HOT LEG-2 CK	1	A,C	TST FRQ-Q	
	8949C	SI TO HOT LEG-3 CK	1	A,C		
	8949D	SI TO HOT LEG-4 CK	1	A,C		
		These check valves function to supply safety injection flow to the RCS hot legs.				

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
12	8956A	ACCUM-1 DISCH CK	1	A,C	IWV-3522 TST REQ-EC TST FRQ-Q	These valves cannot be exercised during power operation because the accumulator will not overcome RCS pressure.
	8956B	ACCUM-2 DISCH CK	1	A,C		
	8956C	ACCUM-3 DISCH CK	1	A,C		These valves cannot be exercised during cold shutdowns because this could result in a possible low temperature overpressurization of the RCS. Full-stroke testing of these valves during refueling outages is not feasible because of the resulting water surge into the reactor vessel and potential for high airborne radiation problems. These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation.
	8956D	ACCUM-4 DISCH CK	1	A,C		
		These check valves function to prevent backflow from the RCS into the accumulators during normal operation. These valves open to supply flow from the accumulators to the RCS during an accident condition.				These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the remaining valves in this group will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
13	8977	RWST TO SI PP CK	2	C	IWV-3522 TST REQ-EC TST FRQ-Q	This valve can only be partial-stroke exercised during power operation. It cannot be full-stroke exercised because the safety injection pumps do not develop sufficient head to overcome RCS pressure. This valve cannot be exercised during cold shutdown because the safety injection pumps are required to be inoperable by Technical Specification Surveillance Requirement 4.5.3.2. to protect against a low temperature overpressurization of the RCS. This valve will be full-stroke exercised during refueling outages.
		This check valve functions to supply borated water from the RWST to the suction of the safety injection pumps.				

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
14	8981	RWST TO RHR PP CK This check valve functions to supply borated water from the RWST to the suction of the RHR pumps.	2	C	IWV-3522 TST REQ-EC TST FRQ-Q	This valve cannot be exercised during power operation because the RHR pumps do not develop sufficient head to overcome RCS pressure. This valve cannot be exercised during cold shutdown because both RHR pumps must be aligned to remove decay heat from the RCS so no path exists for full-stroke exercising this valve. This valve will be full-stroke exercised during refueling outages.
15	8982A 8982B	CONT RECIRC TO RHR PP-1 ISO OC CONT RECIRC TO RHR PP-2 ISO OC These gate valves function to line up the RHR pumps to take a suction from the containment recirculation sumps during the cold leg recirculation phase of an accident condition.	2 2	B B	IWV-3412 TST REQ-EF TST FRQ-Q	These valves cannot be exercised during power operation because they are required to be closed with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2. If these valves were opened during power operation, this would result in one train of the the RHR system being not OPERABLE. These valves cannot be exercised during cold shutdown because opening one of these valves could introduce air into the suction piping of the RHR pumps, causing the RHR pumps to be not OPERABLE for an extended period of time. These valves will be full-stroke exercised during refueling outages.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
16	8740A	RHR TO HOT LEG-1 CK	1	A,C	IWV-3522 TST REQ-EC	These valves cannot be exercised during power operation because the RHR pumps do not develop sufficient head to overcome RCS pressure. These valves cannot be exercised during cold shutdown because this would result in short circuiting the core, thereby not removing decay heat. These valves cannot be adequately tested during refueling outages since the only available test flowpath would result in testing the valves in parallel. These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation. These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the opposite train valve will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
	8740B	RHR TO HOT LEG-2 CK	1	A,C	TST FRQ-Q	
		These check valves function to supply RHR flow to the RCS hot legs 1 and 2.				
17	Deleted					

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
18	9011A	CS HDR-A ISO CK IC	2	A,C	IWV-3522 TST REQ-EC	These valves cannot be exercised during power operation, at cold shutdown, or during refueling outages because flow through these valves would result in spraying down the containment. This would cause problems with wet lagging, corrosion of components inside containment, etc. The only practical method of verifying operability of these check valves is by disassembly.
	9011B	CS HDR-B ISO CK IC	2	A,C	TST FRQ-Q	
		These check valves function to supply spray water to the ring headers in containment. In the closed position they provide a containment isolation function.				These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation. These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the opposite train valve will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
19	FCV-660	CONT PURGE SUP ISO IC	2	A	IWV-3412 TST REQ-EF	These valves are required to be leak-rate tested every time they are exercised per Technical Specification 3.6.1.7 and 3.6.3. Therefore, these valves will be full-stroke exercised every 18 months when they are required to be exercised per Technical Specification Surveillance Requirement 4.6.3.2.c. Also, these valves are limited by Technical Specification 3.6.1.7 to be open less than or equal to 200 hours per calendar year.
	FCV-661	CONT PURGE SUP ISO IC	2	A	TST FRQ-Q	
	FCV-662	CONT EXCESS PRES/VAC RLV ISO IC	2	A		
	FCV-663	CONT EXCESS PRES ISO OC	2	A		
	FCV-664	CONT VAC RELIEF OC	2	A		

Item 19 continued on next page.

REQUEST FOR RELIEF FROM CODE REQUIREMENTS

#	VALVE NUMBER	VALVE DESCRIPTION AND FUNCTION	VLV CLS	VLV CAT	CODE REQUIREMENT	BASIS FOR REQUESTING RELIEF AND TESTING IN LIEU OF REQUIREMENTS
19	(continued)					
	RCV-11	CONT PURGE EXHAUST ISO IC	2	A		
	RCV-12	CONT PURGE EXHAUST ISO IC	2	A		
		These valves function to provide containment ventilation isolation.				
20	8818A	RHR TO CL-1 CK	1	A,C	IWV-3522 TST REQ-EC	These RHR to cold leg check valves cannot be exercised during power operation because the RHR pumps do not develop sufficient head to overcome reactor coolant system pressure. These valves cannot be tested during cold shutdown due to lack of instrumentation necessary to individually verify full-stroke capability of each valve. These valves are not equipped with mechanical exercisers, position indicators or differential pressure instrumentation. These valves will be disassembled, internally inspected, and manual full-stroke exercised on a rotational basis, one valve each refueling outage. If any degradation is detected that interferes with the valve's operability, then the remaining valves in this group will also be disassembled, internally inspected, and manual full-stroke exercised during the same outage.
	8818B	RHR TO CL-2 CK	1	A,C	TST FRQ-Q	
	8818C	RHR TO CL-3 CK	1	A,C		
	8818D	RHR TO CL-4 CK	1	A,C		

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
1	FW-96 FW-98 FW-367 FW-368 FCV-438 FCV-439 FCV-440 FCV-441	These Main Feedwater Check Valves and Feedwater Isolation Valves cannot be exercised during power operation because closing these valves would require securing feed flow to a steam generator which would result in a reactor trip. Three loop operation has not been analyzed for at Diablo Canyon Power Plant and is not allowed.
2	FW-348 FW-350 FW-352 FW-361 FW-362 FW-363 FW-369 FW-370 FW-371 FW-372 FW-373 FW-374 FW-375 FW-376 FW-377 FW-378 FW-379 FW-380 MS-5166 MS-5167	These Auxiliary Feedwater Supply Check Valves cannot be full-stroke exercised during power operation because the only available flow path is into the steam generators which could result in thermal shock to the associated piping and fittings. These valves will be full-stroke exercised during a shutdown to, or a startup from, a cold shutdown condition. Valves MS-5166 and MS-5167, steam supply valves to the turbine driven auxiliary feedwater pump, will be partial-stroke tested on a quarterly frequency with the pump operating in its recirculation flow path.

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
3	FCV-41 FCV-42 FCV-43 FCV-44	These Main Steam Isolation Valves cannot be full-stroke exercised during power operation because this would require securing steam from a steam generator which could result in a reactor trip. Three loop operation has not been analyzed for at Diablo Canyon Power Plant and is not allowed.
4	PCV-19 PCV-20 PCV-21 PCV-22	These Atmospheric Dump Valves cannot be exercised during power operation because this could result in inadvertent safety injection actuation.
5	PCV-455C PCV-456 PCV-474	These Power Operated Relief Valves should not be exercised during power operation by NRC direction. The NRC's current position is that these valves will be full-stroke exercised during the approach to cold shutdown.
6	8078A 8078B 8078C 8078D	These Reactor Vessel Head Vent Valves should not be exercised during power operation by NRC direction. The NRC's current position is that these valves will be full-stroke exercised during cold shutdown.
7	LCV-112B LCV-112C	These Volume Control Tank Outlet Isolation Valves should not be exercised during power operation because failure of either valve in the closed position would result in a loss of reactor system level control or injecting 2000 ppm boric acid solution from the RWST into the reactor coolant system, resulting in a possible plant shutdown.
8	8100 8112	These Reactor Coolant Pump Seal Water Isolation Valves cannot be exercised during power operation because this would result in challenging the relief valve in the RCP seal water return line. If this relief valve failed in the open position, this would result in unnecessary reactor coolant system leakage.
9	8105 8106	These Centrifugal Charging Pump Recirculation Isolation Valves should not be exercised during power operation because failure of either valve in the closed position could result in pump damage if a secondary system accident occurred.

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
10	8107 8108	These Charging Line Isolation Valves should not be exercised during power operation because failure of either valve in the closed position could result in loss of reactor coolant system level control, which could result in a plant shutdown. Also, failure of either of these valves in a closed position would place the plant in an LCO action statement due to a loss of the boration flow path from the boric acid tanks.
11	8145 8148 8377	These Pressurizer Auxiliary Spray Valves should not be exercised during power operation because failure of either valve in the open position could result in a loss of reactor coolant system pressure control which could result in a plant shutdown.
12	8152	This Letdown Line Isolation Valve should not be exercised during power operation because failure of the valve in the closed position could result in a loss of reactor coolant system level control which could result in a plant shutdown.
13	8802A 8802B	These Safety Injection Pump Discharge Isolation Valves cannot be exercised during power operation because they are required to be closed with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2. If these valves were opened during power operation, safety injection flow would go to the hot legs instead of the cold legs. The safety analysis has analyzed for flow going to the cold legs and not the hot legs.
14	8808A 8808B 8808C 8808D	These Accumulator Isolation Valves cannot be exercised during power operation because they are required to be open by Technical Specification Limiting Condition for Operation 3.5.1. Also, the safety analysis does not cover one accumulator being isolated and a failure in another accumulator line.
15	8809A 8809B	These RHR to Cold Legs Isolation Valves cannot be exercised during power operation because they are required to be open with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2.

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
16	Deleted	
17	8835	This Safety Injection to Cold Legs Isolation Valve cannot be exercised during power operation because it is required to be open with power to the valve operator removed by Technical Specification Surveillance Requirement 4.5.2. Also, failure of this valve in the closed position would result in the entire safety injection system being not OPERABLE.
18	8974A 8974B	These Safety Injection Pumps Recirculation to the RWST Isolation Valves cannot be exercised during power operation because they are required to be open with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2. Also, the failure of one of these valves in the closed position could result in damage to the safety injection pumps, thereby rendering the entire safety injection system not OPERABLE.
19	8976	This RWST to Safety Injection Pumps Isolation Valve cannot be exercised during power operation because it is required to be open with power to the valve operator removed by Technical Specification Surveillance Requirement 4.5.2. Also, failure of this valve in the closed position would result in the entire safety injection system being not OPERABLE.
20	8980	This RWST to RHR Pumps Isolation Valve cannot be exercised during power operation because it is required to be open with power to the valve operator removed by Technical Specification Surveillance Requirement 4.5.2. Also, failure of this valve in the closed position would result in the entire RHR system being not OPERABLE.
21	8701 8702	These Reactor Coolant System to RHR System Isolation Valves cannot be exercised during power operation because they are required to be closed with power to the valve operators removed by Technical Specification Surveillance Requirement 4.5.2. Also, they are interlocked with reactor coolant system pressure and cannot be opened if the pressure is greater than 390 psi.

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
22	8703	This RHR to Hot Legs Isolation Valve cannot be exercised during power operation because it is required to be closed with power to the valve operator removed by Technical Specification Surveillance Requirement 4.5.2. Also, failure of this valve in the open position would result in diversion of flow from the analyzed flow paths.
23	8730A 8730B	These RHR Pump Discharge Check Valves cannot be full-stroke exercised during power operation because the RHR pumps do not develop sufficient head to overcome reactor coolant system pressure.
24	8994A 8994B	These NaOH to Containment Spray Eductor Isolation Valves cannot be exercised during power operation because they could introduce NaOH into the RWST and subsequently into the reactor coolant system causing Na_{24} activation problems and possible chemical damage to components in the reactor coolant system. To prevent getting NaOH into the RWST, valve 8992 would have to be closed and the line flushed, which would result in the entire Spray Additive System being not OPERABLE.
25	8998A 8998B	These Spray Additive Tank Outlet Check Valves cannot be exercised during power operation because the system alignment for testing these check valves would result in the entire Spray Additive System being not OPERABLE.
26	FCV-355 FCV-356 FCV-357 FCV-363 FCV-749 FCV-750	These Component Cooling Water Isolation Valves cannot be exercised during power operation because this could result in damage to the reactor coolant pumps and a possible plant trip.

COLD SHUTDOWN TESTING STATEMENT

#	VALVE NUMBER	JUSTIFICATION FOR VALVES TO BE TESTED AT A COLD SHUTDOWN FREQUENCY
27	FCV-235 FCV-236 FCV-237 FCV-238 FCV-239 FCV-240 FCV-658 FCV-659 FCV-668 FCV-669 FCV-696 FCV-697 FCV-698 FCV-699 FCV-700 VAC-252 VAC-253	These Containment Sample Isolation Valves cannot be exercised during power operation because Technical Specification Surveillance Requirement 4.6.1.1a requires these valves to be closed when containment integrity is required, except under strict administrative control. These valves do not receive a containment isolation signal.
28	8805A 8805B	These Charging Pump Suction Valves should not be exercised at power because opening these valves injects highly oxygenated, 2000 ppm borated water into the reactor coolant system. Injecting this water accelerates charging line nozzle corrosion and results in a negative reactivity addition to the reactor coolant system.
29	8716A 8716B	These RHR pump discharge crosstie valves cannot be exercised during power operation because failure of the valve in the closed position would result in a loss of RHR injection flow to two of the four RCS loops from a single RHR pump.
30	9002A 9002B	These Containment Spray pump discharge check valves cannot be exercised during power operation since the system alignment for testing would require containment entry to manually valve out the containment spray headers.

SUMMARY OF UNIT 1 AND UNIT 2 ISI RELIEF REQUESTS WHICH WERE GRANTED CONDITIONAL APPROVAL OR DENIED IN SER

	Relief Request Number	System or Component	Code Item No.	Volume or Area to be Examined	Section XI Required Method	PG&E's Proposed Alternative as Evaluated in SER	Relief Request Status per SER	PG&E Resolution
Unit 1 Unit 2	NDE-012 NDE-015	Steam Generator	B3.140	Nozzle Inside Radius Sections: Primary Inlet and Outlet Nozzles	Volumetric	None	Granted provided visual examination of areas is performed during tube examinations	Relief requests not revised. Per verbal discussion with NRC Staff, visual examination is not required. NRC approval required by next refueling outage.
Unit 1 Unit 2	NDE-006 NDE-007	Seal Injection Filter	C1.10 C1.20	Girth Welds	Volumetric	None	Granted provided visual examination of area is performed to extent practical	Relief requests not revised. Per verbal discussion with NRC Staff, visual examination is not required. NRC approval required by next refueling outage.
Unit 1 Unit 2	NDE-006 NDE-007	Excess Letdown Heat Exchanger	C1.10 C1.20	Girth Welds	Volumetric	Surface examination to extent practical	Granted provided volumetric examination performed to extent practical	Relief requests have been revised in Revision 7/4 to require volumetric examination to extent practical in addition to surface examination to extent practical. NRC approval required by next refueling outage.
Unit 1 Unit 2	NDE-006 NDE-007	RHR Heat Exchangers	C1.10 C1.20	Girth Welds	Volumetric	Surface examination to extent practical	Granted provided volumetric examination performed to extent practical	Relief requests have been revised in Revision 7/4 to require volumetric examination to extent practical in addition to surface examination to extent practical. NRC approval required by next refueling outage.
			C2.20	Nozzle-To-Shell Welds	Volumetric and Surface			
Unit 1 Unit 2	System Pressure Test 2	Hydrostatic Test of Class 2 and 3 Component Cooling Water Systems			IWC-5000 IWD-5000	Visual leak check during normal system operation each period and a weekly analysis of water chemistry	Denied: Insufficient justification	NRC approval not required. Relief request no. 2 has been deleted in Revision 7/4.
Unit 1 Unit 2	System Pressure Test 3	Hydrostatic Test of Class 2 Component Cooling Water Piping Associated with Containment Penetrations			IWC-5000	IWD-5000	Denied: Insufficient justification	NRC approval not required. Relief request no. 3 was previously deleted in Revision 6/3.

SUMMARY OF UNIT 1 AND UNIT 2 ISI RELIEF REQUESTS NOT EVALUATED IN SER

	Relief Request Number	System or Component	Code Item No.	Volume or Area to be Examined		Section XI Required Method	PG&E's Proposed Alternative	Relief Request Status
Unit 1	NDE-008	Pipe Welds (Class 1)	B9.11	WIB-415B		UT/Surface	Surface and/or volumetric (UT) examinations to extent practical. See NDE-008 Appendix B.	NDE-008 Appendix B has been revised in Unit 1 Revision 7 to include these additional welds. NRC approval required by next refueling outage. PG&E determined that these welds were partially inaccessible during Unit 1 second refueling outage. These welds were reported to the NRC in the ISI 90 day report following the outage.
				WIB-416A	WIB-276	UT/Surface		
				WIB-432B	WIB-313SE	UT/Surface		
				WIB-433A	WIB-171	UT/Surface		
			B9.21	WIB-124		Surface		
		Pipe Welds (Class 2)	C5.21	WIC-9-1		UT/Surface		
Unit 2	NDE-009	Rx Vessel Safe End	B5.10/ B5.50	WIB-RC-1-1SE		UT/Surface	Surface and/or volumetric (UT) examinations to extent practical. See NDE-009 Appendix B.	NDE-009 Appendix B has been revised in Unit 2 Revision 4 to include these additional welds. NRC approval required by next refueling outage. PG&E determined that these welds were partially inaccessible during Unit 2 first and second refueling outage. These welds were reported to the NRC in the ISI 90 day reports following each outage.
				WIB-RC-2-1SE		UT/Surface		
		Pressurizer Safe End	B5.20/ B5.50	WIB-423SE		UT/Surface		
		Pipe Welds (Class 1)	B9.11	WIB-291	WIB-6	UT/Surface		
				WIB-88	WIB-39	UT/Surface		
				WIB-322	WIB-197	UT/Surface		
					WIB-246	UT/Surface		
				WIB-RC-1-2		UT/Surface		
				WIB-RC-2-2		UT/Surface		
			B9.31	WIB-37	WIB-55	UT/Surface		
			B10.10	989-29R	409-3A	Surface		
				898-2		Surface		
			B9.21	WIB-856	WIB-410A	Surface		
				WIB-408	WIB-514	Surface		
		Pipe Welds (Class 2)	C5.21	WIC-1357A	WIC-1357C	UT/Surface		
				WIC-1357B	WIC-1357E	UT/Surface		
			C3.40	23-36R		Surface		
Unit 1 Unit 2	System Pressure Test 8	Hydrostatic Test of Class 2 Non-Safety Related System Containment Penetrations				IWC-5000	Local leak rate test every 5 years at 50 PSI per 10 CFR 50 App. J.	NRC approval required by next refueling outage. This relief request was previously submitted in Revision 6/3.
Unit 1 Unit 2	System Pressure Test 9	Hydrostatic Test of Class 2 Non-Safety Related Fuel Transfer Tube to Refueling Canal				IWC-5000	Test integrity of O-ring seal at flange every 5 yrs.	NRC approval required by next refueling outage. This relief request was previously submitted in Revision 6/3.

SUMMARY OF UNITS 1 AND 2 IST RELIEF REQUESTS ADDED, DELETED, OR REVISED IN IST PROGRAM PLAN REVISION 7 (UNIT 1) AND REVISION 4 (UNIT 2)

Relief Request No.	Pump/Valve	Section XI Required Testing Method	PG&E's Alternate Testing Method As Evaluated in SER	Relief Request Status per SER	Summary of Change
Pump 4	Reciprocating charging pump.	IWP-3100-1 Differential pressure.	Observe proper flow rate at test pressure.	Relief not required.	Relief request has been deleted.
Pump 8	Reciprocating charging pump.	IWP-4520(b) instrumentation accuracy.	Utilize existing vibration instrumentation.	Relief not required.	Relief request has been deleted.
Valve 1	FW-349 and FW-353. Check Valves	IWV-3522 Full-stroke exercise quarterly.	Sample disassembly/ inspection/manual full-stroke exercise during refueling outages.	Relief granted provided inspection performed in accordance with NRC generic position.	Relief request alternate testing method has been verified to be consistent with Attachment 1 position 2 of NRC Generic Letter 89-04 regarding check valve disassembly/inspection. Basis for relief has been expanded for clarification.
Valve 10	8948A, 8948B 8948C, and 8948D. Check Valves	IWV-3522 Full-stroke exercise quarterly.	Full-stroke exercise during refueling outages.	Relief granted.	Relief request alternate testing method has been revised to require check valve disassembly/inspection/ manual full-stroke exercise on a rotating basis during refueling outages. This change is consistent with Attachment 1 position 2 of NRC Generic Letter 89-04.
Valve 12	8956A, 8956B, 8956C, and 8956D. Check Valves	IWV-3522 Full-stroke exercise quarterly.	Sample disassembly/ inspection/manual full-stroke exercise during refueling outages.	Relief granted provided inspection performed in accordance with NRC generic position.	Relief request alternate testing method has been verified to be consistent with Attachment 1 position 2 of NRC Generic Letter 89-04 regarding check valve disassembly/inspection. Basis for relief has been expanded for clarification.
Valve 16	8740A 8740B Check Valves	IWV-3522 Full-stroke exercise quarterly.	Full-stroke exercise during refueling outages.	Relief granted.	Relief request alternate testing method has been revised to require check valve disassembly/inspection/ manual full-stroke exercise on a rotating basis during refueling outages. This change is consistent with Attachment 1 position 2 of NRC Generic Letter 89-04.

SUMMARY OF UNITS 1 AND 2 IST RELIEF REQUESTS ADDED, DELETED, OR REVISED IN IST PROGRAM PLAN REVISION 7 (UNIT 1) AND REVISION 4 (UNIT 2)

Relief Request No.	Pump/Valve	Section XI Required Testing Method	PG&E's Alternate Testing Method As Evaluated in SER	Relief Request Status per SER	Summary of Change
Valve 17	9002A and 9002B. Check Valves	IWV-3522 Full-stroke exercise quarterly.	Full-stroke exercise during refueling outages.	Relief granted. However, basis for relief is incomplete.	Relief request has been deleted to address SER concerns. Cold shutdown testing statement no. 30 has been added.
Valve 18	9011A and 9011B. Check Valves	IWV-3522 Full-stroke exercise quarterly.	Sample disassembly/ inspection/manual full-stroke exercise during refueling outages.	Relief granted provided inspection performed in accordance with NRC generic issue.	Relief request alternate testing method has been verified to be consistent with Attachment 1 position 2 of NRC Generic Letter 89-04 regarding check valve disassembly/inspection. Basis for relief has been expanded for clarification.
Valve 20	8818A 8818B 8818C 8818D Check Valves	IWV-3522 Full-stroke exercise quarterly.	Not included in SER. This is a new relief request.	Not included in SER. This is a new relief request.	Relief request has been added to require check valve disassembly/ inspection/manual full-stroke exercise on a rotating basis during refueling outages. This change is consistent with Attachment 1 position 2 of NRC Generic Letter 89-04.

ENCLOSURE 1

DIABLO CANYON UNIT 1
INSERVICE INSPECTION AND TESTING PROGRAM PLAN
REVISION 7

PACIFIC GAS AND ELECTRIC COMPANY
Diablo Canyon Power Plant
ISI/NDE Department
420.9

Change to Diablo Canyon Unit 1
Inspection and Testing
Program Plan

Date: June 23, 1989

Diablo Canyon Unit 1 ISI and IST Program Plan Receipt Acknowledgement

M Document Control Desk

You have been issued a Controlled Copy of the Diablo Canyon ISI and IST Program Plan. Here is the next sequential revision to the plan. Please revise your controlled copy as follows:

CHANGE INSTRUCTIONS

Remove all pages from the Program Plan binder and replace with Revision 7, with the exception of certain ISI boundary drawing pages (section 2.0 of Program Plan). This revision is a complete reissue and supersedes all previous drawing pages.

For questions or assistance please phone the Document Control office, PG&E extension 691-4500, Pacific Bell phone (805) 595-4500.

After revising your copy of the Program Plan in accordance with these instructions, place the attached change description in the front of the manual behind the controlled copy numbered title page.

Please acknowledge receipt of this revision by signing below and returning this form to:

Pacific Gas and Electric Co.
Nuclear Regulatory Affairs
77 Beale St./333 Market Room A6093
San Francisco, CA 94106

Date: _____ Receipt of Controlled Copy N/A Revision # 7 of the Diablo Canyon Unit 1 ISI and IST Program Plan is hereby acknowledged.

_____
RECIPIENT SIGNATURE

DCPP UNIT 1 ISI/IST PROGRAM PLAN
CHANGE DESCRIPTION
REVISION 7

COPYHOLDERS:

Revision 7 of the DCPP Unit 1 Inservice Inspection and Testing Program Plan is issued as a controlled document in accordance with PG&E procedure AP E-4S7. Revision 7 is a complete reissue, with the exception of certain ISI boundary drawing pages (Section 2.0), and supersedes all previous revisions. All changed pages (except tabs) should be removed from the Program Plan binder and replaced with Revision 7.

The following technical changes are incorporated in Revision 7 and are identified by revision bars.

INSERVICE INSPECTION (ISI)

CHANGE	DESCRIPTION	JUSTIFICATION
Section 1.0, p. 3	Adoption of ASME Code Case N-356.	NRC letter to PG&E dated March 24, 1988.
Section 1.0, p. 5. Table 2.4, p. 1 of 1 Various tables.	Snubbers removed from program exam schedule.	Visual exam of all snubbers is required each outage by Technical Specifications.
Section 2.0, sheets 1, 10, 12, 14, 15, 17, 36, and 51 of 51	Incorporate revised ISI boundary drawings (102028) up to Revision 21.	Updated to reflect plant design.
Table 1.1, p. 4 of 9	RV outlet nozzles inspections schedule change from period three to period one.	All inner radius inspections completed during period one (as allowed by Code).
Table 1.2, p. 1 of 3	Pressurizer longitudinal welds 6 and 9 examination period change.	Conform with exam as performed.
Table 1.4, p. 18 of 57	Two welds gained during valve replacement on loops 1 and 2 spray lines.	Transition pipe pieces added during valve replacement.
Table 1.4, p. 35 thru 57 of 57 Table 2.2, p. 18 thru 32 of 32 Table 3.2, p. 1 thru 9 of 9	Updated numbers of hangers; snubbers removed from schedule.	Plant design requirements, including snubber reduction program; visual exam of all snubbers is required each outage by Technical Specifications.
Table 1.5, p. 5 of 5	Inspection schedule for RCP flywheels is added to program.	Augmented inspection.

INSERVICE INSPECTION (ISI)

CHANGE	DESCRIPTION	JUSTIFICATION
Table 1.6, p. 7 of 15	V-8378B inspection schedule change from period one to period two.	Exam rescheduled due to bolting replacement.
Table 2.1, p. 1 of 18	SG girth weld W1-2 is examined concurrently with channel head to tubesheet weld.	Concurrent scheduling for ALARA and efficiency.
Table 2.1, p. 10, 14 of 18 Table 3.4, p. 9 of 15	PT and UT required for RHR heat exchanger nozzles welds and excess letdown heat exchangers girth welds per relief request NDE-006.	NRC SER dated December 14, 1988; PG&E letter DCL-89-070 dated March 21, 1989.
Appendix B, p. 1 thru 3 of 3	Several welds are added to relief request NDE-008.	Welds determined to have limited accessibility to NDE. PG&E letter DCL-89-070, dated March 21, 1989.
Table 3.2, p. 5, 8 of 9	Deleted lines K2-3007-10 and K2-3004-6 from ISI schedule.	Lines upgraded to Code Class 2 (exempt).
Table 5.2, p. 8, 9 of 13, Table 5.3, p. 2 of 4, Table 5.4, p. 1 of 4	Deleted system pressure test relief request # 2.	PG&E will attempt to perform hydrostatic test of CCW system in accordance with Code requirements. See PG&E letter DCL-89-070 dated March 21, 1989 in response to NRC SER dated December 14, 1988.
Table 5.2, p. 4, 5, 7 of 13	Required test pressure was revised to indicate INSERVICE/FUNCTIONAL.	Code requires functional test.
Table 4.1.1, p. 1 of 3, Table 4.2.1, p. 1 of 51	Boundary drawing revision change.	Updated to reflect plant design.

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.1.1, p. 2, 3 of 3, Table 4.1.2, p. 3 of 3	Deleted pump relief requests #'s 4 and 8 for reciprocating charging pump. Note has been revised to clarify basis for this pump being included in the IST program.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989.
Table 4.2.1, p. 11, 12 of 51	Decreased the limiting value of full-stroke time for steam dump valves PCV-19, 20, 21, and 22 from 120 seconds to 60 sec. Also, the valve is tested in both the open and close direction.	More conservative stroke time limiting value is based on actual test data obtained during previous STP V-3R1 tests.
Table 4.2.1, p. 15 of 51	Increased the limiting value of full-stroke time for the pressurizer PORV's (PCV-455C, PCV-456, and PCV-474) from 2.0 sec. to 3.5 sec.	3.0 second limiting value of full-stroke time is a reasonable deviation from the 2.0 second reference stroke time, in accordance with NRC Generic Letter 89-04, Position 5 of Attachment 1, and is the safety analysis limit as calculated by Westinghouse.
Table 4.2.1, p. 23, 24 of 51, Table 4.2.2, p. 13, 17 of 19	Valve relief request #20 added to program to require verification of full-stroke exercising of RHR check valves 8818 A through D on a refueling outage frequency in accordance with NRC Staff position on check valve disassembly/inspection. Deleted cold shutdown testing Statement No. 16.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.
Table 4.2.1, p. 27, 30 of 51, Table 4.2.2, p. 7, 8, 11 of 19	The alternate testing method specified for valve relief requests #10 and #16 have been revised to require verification of full-stroke exercising of check valves 8948A through D and 8740A and B on a refueling outage frequency in accordance with the NRC Staff position on valve disassembly/inspection.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.

INSERVICE TESTING (IST)

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.2.1, p. 34 of 51, Table 4.2.2, p. 11, 19 of 19	Valve relief request #17 has been deleted from the IST Program Plan. Cold shutdown testing statement No. 30 has been added to provide justification for not exercising valves 9002A and 9002B during power operation because system alignment for testing would require containment entry to manually valve out the containment spray headers. Table 4.2.1 has been revised to reflect a cold shutdown testing frequency for these valves.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070 dated March 21, 1989.
Table 4.2.1, p. 10 of 51	Revised to accurately identify valve FCV-151.	Typographical error.
Table 4.2.1, p. 7, 8,9,10,11 and 12 of 51	STP V-2U has been divided by Steam Generator number.	System Engineering enhancement.
Table 4.2.2, p. 1, 9, 12 of 19	The basis for valve relief request #'s 1, 12, and 18 have been expanded and clarified to ensure that check valves FW-349, FW-353, 8956A through D, and 9011A and B are inspected in accordance with NRC Staff position on check valve disassembly/inspection.	NRC SER dated December 22, 1988. PG&E letter DCL-89-070, dated March 23, 1989. NRC Generic Letter 89-04, Position 2 of Attachment 1.

INSERVICE TESTING (IST)

CHANGE	DESCRIPTION	JUSTIFICATION
Table 4.2.2, p. 2, 11, 14, 16, 19 of 19	Valve relief request #3 and cold shutdown testing statement 27 have been revised to accurately identify valve VAC-252. Cold shutdown testing statement No. 2 has been revised to accurately identify valve FW-352. Cold shutdown testing statement No. 12 has been revised to accurately identify valve 8152. Valve relief request No. 16 has been revised to accurately identify valves 8740A and 8740B as being Category A, C.	Typographical errors. NRC SER dated December 22, 1988. PG&E letter DCL-89-070, dated March 23, 1989.